EDITORIAL

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Reducing mental health stigma with supportive leadership and the right message

Dr. Paul Rinkoff*

Take a look around your workplace. Are stigmatizing attitudes the norm? During your career, you may have had the unfortunate experience of being stigmatized by your colleagues or leaders, perhaps relating to your service-time, area of assignment, rank, gender, age, abilities, or mental health. This institutional reality, and the accompanying editorial, are supported by a combination of empirical research that I have undertaken, two decades of experiences policing Canada's most populated city, and an assortment of leader positions that I have held, from frontline operations, to community policing, to emergency management and, most recently, corporate health—appropriately named the Wellness Unit.

My leadership style and ideas are uniquely influenced and informed by a PhD in public policy, which comes in handy at work—sometimes more than you might think! My doctorate has provided me with the opportunity to research small, medium, and large police organizations and, while doing so, interview police officers and leaders with respect to my research interests. Specific to this editorial, I have explored the subversive factors that compose police subculture to improve my understanding of the common language and assumptions linked to the sociological perspectives of police officers.

My learnings have confirmed that the informal norms and values that exist in the workplace do shape the everyday decisions and practices of police officers. This can sometimes be beneficial in a first responder environment—but not always. For instance, hypervigilance, an attribute often associated with the rapid decision-making processes of police officers, allows for the immediate recognition of, and response to threats. This attribute can be described as one that is positive. Contrastingly, there are negative temperaments that can be associated with police subculture: in particular, control, cynicism, distrust, and uncertainty. These common frames of reference have the effect of reinforcing certain workplace stereotypes and stigmas.

This editorial focuses on one prominent stigma—mental health stigma—and introduces the potential benefits of supportive leadership when attempting to create stigma change strategies in a progressive policing environment. This editorial also draws from the knowledge base of the health professionals that I have been fortunate to work with during my most recent leadership assignment, at the Wellness Unit. Within the walls of the Wellness Unit, a team of leaders and health enthusiasts supports the physical and mental health issues of over 7,500 employees, primarily focused on the management and treatment of occupational and non-occupational injury and disease, workplace safety and accommodation, mental health support, and return-to-work initiatives. These professionals do their best to keep all employees healthy, informed, and safe in the workplace.

When we examine our progressive police organizations, what leadership trends do we see when addressing mental health stigma? Generally speaking, leaders of progressive organizations are actively engaged in change management and the disruption of the old guard. For instance, it is common to hear of police leaders openly discussing personal challenges and experiences relating to prejudice, racism, discrimination, and accessibility. Concurrently, we observe progressive leaders effecting real change by enacting policies which promote diversity, inclusivity, and human rights. Yet, in these same organizations, recounts at the leadership level dedicated to one's own struggles surrounding mental health remain scarce. This comes as a detriment to anti-stigma strategies in policing, especially when the research tells us that anecdotes of lived experiences from those in role-model and leadership positions, including journeys to recovery, are considered impactful to those suffering with mental illness. Talking openly about mental health can reduce feelings of self-blame and shame. Police leaders are strategically positioned to amplify, and add credibility to messages which are designed to overcome stigma, while dispelling myths surrounding mental health disorders and crisis.

The reluctance of those in leadership positions to speak out and share their lived experiences comes at an organizational and individual cost. The Centre for Addiction and Mental Health reports that in any given year, one in five Canadians experience mental illness (2022). Moreover, the research shows us that first responders are at least twice as likely to suffer from occupational stress disorders when compared with the general population (Government of Ontario, 2016). Equally distressing is the finding that 75% of working Canadians are averse to disclosing a mental illness to leaders of their organization (IPSOS, 2019). This finding reminds us of an unfortunate reality in policing—that employees who experience mental illness continue to be afraid of being ostracized in

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the workplace or from colleagues, being reassigned, or being limited in job mobility and promotion. The fear of coming forward is compounded by the amplified challenges that those who experience mental illness in the workplace must endure (Corrigan & Watson, 2002). First, they must deal with the symptoms and disabilities associated with the disease. Second, they are forced to deal with workplace stereotypes, prejudices, and misconceptions about their mental illness.

I recently attended a conference (Law Enforcement in Occupational Safety and Health – LEOSH) in New Brunswick, which brought together corporate health units from police organizations across Canada. A recurring theme at the conference was the direct and negative impact that stigma has on the likelihood that a police officer will come forward and access an organization's mental health resources—hindering the timely opportunity to receive professional help, diagnosis, and treatment. This theme prevails in policing, despite the best efforts of leaders and the many mental health awareness campaigns that have followed.

Hearing similar stories from corporate health representatives from police organizations across the country reminded me of a moment during my career when a police supervisor professed to me, "I'll never get promoted again; they know, and once they know it's over." I remembered how difficult it was for that supervisor to share with me this perspective and how equally challenging it was for me to hear and respond to it, as a leader. In that situation, I was glad that I was able to speak openly to that supervisor, provide hope, and encourage a healthy recovery. However, in that short and unplanned moment of conversation, I was unable to change that supervisor's perception of stigma in the workplace. My hope is that this editorial has a greater impact.

What is it that continues to promote the existence of mental health stigma in our police organizations? We often see two main drivers: public stigma and self-stigma (Corrigan & Watson, 2002). Public stigma speaks to the negative attitudes which employees choose to direct at their colleagues; these include judgments of incompetence, weakness, and dangerousness. Self-stigma consists of the same judgments, which then become internalized by those who have chosen to come forward, leading to negative beliefs about oneself and low self-esteem. One finding offers some positive news. The majority of workers, when polled, report that they are able to recognize signs of mental health stress and would proactively try to help their colleagues (American Psychiatric Association, 2019). This includes connecting those in distress with the appropriate mental health resources.

As a police leader, what can you do to challenge the mental health stigma that exists in your organization? First, familiarize yourself with the services offered by your corporate health unit—are there opportunities to improve the supports offered to your members? In our Wellness Unit, we offer a wide range of mental health resources to police officers and civilians, including early and regular access to corporate psychologists, a peer support and chaplaincy program, a critical incident response team, medical advisory services, an occupational health and safety team, claims management and return-to-work specialists, and referral to our EFAP program. Further, we offer well-being programming to our members, including nutrition, yoga, and meditation services. Recently, we partnered with an external provider to deliver 8 weeks of pro-active occupational stress training to members across our organization. We also collaborate with local clinical providers and encourage members to seek out support from community organizations, such as Toronto Beyond the Blue and Canada Beyond the Blue. Second, take the time to learn more about mental illness and share your knowledge with your leadership team and colleagues. Introduce your membership to advocates from mental health agencies who are willing to share real-life examples, and get to know those who have experienced mental illness. These leadership activities serve to normalize mental health discourse in your organization. Third, become a mental health advocate. Speak openly about your own lived experiences; show solidarity, and dispel misconceptions. In doing so, you are setting a positive example and informing members of your organization—those who suffer with mental illness—that they are valued and that there are supports available. Always reinforce dignity and respect for all employees, and affirm regularly that reprisal will not be tolerated by you or any leader of your organization. By engaging in these outward facing leadership activities, you are acknowledging your support for those that you serve and their individual struggles. After all, as a leader in policing, you have likely been there at some point; you may have had to suffer and recover alone, or you may have had the benefit of having access to the right resources to help support your recovery. In sum, a leader's support and message can be one of the most powerful ways to reduce mental health stigma in your organization—I encourage you to join in.

CONFLICT OF INTEREST DISCLOSURES

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REVIEW

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Brief mindfulness training for Canadian public safety personnel well-being

Renae M. Stevenson*

ABSTRACT

The body of research demonstrating the psychological and physiological benefits of mindfulness-based interventions (MBIs) is robust and spans decades, yet its adaptation for a population at significantly higher-than-average risk of negative health outcomes, operational stress injuries, moral injury, and burnout is in its infancy. Failing to address these risks has costs not just for the well-being of public safety professionals (PSPs), but for their families, their agencies, and their communities. Public safety work requires a high standard of ethical decision-making and compassionate contact with the communities served. The public safety oversight of agency, government, and training institutes must prepare its professionals to deliver exemplary levels of service as well as establish trauma-competent training and support frameworks that are evidence-based to protect PSP well-being. Remedying historically ineffective training with evidence-based models not only addresses the complexity of operational stress injuries (OSIs) but also the needs of social justice reform.

Canada's contribution to the body of research using evidence-based MBIs for PSP well-being is scarce. This literature review informs leaders, policymakers, change agents, and researchers not only of the need for such critical research in Canada, but of its current state and important considerations for its design. The efficacy of MBI is discussed, evaluating recent quantitative, qualitative, and mixed-methods studies towards charting a brief MBI (bMBI) logistically deliverable, attentive to the PSP cultural context needs and barriers, and which facilitates sustainable skill-building in attention, awareness, and compassion.

Key Words MBSR; MBRT; first responder; resilience; OSI; PTSD; wellness; decision-making.

BACKGROUND

Canadian public safety professionals (PSPs)—police, fire, paramedic, corrections, civilian support workers and dispatchers—are at the front lines of human suffering and often blamed as inadequate, or unprofessional, when services fall short. A PSP experiences significantly higher-than-average exposure to critical incidents and to trauma, exacerbated by high organizational stressors and cultural stigma inhibiting access to mental health support (Carleton et al., 2018; Carleton et al., 2020; Chopko et al., 2018; Fleischman et al., 2021; Ricciardelli et al., 2018, and Violanti et al., 2017). PSPs also suffer disproportionately from negative health outcomes such as depression, PTSD, cardiovascular disease, and autoimmune disease while being more vulnerable to suicide and moral injury (Carleton et al., 2017; Carleton et al., 2020; Fleischman et al., 2021; Papazoglou et al., 2020; Wilson et al., 2016, and Violanti et al., 2017). Furthermore, PSPs may be epigenetically exposing their children to increased risk for anxiety, depression, and PTSD (Yehuda et al., 2005; Yehuda & Lehrner, 2018). Addressing these systemic issues requires a holistic approach and evidence-based training beyond the scope of researchers alone. It necessitates peeling back PSPs' guarded culture curtain, and collaborating *with* researchers to co-create solutions and healthier, sustainable paths forward.

Problem Statement

There is limited research in general populations regarding brief mindful-based interventions (bMBIs). To date, there is no peer reviewed research utilizing an evidence-based MBI with Canadian PSPs—brief or otherwise. This is due to the impracticality of its typical 8-week program format; the lack of Canadian subject matter experts (SMEs); the lack of culturally competent and certified professionals to teach these interventions to PSPs; resistance from management personnel, and poor participant enrolment due to the inherent PSP cultural stigma around seeking mental health supports. The purpose of this literature review is to evaluate recent studies to inform

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and encourage research development of bMBIs. Further, these bMBIs should target critical and efficacious components of established MBIs, be refined to logistically feasible formats, and address Canadian PSP agency-specific needs.

Literature Review

The Canadian Public Safety Personnel Mental Health Landscape

The Canadian federal government mandated an action plan and the creation of the Canadian Institute for Public Safety Research and Treatment (CIPSRT) to address operational stress injuries (OSIs) amongst PSPs (Oliphant, 2016). Cultural stigma is an identified barrier exacerbating the problem, as is the need for evidence-based research, federal leadership and oversight, and shared best practices between all levels of government and stakeholder agencies (Oliphant, 2016).

One of the CIPSRT's first initiatives was to survey Canadian PSPs using self-report and validated tools to screen for mental disorder symptoms (Carleton et al., 2017). This study provides the first widespread data capture for a Canadian PSP sample and stresses the need for epidemiological study (Carleton et al., 2017). Carleton et al. found significantly higher rates of mental disorders in PSPs compared with the general population, and they found higher rates for federal police and paramedics than municipal police or fire agencies. Carleton et al. (2020) also examined causative stressors of PSPs using self-report validated instruments and they found that both traumatic events and stressors were associated with higher positive screening for mental disorders.

Ricciardelli et al. (2018) inductively analyzed themes from participants surveyed by Carleton et al. (2017). The derived themes paint a picture of compromised physical and psychological health, negative effects on family and relationships, and fatalistic attitudes such as *helplessness*, *worthlessness*, and being *disposable* (Ricciardelli et al., 2018). Ricciardelli et al.'s phenomenological examination points to systemic issues around a lack of evidence-based resourcing supports, PSP mental health cultural stigma, treatment-seeking barriers, and being over-scrutinized when taking needed leave.

There is a void in Canadian PSP research examining correlations associated with cultural stigma and accessing mental health supports and trainings. Understanding the *DNA* of this cultural stigma may provide clues on its mitigation. Krakauer et al. (2020) correlated stigma, service intentions, and mental health literacy and they found theoretical support for the notion that *resilience training* helps to minimize stigma and reduces other barriers to treatment support. Casas and Benuto (2022) linguistically analyzed trauma narratives from an online PSP support website in the United States identifying several themes: *idealization and disillusionment of the job, accumulated trauma exposure, trauma sequalae,* and *mental health stigma*. Casas and Benuto's findings align with other PSP research around empathetic distress, burnout, and high rates of mental disorders and underscores the need and desire amongst PSPs for peer support and top-down modelling for destigmatization (Carleton et al., 2017; Carleton et al., 2020; Krakauer et al., 2020; Ricciardelli et al., 2018).

Canadian Public Safety Personnel Mindfulness Research

There is a near void of published data with Canadian PSPs on mindfulness measures and the use of MBI interventions due to a lack of SMEs in this research field and a lack of stakeholder buy-in and coordination. Stevenson (2018) used purposive sampling to measure mindfulness using the FFMQ-15 (Five Facet Mindfulness Questionnaire-15; Christopher et al., 2016) in a British Columbia municipal police force from each recruit and experienced member samples. Fleischmann et al. (2021) critically contribute to MBI research in Canada by building on Kaplan et al.'s (2018) research regarding the correlational relationship of mindfulness and self-compassion facets with occupational stressors. Unlike Kaplan et al., who noted that non-reactivity moderated the perception of stress with operational stressors in a US sample, Fleischmann et al. did not. Fleischmann et al. found that non-*judging* moderated operational stressors in a Canadian PSP sample. Fleischmann et al.'s ongoing research will likely contribute as the first peer-reviewed published data of an MBI with a Canadian PSP sample. Sylvan (2021) is currently exploring contemplative practice amongst Royal Canadian Mounted Police (RCMP) senior police leaders through an exploratory phenomenological approach. One of the aims of Sylvan's research is to identify actionable priorities for policing regarding mindfulness and meditation training.

Public Safety Personnel Mindfulness-Based Intervention Research

Mindfulness-Based Stress Reduction (MBSR) was developed by Jon Kabat-Zinn and is an evidence-based group intervention combining meditation practices, experiential exercises, and psychoeducation that has demonstrated efficacy spanning decades (Boyd et al., 2018; Grossman et al., 2004; Khoury et al., 2015). The majority of PSP and similar occupation mindfulness-based research is in American populations using MBSR-based frameworks but adapted for high-demand professions.

Mindfulness-Based Resilience Training (MBRT) has a strong research foundation specific to PSP populations but is limited to US populations. Several pilot and feasibility studies utilized MBRT and demonstrated promising results (related to resilience, well-being, aggression, psychological flexibility, distress tolerance, alcohol use, sleep improvement, and burnout) and its researchers are now developing and replicating MBRT in larger, randomized control trial (RCT) samples (Christopher et al., 2016; 2018; 2020; Eddy et al., 2021; Grupe et al., 2021; Kaplan et al., 2020; Trombka et al., 2018). Eddy et al. (2021) used grounded theory methodology to assess MBRT in a US municipal police sample aimed at improving resilience to combat chronic occupational stressors. Participant experiences aligned with quantitative findings related to the beneficial effects of the body scan and mindful movement (Colgan et al., 2016) but also with Canadian PSP research findings around cultural stigma as a hindrance to treatment-seeking (Carleton et al., 2018; Carleton et al., 2020; Krakauer et al., 2020; Ricciardelli et al., 2018). Although thematic saturation wasn't reached, Eddy et al.'s findings are consistent with other research on the mechanics correlating the mindfulness facet of non-reactivity with improved interpersonal relations, the PSP health benefits of increased mindful awareness for distress tolerance, and the need for ongoing booster sessions for improved functioning and emotional regulation (Kaplan et al., 2020; McDonald et al., 2022).

Grupe et al. (2021) conducted an RCT utilizing validated instruments and measured cortisol awakening response (CAR)

with a PSP sample. In addition to improvements in mental health, distress tolerance, and sleep quality, Grupe et al. found reduced CAR, which was maintained at a 3-month follow-up. Grupe et al. also found evidence of PTSD symptom reduction. In an RCT using psychometric instruments, Trombka et al. (2018) used Mindfulness-Based Health Promotion (MBHP) with Brazilian PSPs and found empirical evidence across both quality of life and psychological domains which was consistent with Christopher et al. (2016), Grupe et al. (2021), and Fitzhugh et al.'s (2019) findings. The professional demands of the military are like PSP occupations in both trauma exposure and their need for cognitive resilience. As such, research in these populations helps inform PSP research. Jha et al. compared Mindfulness-Based Mind Fitness Training (MMFT) to a positivity training program (PT) of a military personnel sample pre-deployment to Afghanistan. Jha et al. found the MMFT group sustained significantly less degradation in working memory than the PT group and they maintained better task performance (Jha et al., 2020). Jha et al. suggest MBIs should be considered for other high reliability/high stress professions to promote cognitive resilience.

Delivery Modes and the Efficacy of Brief Mindfulness-Based Interventions

Wahbeh et al. (2014) qualitatively analyzed data from a US cross-sectional online survey of 500 participants to assess preference types for meditation programs. Recruiting included purposive sampling to capture more PTSD-diagnosed individuals (Wahbeh et al., 2014). Internet was the preferred delivery mode (43%), followed by individual (38%), and group intervention at 20% (Wahbeh et al., 2014). Research is limited for bMBIs—whether in-person or online. Colgan et al. (2016) qualitatively assessed data from 102 PTSD-diagnosed US military veterans who participated in an RCT including bMBIs of a 20-minute body scan and a 20-minute mindful breathing practice over 6 weeks. Of note, PTSD symptom improvement was reported more in the bMBI groups than in the non, and the breathing-specific interventions were endorsed by participants to improve sleep quality (Colgan et al., 2016). These findings highlight key areas to target in the development of bMBIs—namely a focus on *attentional* breath practices and *interoceptive* practices like the body scan. Sleep deprivation and disruption is an occupational hazard and an unavoidable reality of the 24-hour nature of PSP work. Colgan et al.'s correlational finding between breath practices and improved sleep is an area for future PSP research focus. The Resilience@ Work Mindfulness Program (R@W) was a cluster RCT with Australian fire and hazmat personnel. The protocol used six online, self-paced sessions over 3.5–6 weeks combining Acceptance and Commitment Therapy (ACT), Mindfulness-Based Cognitive Therapy (MBCT), and compassion training with participants primarily recruited by peer support teams (Joyce et al., 2019). Joyce et al. measured several domains using validated psychometric tools and saw moderate to large effect sizes for resilience scales, which were maintained at a 6-month follow-up. Also using an online delivery model, Fitzhugh et al. (2019) conducted an RCT from five UK police agencies assigned to a wait control group, Headspace, or Mindfit Cop (MC) intervention groups. Fitzhugh et al. assessed well-being, resilience, mindfulness, absenteeism, and job control using validated psychometric tools. Improved sleep, distress tolerance, focus and feeling supported were noted while barriers identified were scheduling, lack of quiet rooms, unit assignments, cultural stigma, and technical issues (Fitzhugh et al., 2019). Fitzhugh et al. follow-up interviews were also conducted with the MBI groups, and findings highlighted participant increases in awareness, reflection, and recognizing autopilot behaviour.

The COVID-19 pandemic transitioned a lot of training and mental health programs to online formats both for the general population and for PSPs. McCall et al. (2021) thematically analyzed why PSPs access specific online programs, and they found that most participants learned of programs from PSP professional affiliations; they accessed them due to convenience, affordability, and to mitigate cultural stigma barriers; and they were motivated to learn coping strategies to manage symptoms. These findings highlight why PSP skills-based resilience training is a *vital* need in a variety of delivery formats. Stelnicki et al. (2021) used a mixed-methods design of a cognitive behavioural therapy (CBT)-based intervention to longitudinally measure outcomes related to mental health disorders, social support, resilience, emotional function, shame, and stigma in early career PSPs. Stelnicki et al. then analyzed qualitative data using NVivo software, finding the program was well-received, enhanced awareness and resilience, and improved social connections, which was consistent with the study's quantitative findings. A suppressed social engagement system is a facet of PTSD and OSIs. Improving social connections is a foundational component in Polyvagal Theory and it is critical for a regulated autonomic nervous system (Porges, 2021).

Future Implications

Based on CIPSRT research of well-being need, Canadian MBI research should prioritize higher-risk groups such as paramedics and the RCMP. MBIs should be ethically informed by best practices, include *trauma-competent* mindfulness practices, and be delivered by culturally informed and qualified trainers in logistically accessible formats. RCT recruitment may improve, and cultural stigma be mitigated by purposive sampling of cluster-randomized peer and leadership participant populations to help build program champions—which in turn will enhance future PSP participant enrolment.

Future PSP research should endeavour to replicate MBRT in randomized clustered samples, targeting recruit academies, provincial and federal PSP agencies, and varying delivery methods from in-person immersion, to hybrid immersion/virtual boosters, to purely online but under 6 weeks in duration. These studies can extend beyond quasi-experimental to RCT designs and include both phenomenological and grounded theory qualitative designs to truly refine the intervention to best serve diverse Canadian PSP populations.

CONCLUSION

The efficacy of MBIs with general populations is well established. A strong research foundation now exists with PSPs and the much-needed application of MBIs for Canadian PSPs to improve well-being and to protect against inherent occupational stressors. The well-being of PSPs is critical not just for public safety but for a sustainable workforce. The landscape of Canadian PSP health and well-being is better

informed by the centralized efforts of the CIPSRT and its deficit of research is shrinking. But Canada is still falling short of *implementing* evidence-based programs to protect PSPs. This is exacerbated by the toll taken by the COVID-19 pandemic, which further diminished already limited staffing resources. MBIs are feasible, scalable, and efficacious solutions to protect and strengthen PSP well-being, to enhance ethical decision-making, and to address a social justice crisis that needs disarming.

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CONFLICT OF INTEREST DISCLOSURES

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ORIGINAL RESEARCH

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Enhancing resilience: An interpretative phenomenological analysis of The Awe Project

Jeff Thompson*

ABSTRACT

Awe is a complex emotion often associated with experiencing multiple other positive emotions during a captivating and immersive experience. Engaging in awe experiences contributes to enhancing an individual's personal resilience and well-being. Moreover, the benefits of experiencing awe transcend the individual, as it has been described as a self-transcendent emotion provoking concern beyond the self. Using an Interpretative Phenomenological Analysis (IPA) methodology, this exploratory paper evaluates the impact of The Awe Project, an online resilience and well-being program that can be accessed on mobile devices, on a specific cohort of participants. Data analysis consisted of examining participant post-program surveys and comments made during the program. Results indicate the program supported participants' resilience and well-being through evoking awe and using other mindfulness and resilience practices, such as having a sense of agency, cognitive reappraisal, connectedness, controlled breathing, gratitude and appreciation, meaning and purpose in life, and optimism and prospection.

Key Words Well-being; phenomenology; technology; mental health.

INTRODUCTION

It is imperative that new, evidence-based technological interventions be designed and empirically evaluated to support individuals' well-being and enhance their personal resilience. This urgency exists for a number of reasons: suicide remains a global concern, depression and anxiety continue to be a disturbing issue, and there is an increasing sense of isolation and loneliness. Each of these concerns has been further compounded by the emergence of the COVID-19 global pandemic, with studies showing increases in mental health conditions impacting people from a variety of demographic groups and geographic locations (Abbott, 2021; COVID-19 Mental Disorders Collaborators, 2021; World Health Organization, 2022).

Currently, even as COVID-19 and its related strains begin to dissipate, the mental health concerns remain significant (CVS Health, 2022; Melville, 2022; Xie et al., 2022). It is therefore necessary for individuals, as well as institutions, such as schools, organizations, and government agencies, to develop positive coping strategies that can support people's well-being and enhance their resilience, while also contributing to an overall positive and healthy daily life. These skills, strategies, programs, and interventions must be evidence-based and practically designed.

This paper uses the translational research approach to examine and evaluate one such program, The Awe Project, that was designed by the author to offer a brief resilience intervention accessible on mobile devices and computers to support an individual's resilience and overall well-being. Translational research is research conducted specifically for the purpose of improving human health (Thompson et al., 2022).

The Awe Project was specifically designed with mobile technology in mind for easy accessibility. The program is primarily grounded in eliciting awe in participants as well as prompting them to engage in additional, evidence-based resilience practices such as having a sense of agency, cognitive reappraisal, connectedness, controlled breathing, gratitude and appreciation, meaning and purpose in life, and optimism and prospection. Previous studies have established the close relationship between experiencing awe with these resilience practices and enhancing personal resilience and overall well-being (Thompson et al., 2022).

This paper examines and evaluates The Awe Project through interpretative phenomenological analysis (IPA), a specific type of phenomenological research methodology, by analyzing data collected from individual participant comments shared during the program and their feedback from a post-program survey. In addition to IPA, the broader

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concepts of phenomenology also inform the development of this paper.

To begin, a literature review is first used to explain the principles of IPA and why it is the appropriate methodology to guide this exploratory evaluation of The Awe Project. Next, the literature review is used to examine awe and provide the rationale for concentrating the program around this specific emotion. Finally, the literature review concludes with an overview of resilience. Additionally, the previously mentioned resilience skills are explored, detailing their important role in supporting an individual's mental health and well-being, and in enhancing resilience.

Interpretative Phenomenological Analysis

Interpretative phenomenological analysis is a qualitative research methodological approach that first seeks to understand a person's experience of a phenomenon, after which a researcher makes an interpretation and establishes themes across multiple individuals' experiences (Creswell, 2007; van Manen, 1990). For this paper, awe is the phenomenon being explored, although other related, positive emotions and resilience practices are also examined.

Interpretative phenomenological analysis (IPA) is informed by three key elements: phenomenology, hermeneutics, and idiography (Love et al., 2020; Smith et al., 2009). Phenomenology guides IPA by "providing us with a rich source of ideas about how to examine and comprehend lived experience" (Smith et al., 2009, p. 11). Hermeneutics is the second theoretical source of IPA and is the study of interpretation. The phenomenon of awe is a subjective experience that is then interpreted and analyzed by the researcher, who is able to offer meaningful insights beyond the direct text provided by participants when they share their experience (Smith et al., 2009, p. 23). Lastly, idiography refers to the attention given to particular details; it explores a specific phenomenon and how it is understood from the perspective of a specific group and in a specific context (Smith et al., 2009, p. 29).

Although IPA is concerned with how an individual makes meaning of a phenomenon, the focus does not remain solely on a single individual. While the individuals provide their perspectives and insights on the experience, the researcher is responsible for making meaning and interpreting what has been shared. This has been referred to as a "double hermeneutic" (Smith & Osborn, 2003), as it shows the dual role of the researcher as becoming both a participant and an interpreter of the other participants' experiences of the phenomenon (Guba & Lincoln, 1994; Montague et al., 2020).

One goal of IPA is to make meaning of the experiences; hence, establishing themes across the group of individual experiences is a critical part of IPA when multiple participants are involved (Bonner & Friedman, 2011; Smith & Nizza, 2021; Smith & Osborn, 2003). Themes are derived from the researcher's understanding of the phenomenon, while they also review their notes and the connections and patterns of the data being analyzed (Smith et al., 2009).

The development of themes is a shift in the experience of the phenomenon as it moves from the participants to the researcher; however, the relationship between the two remains constant. This is an example of what is described as the hermeneutic circle, where the themes emerge from analyzing the entire dataset (the "whole"), which can only be derived from the interpretations of each individual's subjective statements (the "parts") (Frechette et al., 2020). The circle is "completed" when those individual statements are collectively interpreted and therefore become part of a theme.

For the reasons explained in this section, a qualitative methodology such as IPA is the most practical for an exploratory paper examining and evaluating a program such as The Awe Project because it seeks to ascertain meaning, individually and also collectively as a group, of the phenomenon in question: awe.

Awe Explained

Awe has been described as a complex emotional response to something or someone extraordinary (Stellar, 2021; Thompson et al., 2022). Experiencing awe is subjective, as a situation that can be awe-eliciting for one person is not necessarily so for others; however, some common categories have proven effective in provoking awe in many individuals. These include nature, space, music and the arts, spiritual experiences, connectedness, and both one's own accomplishments and those of others (Graziosi & Yaden, 2019; Shiota et al., 2007; Sturm et al., 2020; Yaden et al., 2019). Moreover, direct experience on the part of the initiator is not required, as awe has been shown to be evoked through pictures, video, virtual and augmented reality, and narratives (Bai et al., 2017; Chen & Mongrain, 2020; Chirico et al., 2016; Chirico et al., 2017; Cuzzolino, 2021; Danvers & Shiota, 2017; Krenzer et al., 1018; Piff et al., 2015; Stellar et al., 2018; Rudd et al., 2012; Thompson, 2022a; Walker & Gilovich, 2020).

Although awe is experienced primarily as a positive emotion, there can also be potential negative feelings associated with awe, such as fear, terror, and horror (Arcangeli et al., 2020; Bethelmy, & Corraliza, 2019; Chirico & Yaden, 2018; Guan et al., 2019). This paper, however, examines the positive aspects and benefits of awe. There are two key elements associated with awe: vastness and the need for accommodation. These were first theorized in the seminal work conducted by researchers Dacher Keltner and Jonathan Haidt (2003). Vastness can refer to something physical but can also be conceptually based (Chirico & Gaggioli, 2021; Thompson, 2022b). This sense of vastness requires the creation of a new mental schema, which is also described as a need for accommodation (Keltner & Haidt, 2003; Thompson, 2022b).

The complexity of awe is best explained by the wide-ranging positive impact it can have on an individual, including neurologically, cognitively, emotionally, physically, and behaviorally. Neurologically, the positive impact of experiencing awe can include reduced activity in the *default mode network* (DMN) regions of the brain (Tabibnia, 2020; van Elk et al., 2019). Over-activity in the DMN has been associated with rumination and mental health conditions such as depression and anxiety (Coutinho et al., 2016; Hamilton et al., 2015; Posner et al., 2016; Preuss et al., 2020). Thus, experiencing awe can help offer a perspective shift by capturing a person's attention and providing a "break" from their current, detrimental mindset that can involve ruminating (van Elk et al., 2019).

Brain imaging work conducted by Guan and colleagues (2019) has shown that an individual's higher self-reporting of dispositional awe is negatively associated with regional gray matter volume in different parts of the brain (the anterior cingulate cortex, middle/posterior cingulate cortex, and middle

temporal gyrus). This work identified specific regions of the brain that have a role in processing dispositional awe. Another study by Guan and colleagues (2019) further demonstrated that different regions of the brain are activated based on the type of awe being experienced (positive compared with negative).

Cognitively, awe has been described as an epistemic emotion, meaning it can reveal gaps in one's current knowledge (Gottlieb et al., 2018; McPhetres, 2019; Cuzzolino, 2021). Awe as an epistemic emotion has also been associated with an individual's sense of curiosity to fill those gaps in knowledge (McPhetres, 2019). Anderson and colleagues (2020) established a further link between awe and curiosity, both having a positive impact on academic outcomes.

A common experience related to awe is an individual's referring to feeling "small" in a positive manner (Piff et al., 2015), which is also connected with humility (Stellar et al., 2018). This sense of "smallness," or the "small self," alters the person's perspective in various ways, including seeing their daily issues, concerns, and problems as less overwhelming (Piff et al., 2015; Reinerman-Jones et al., 2013; Shiota et al., 2007, 2017; van Elk et al., 2016). This "smallness" has also been shown to create a sense of connectedness with others (Yaden et al., 2017), while awe more generally has been linked with enhancing social connectedness (Sturm et al., 2020).

Awe experiences can enhance one's sense of purpose and meaning in life (Rivera et al., 2019) and overall life satisfaction (Krause & Hayward, 2015). Awe can also improve problem-solving skills (Dobson, 2015), increase focus (Danvers & Shiota, 2017), and promote creative thinking (Chirico et al., 2018; Keltner & Haidt, 2003; Zhang et al., 2021). Additionally, awe can increase a sense of gratitude, openness, and optimism (Nelson-Coffey et al., 2019; Stellar et al., 2018). Awe's impact on a person's perspective also includes an expanded shift in how they perceive time. Rudd and colleagues (2012) showed that people who were induced with awe felt less impatient and did not feel rushed (Rudd et al., 2012).

Awe can also have numerous emotional benefits for the individual, including increasing happiness and instilling an overall positive mood (Gordon et al., 2017). Awe can assist individuals with being able to handle ambiguity and uncertainty (Bonner & Friedman, 2011; Shiota, et al., 2006; Shiota, et al., 2007), while it can also reduce feelings of stress (Anderson, et al. 2018; Bai et al., 2021; Stellar et al., 2017) and despair (Bonner & Friedman, 2011).

Experiencing awe has been shown to have positive benefits on an individual's physical health and overall well-being (Rudd et al., 2012; Stellar, et al., 2015). This includes awe having a positive impact on one's immune health, as research has established a relationship between awe and lower levels of pro-inflammatory cytokines (Stellar et al., 2015). Stellar and colleagues (2015) have found high levels of cytokines to be associated with deficient health, including depression, diabetes, and heart disease.

Lastly, experiencing awe can also impact a person's behaviour, as it is considered a self-transcendent experience (Chirico & Yaden, 2018; Jiang & Sedikides, 2021), meaning one that involves looking beyond oneself and taking a larger perspective that includes concern and care for others (APA, n.d.; Yaden et al., 2016). The prosocial behaviours associated with experiencing awe include altruism, compassion, generosity, kindness, and concern for others and the environment (Nelson-Coffey et al., 2019; Piff et al., 2015; Rudd et al., 2012; Yang et al., 2016, Yang et al., 2018; Zhao et al., 2018; Zhao et al., 2022).

Awe has also been described as being both a mindfulness and resilience practice (Büssing, 2021; Clark, 2020; Keltner, 2017; Lutz et al., 2015; Sturm, et al., 2020; Tabibnia, 2020; Thompson, 2022a). Tabibnia (2020) found that awe is both a type of mindfulness practice and a component in supporting an individual's resilience and well-being, and recent works by Thompson and colleagues (Thompson, 2020a; Thompson & Drew 2020; Thompson et al., 2022; Thompson, 2022a; Thompson 2022b) have further explored this notion of awe as a mindfulness practice and its relationship with other resilience practices. As described later in this paper, The Awe Project attempts to put these previous studies, suggestions, and recommendations into practice.

Researcher Marianna Graziosi (2018) explains awe's subjectivity and relationship to mindfulness by clarifying that awe is both an ordinary response to the extraordinary, while also being an extraordinary response to the ordinary. An individual's approach, perspective, and reflection contribute to awe being experienced in a particular situation or interaction.

Finally, and expanding on Graziosi's work, The Awe Project embraces the approach that experiencing awe is not limited to once-in-a lifetime, extravagant, or extraordinary moments. Rather, awe can be experienced in brief, everyday moments (Shiota, 2021). Kirk Schneider's (2009) work elaborates on this aspect by explaining that those purposely *seeking out* specific instances for awe to occur are most likely not to find it. Instead, simply *being open* to experiencing awe in one's daily activities can bring about moments of awe.

Resilience Explained

Resilience refers to adapting in the midst of adverse and challenging situations and the ability to "bounce back" in a manner that is positive and productive (APA, 2020; Southwick & Charney, 2018; Thompson, 2022a). Additionally, resilience involves seeking support beyond one's own means when necessary (Thompson, 2022a; Thompson, 2020b).

With respect to trying to enhance an individual's well-being, research by Wild and colleagues (2020) has shown that psycho-educational measures alone are not as effective as initiatives that involve interactive elements where participants engage in techniques and practices. Knowing about resilience and its evidence-based practices is not enough: enhancing resilience requires the participant to take action.

Individuals must access a broad range of resilience practices in order to maintain and enhance their personal resilience. Being aware of and accessing diverse resilience techniques is referred to as flexibility (Bonanno, 2005), and a proactive engagement with flexibility is necessary in the aftermath of traumatic or stressful events. Some of these resilience practices and techniques include having a sense of agency, cognitive reappraisal, connectedness, controlled breathing, gratitude and appreciation, meaning and purpose in life, and optimism and prospection. While Thompson and colleagues (2020; 2022) have explored each of these practices in depth, including their relationship with awe and overall well-being, they are further explained below.

Having a sense of agency means acknowledging both what one is able to control and those things that are beyond

one's control (Hanson, 2018). It is associated with taking action instead of feeling helplessness or hopelessness, and it is also related to optimism, which is further discussed in this section (Nelson-Coffey et al., 2019; Thompson et al., 2022).

Cognitive reappraisal broadly refers to reinterpreting a situation in a manner that alters the meaning and emotions related to that situation (Xu et al., 2020; Gross & John, 2003; McRae et al., 2012; Southwick & Charney, 2018). With respect to resilience and well-being, engaging in cognitive reappraisal is a critical practice and can be highly effective in regulating both affect and physiological arousal (Buhle et al., 2014). There are many additional benefits to practicing cognitive reappraisal, including potential increases in social connectedness, finding meaning and purpose in life (Southwick & Charney, 2018), improved coping strategies and recovery (Shapero et al., 2019), overall well-being, and life satisfaction. Engaging in cognitive reappraisal can also reduce stress as well as depression and anxiety symptoms (Xu et al., 2020).

Connectedness, for the purposes of this paper and in relation to resilience, refers to our social relationships with others that support an individual's well-being. This type of connectedness has been shown to help reduce and manage stress (Nitschke et al., 2021; Southwick & Charney, 2018) while also contributing to self-worth, self-esteem, and overall happiness (Brown et al., 2020). Connectedness is also positively associated with other resilience-related practices such as altruism, finding meaning and purpose in life, and expressing gratitude (for example, see Suttie, 2017).

Controlled breathing is arguably the most well-known resilience and mindfulness practice (Thompson et al., 2022). Controlled breathing practices are varied and generally involve breathing in a specific and purposeful manner. Many studies have explained the benefits of controlled breathing, which include reducing stress and anger while improving mood, focus, sleeping habits, and overall well-being (for a review, see Thompson et al., 2022).

Gratitude practices are another common resilience practice, whereby the individual recognizes that something good has been received or has happened to them and the source of this is outside of that individual (DeSteno, 2018; Emmons, 2010; Millstein et al., 2016). Practicing gratitude can support a resilient perspective in an individual because the more we practice gratitude, the more that practice contributes to our ability to be optimistic about the future (Kerr et al., 2015). Practicing gratitude can improve one's mental and physical health and strengthen our connectedness with others (Emmons, 2010), and it has a positive impact on brain function and on one's immune system (Millstein et al., 2016; Mills et al., 2015).

Finding meaning and purpose in life (MPiL) can enhance an individual's resilience as it can assist with coping positively with life's challenges (Schaefer et al., 2013; Southwick & Charney, 2018). Possessing MPiL has been described as having order in one's life, pursuing worthwhile goals, and having a general, overall sense that one's life has significance (see Shin & Steger, 2014). Shin and Steger (2014) found that the benefits of having MPiL include happiness, life satisfaction, well-being, and psychological and physical health. Further studies of MPiL have shown that additional benefits can include improvements in sleep quality, prolonged life, social connectedness, and increased cognitive abilities (Alimujiang et al., 2019; Schaefer et al., 2013; Southwick & Charney, 2018).

Possessing optimism, having hope, and looking forward to future events and activities comprise future-oriented resilience practices. In terms of resilience, optimism refers to the belief that one can contribute to change for the better (Reivich & Shatte, 2003). Realistic optimism entails both believing that positive change can occur and taking action to make it happen (Guarnera & Williams, 1987; Hanson, 2018). Importantly, having optimism is a behaviour that can be learned (Schneider, 2001) and that has been associated with overall happiness, success in life, reduced anxiety (see Carter, 2008), and workplace satisfaction (Youseff & Luthans, 2007).

Prospection, like optimism, is another future-facing resilience practice. Prospection entails positive, goal-directed thinking and behaviours and is important for a variety of reasons. Studies have shown that when prompted to think about a future event (compared with a previous event), prospection had a greater impact on an individual's feelings in the current moment (Van Boven & Ashworth, 2007). Thus, reflecting on possible, realistic, future events can have a positive impact on the present moment. MacLeod (2017) explored the evidence-based studies on the benefits of prospection and found that, broadly speaking, prospection can have a positive impact on an individual's psychological and emotional well-being and overall mental health.

Enhancing personal resilience involves possessing a mindset whereby one must be aware of and appropriately use various practices and techniques to help proactively handle potential adverse and stressful events, to support oneself during those events, and to recover post-event. This flexible approach entails engaging in the practices, in addition to awe, mentioned in this section. The next section details how The Awe Project was developed to provide a program that brings all of those practices together, centralized to the experience of awe, to support a person's well-being and enhance their personal resilience.

The Awe Project Explained

The Awe Project, created by the author, was designed to provide participants with evidence-based, awe-inducing videos and resilience-enhancing practices (as noted in the previous section) that are brief, easily accessible, and practical. The program lasts 5 days and involves various resilience practices related to watching a brief awe-inducing video each morning and evening.

There are 10 videos in The Awe Project. The videos were selected based on previous studies of categories that have been shown to elicit awe. These are represented across the 10 videos and include accomplishments, art, music, nature, religious and spiritual moments, space, and social interactions (Allen, 2018; Anderson et al., 2018; Pilgrim et al., 2017; Shiota et al., 2007; Thompson, 2022a).

The program is cohort-based, and participants access the material via mobile devices or computers through a private classroom on the Google Classroom application. It was specifically designed in this manner to support its availability to everyone, regardless of geographic location.

The participants were informed that each of the morning and evening activities should take less than 10 minutes to complete. In addition to the program being designed to be easily accessible through mobile technology, it was also designed to be adaptable to each person's specific situation, living and work conditions, and other life commitments. The

program's activities are therefore asynchronous, completed at the individual's own pace within a requested timeframe.

The morning's content and practices are pre-scheduled and are posted at 5 o'clock every morning. Participants are instructed to complete them before noon, and it is suggested they try to do so as close as possible to when they first wake up. The morning activities involve a 1-minute controlled breathing practice that includes a motion graphic for the participants to follow along with, a short video, and a reflective question. The participants are instructed to answer the questions immediately after watching the video.

The evening content and practices are posted at 6 o'clock in the evening and the participants are requested to complete them at any time prior to going to sleep. Although for this particular cohort, the 1-minute breathing practice was included only during the morning session, it has since been added to the evening session. Similar to the morning instructions, the participants are asked to answer the questions immediately after watching the video.

As already explained, after watching the videos participants are prompted to answer either a single question (a reflection on the video) or, on certain days, a second question as well. Each of the second questions is grounded in a resilience practice designed to build on the first question. The prompted resilience practices are those previously explained: agency, cognitive reappraisal, connectedness, controlled breathing, gratitude and appreciation, meaning and purpose in life, and optimism and prospection.

METHODOLOGY

Phenomenology research methods and, more specifically, IPA methodology, guided the development of this study because it was deemed the most appropriate, as it involves, as described above, a specific experience (the phenomenon of awe), examines a group of people's experiences of that phenomenon (a specific cohort), and is being studied in a specific context (participating in The Awe Project).

The most frequently utilized method to collect data when conducting a phenomenological study, including IPA, is through interviews, although other sources are also acceptable, for example, data previously collected for a different purpose (Bonner & Friedman, 2011; Creswell, 2007; Frechette et al., 2020; Smith & Osborn, 2003).

For this study, a secondary analysis was conducted of comments made by participants during The Awe Project as well as their feedback from the post-program survey. Secondary analysis of data related to awe is not uncommon in IPA studies. Bonner and Friedman (2011) used secondary data to further examine the subjective and collective accounts of people's experiences of awe in order to determine themes from individual accounts. In part, Bonner and Friedman's work motivated and guided this study's approach.

Themes were established in a manner consistent with previous qualitative research approaches and recommendations, while also taking into account themes that emerged in previous, related awe studies (Bonner & Friedman, 2011; Thompson, 2022a). The methodology of establishing themes is presented further below.

Approval for this study was granted through the author's Institutional Review Board at Lipscomb University.

DATA SOURCE

The dataset is comprised of a single cohort of 12 participants who took part in The Awe Project in the beginning of 2021. This sample size is consistent with both phenomenological research generally (Groenewald, 2004; Polkinghorne, 1989) and IPA specifically (Eatough & Smith, 2017; Smith & Nizza, 2021). Although there exists a larger dataset of additional cohorts that will be analyzed in future studies (over 20 cohorts comprising approximately 300 participants), the current analysis is an exploratory evaluation of the program and the dataset size is consistent with typical IPA studies (Smith & Nizza, 2021). Moreover, it is also consistent with IPA-suggested approaches in that it is a purposely small, homogenous, selected sample (Smith et al., 2009), where the richness of the data is more important that the sample size (Frechette et al., 2020; Mapp, 2008). It is worth noting, and once again only preliminarily, that the findings in this paper are consistent with a larger dataset of approximately 20 additional cohorts currently under review.

The 12 participants included 6 men and 6 women who had participated in previous resilience training offered by the author. Additional demographic data is provided in Table I below.

Within the law enforcement demographic, the participants work in a variety of settings, including hostage negotiation, patrol, patrol supervision, specialized response unit, and as a detective investigator.

Establishing Themes

This paper's approach to establishing and presenting the themes was informed by the previously mentioned study conducted by Bonner and Friedman (2011) as well as other studies related to awe and resilience (Thompson & Drew, 2020; Thompson, 2020a; Thompson, 2022a). IPA researchers have cautioned it is not a prescriptive methodology and ultimately needs to be adapted and modified by each researcher (Smith & Nizza, 2021; Smith & Osborn, 2003).

TABLE I Participant demographics

Demographic	*n* (%)
Location	
United States	9 (75%)
Canada	3 (25%)
Employment	
Law enforcement	6 (50%)
Uniformed member	5
Correctional facility	1
Education	3 (25%)
University	1
High school	1
Law enforcement	1
Psychologist	1 (8%)
Science Researcher	1 (8%)
Nurse	1 (8%)

Consistent with IPA data analysis (Smith et al., 2009; Smith & Osborn, 2003), the findings, their interpretation, and the themes developed by the researcher are interwoven and are supported by extracts from participants' direct accounts of their experiences (in contrast to presenting the results and discussion in separate sections). Similar to previous awe research on secondary data analysis (Bonner & Friedman, 2011), this paper uses multiple extracts to illustrate the perspectives of various participants, which in turn are used to generate a variety of themes.

In qualitative research, this type of "thick descriptions" involves an immersive process of interpreting meaning by providing the participants' detailed accounts (Clark & Chevrette, 2017; Denzin, 1989; Geertz; 1973; Mills et al., 2010). Additional qualitative work has described the value of thick descriptions as providing a detailed account of participants' experiences of a phenomenon, enabling the researcher to establish patterns (or themes) and to derive meaning and conclusions from them (Holloway, 1997; Lincoln & Guba, 1985).

RESULTS

Prior to examining the feedback provided by participants on each of the program's videos and questions, this section details program-wide feedback that were used to develop the overall themes.[1] In the post-program survey, the participants were asked a total of 25 questions comprising both Likert Scale responses and open-ended questions. In this paper, the following open-ended questions are examined: "How would you describe The Awe Project to someone?", "How would you describe The Awe Project's impact on you?", "What did you like most about The Awe Project?", and "Anything else you'd like to add?"

Given that the experience of awe is subjective and that this paper seeks to gain a deeper understanding of an individual's perspective on awe while also exploring the themes that can emerge by examining those perspectives collectively, a necessary first step is to explore how each participant described the program and to summarize its overall impact. This first, "global" approach to examining the program must take place prior to obtaining participants' insights into the specific videos and their impact on each participant.

Participants described The Awe Project in various ways, often stating that it helped shape a different perspective for them:

> A 5-day interactive program that helps you reset your mindset at the beginning and the end of your days.

> A set of daily activities to help you set positive intentions and acknowledge positive experiences for [the] long and short term.

This perspective shift is related to awe promoting curiosity and being described as an epistemic emotion; experiencing awe can both reveal gaps in knowledge and promote learning (Gottlieb et al., 2018; Krogh-Jespersen et al., 2020; McPhetres, 2019; Cuzzolino, 2021): "[A] 5-day project that makes you realize that there is much more to this world and this universe than you could possibly imagine."

In addition to experiencing a perspective shift, the following explains the relevance of feeling "small," which is frequently associated with awe and is widely cited in the research (Allen, 2018; Piff et al., 2015; Reinerman-Jones et al., 2013; Shiota et al., 2017; van Elk et al., 2019). Consistent with the research, the sense of feeling "small" relates to reappraising various aspects of life, especially those that are negative:

> It helps to remind us that we need to take more time to evaluate our individual situations in a bigger picture. At times we tend to only see the negative and don't realize that our problems are small in comparison to others and also small in comparison to all the "good" around us.

Participants described how the program impacted them in various, positive ways, including feeling grateful and humble:

> These 5 days made me humbler and more appreciative of what I have.

> Made me appreciate and put things into perspective.

Part of the program's positive impact was how the participants plan to approach life going forward: "It has left me in a more positive frame of mind and inspired to work to stay more positive."

The following participant summed up the program's impact as vast and complex, like awe itself (Keltner & Haidt, 2003; Thompson, 2022a):

> I loved every part of this project… A program that holds you accountable for taking 5 minutes each morning and each evening for yourself. During those moments, you are reflecting on different things and different moments that your mind brings you to, and we are given the opportunity to briefly discuss them with the class… inspiring to connect with others and their backgrounds and interesting to read everyone else's perception of what their awe is.

Data analysis identified 18 themes related to participants' experiences of awe and resilience practices. Although IPA studies can be limited to fewer themes, Smith and Nizza (2021) caution, "these numbers are indicative and not prescriptive, and the goal should be quality, not quantity" (p. 48). Hefferon and Gil-Rodriguez also acknowledge there is not a strict rule for establishing a set number of themes (2011). Finally, and more broadly as this paper is also guided by general phenomenological methodologies, a fixed number of recommended themes is not identified or suggested (Creswell, 2007; Moustakas, 1994). Table II identifies these overall themes, based on the analysis of the replies and comments, and they are further examined in the Discussion section below.

[1] It is suggested that readers who are interested in participating in The Awe Project stop reading at this point. The following sections of the paper share the themes and feedback from previous participants and detail what occurs during each video. It is the author's (who is the creator of the program) belief that if the reader continues and is aware of the themes, comments, and details of each video and then participates at some point in the future, they will not have the intended experience.

As described in the previous section, the themes emerged through an analysis of the data in a manner consistent with various qualitative methodologies, mainly IPA. Previous awe research (Bonner & Friedman, 2011; Cuzzolino, 2021; Thompson, 2022a) provided a further framework in which to analyze the data for the purpose of identifying themes.

TABLE II Awe project themes and examples

Theme	Example
Accomplishment	"Wow! Talk about overcoming obstacles."
Ambiguity and uncertainty	"Even though I wasn't exactly sure what I was seeing, my attention was focused on the beauty of it."
Cognitive reappraisal	"Reminded me that there is awe all around you every day, and try to pause and take it in."
Connectedness[1]	"Just watching these videos and commenting on them afterwards shows the power of experience; shared experience."
Curiosity	"The video again reminded me there is so much out there to explore and experience."
Gratitude	"Another amazing video; makes me appreciate where I live that much more."
Humility/humble	"Nature can remind us that we don't control everything."
Meaning and purpose in life	"It's been a particularly busy week for me, and this shared, meaningfully productive experience added something meaningful to it."
Mindfulness[2]	"I was so entrenched in this video that I actually said AWE, while watching it."
Open-mindedness	"I enjoy the videos and reading everyone's comments and points of view on the videos we have watched."
(Other) Positive emotions	"I had feelings of joy and warmth."
Profound	"Enlightening."
Prospection and optimism	"I feel motivated to never give up and not to quit when life gets hard."
Physical sensations	"Watching that gave me shivers throughout the entire beginning and end!"
Reduce anxiety/ stress/worry	"I couldn't help but feel like anything I may be going through, compared to watching that, is maybe not so huge."
Self-transcendence	"I have really enjoyed the videos that highlight nature's beauty, and have even sent links to some of my friends."
Small self	"Realizing how small we are in comparison to the universe forces me to pause and change my perspective."
Vastness	"It highlights the vast and beautiful space of this world we live in."

[1] Connectedness to others in the cohort, to other people generally, and with nature.
[2] Mindfulness, for the purpose of this study, includes time feeling altered, feeling as if time slowed, and being present in the moment.

DISCUSSION

The previous section established the themes and overall programmatic feedback from The Awe Project. In this section, those themes and "global" comments are further examined and discussed. For practical purposes, the section is divided into subsections, one for each video. Structuring the data and themes via each video, in contrast to presenting it in sections separated by themes, invites the reader to experience the program in a similar manner as the participants.

Day 1 Morning

The video that starts the program comprises various clips and time-lapse moments of Yosemite National Park during the day and evening. A theme that was immediately recognized in this video and that persisted throughout the program was the depth or intensity of participants' positive experiences while reflecting on the videos (underling added):

> I was "wowed" by the video. It was peaceful, breathtaking and inspiring.
>
> That was like an overdose of awe!
>
> Watching the video was pretty awe-inspiring in itself… It's sort of like a humbling grandiosity.

Among the many positive emotions participants experienced was a calming effect: "This video was calming and soothing to watch; helped soothe and calm nerves and anxiety before [work]."

In addition to positive emotions, the video also evoked a common experience of awe, the altering of time (Rudd et al., 2019), which, for the purpose of establishing themes, was considered part of mindfulness. This form of mindfulness was often described as participants taking the time to pause and, in certain circumstances, notice the variety of details in the video:

> Made me stop and pause about how majestic the world and life is.
>
> I focused on a few things: the overtures, the vastness of the landscape and bed of stars.

An additional consistent theme associated with this video was the sense that it created a curiosity and yearning to learn and experience more of the world. Once again, this resonates with awe being described as an epistemic emotion that raises awareness of a person's limited knowledge and motivates them to learn and experience more (McPhetres, 2019): "Watching the video is also prompting me to consciously plan something I think will be awe-inspiring very soon."

The following participant acknowledges the challenges that they will face with respect to this yearning and how they will not let it hinder them. This type of acknowledgment and approach is critical to enhancing personal resilience and is often referred to as acceptance (Southwick & Charney, 2018): "The video again reminded me there is so much out there to explore and experience. I may not become a rock climber and scale a mountain. That won't stop me from taking in the world in a different perspective."

Despite this initial video being only 3:58 minutes long, the participant's comments illustrate that it was still able to evoke numerous awe-related emotions as well as allow them to engage in critical resilience practices such as acceptance and mindfulness.

Day 1 Evening

The second video in The Awe Project is a short section of a longer video that covers the journey of a man traveling up to the edge of space (127,852 feet into the stratosphere) and then leaping out to return back to Earth, breaking the sound barrier during free fall at a speed of 843.6 miles per hour. At the time, this feat broke a world record, which is why the video was selected as illustrating accomplishments described as potentially eliciting awe (Walker & Gilovich, 2021). Moreover, as expected, and as validated from the feedback, this video evoked various intense emotions, including uncertainty and ambiguity, two feelings that have been associated with awe (as previously mentioned) and resilience (Iacoviello & Charney, 2014; Southwick & Charney, 2018).

Participants were asked to share what they felt during the video and especially at the end. Again, as expected, the emotions shared at different stages of the video were varied. This second video was the first to have an additional question that prompted the participants to reflect on and share another resilience-related practice. All subsequent videos also had an additional question. In this first instance, participants were asked about something that had made them happy that day and why it had done so.

With respect to the first question, the intensity and depth of emotions experienced at different points in the video were acknowledged by participants:

> That was incredible to watch and what a mix of emotions in such a short time!! I cannot imagine the panic that he and onlookers felt watching him spin, then feeling like he was going to pass out, to minutes later: relief, happiness and pride!!

> Watching that gave me shivers throughout the entire beginning and end! In conclusion, I felt relief.

The participants also acknowledged the person's sense of accomplishment, which has previously been established as eliciting awe: "It was pretty amazing to see that and imagine what a sense of accomplishment he must have had."

Interestingly, and possibly because they had just watched a video on personal accomplishment, some participants reflected on accomplishments (both their own and someone else's) with respect to the second question, which asked about something that had made them happy that day:

> One thing that made me happy today was cleaning out the crawl space under our basement stairs. Happy when it was done! Much like the video, it was nerve racking at the beginning, but I did feel a sense of accomplishment when it was done!

> Something that made me happy today was receiving a text from our daughter's teacher commending her on her abilities with virtual learning, leadership skills and willingness to help others without being asked. Proud mama moment – a great thing to read in the middle of a very busy shift… that was my awe moment of the day :). Despite dealing with [work issues], my phone buzzed to remind me of what was really important in my life: my family!

The above reflection on someone else's personal accomplishment demonstrates the interconnectedness between experiencing awe and resilience and the corresponding traits associated with both. In this case, it shows the relationship between connectedness, self-efficacy, positive emotions such as joy and happiness, and cognitive reappraisal.

Day 2 Morning

The third video is from the movie *Tree of Life* (Mallick, 2011), which depicts the creation of the universe and is accompanied by music from "Lacrimosa," from Mozart's 1791 *Requiem*. This particular clip was selected for several reasons. To begin, it depicts images of the universe known to elicit awe (Allen, 2018). Next, it was also anticipated that it would elicit different responses from each of the participants. In addition, as the video does not explain what is occurring, it can possibly create confusion and be visually jarring for the viewer. Finally, the music can add a further emotional depth and intensity.

Participants validated each of these hypotheses in their comments and responses to each other. The following participant did not enjoy the clip: "When I watched that video, unlike the others, I didn't enjoy it as much. I found myself questioning if this is real or not."

Although the comments below share that perspective of uncertainty with what they were watching, these participants were also able to find something positive or meaningful to take from it while also touching on additional themes:

> Even though I wasn't exactly sure what I was seeing, my attention was focused on the beauty of it.

> The clip itself is pretty mystifying, but it's something I can't help but marvel at… I find the colors to be alluring… All-in-all, again, this made me think on the vast, unknowable nature of the universe and the sublime.

The following participants explained their positive experiences from the video:

> I found it very relaxing. In fact, I believe l could go to sleep watching that video. Made me feel like I was floating with no worries.

> There was a calmness I felt during the first part of the clip. I felt small in comparison to the universe.

However, some found the music, which generally has been described as eliciting awe (Pilgrim et al., 2017), unfavourable:

> I know the music was meant to enhance the visual, but for me it detracted.

> I… do not feel like the music coincides. I agree with [name]: not my favorite one.

A common theme shared by participants was the seemingly contradictory aspects of the video, which also captivated them. These comments align with common awe themes, such as a sense of time being altered, mindfulness, and again, being able to handle uncertainty:

> Incredibly mesmerizing, especially with the accompanying music. Beautiful disasters.

> That was intense and beautiful at the same time… the visual was amazing and put me in a trance.

This video, the third in the program, was designed to elicit awe as well as common corresponding experiences, such as feeling small, sensing a vastness, time being altered, mindfulness, calmness, a need for accommodation, identifying gaps in knowledge, and beauty. Attributes of resilience were also revealed through the responses to the videos, including reframing and reappraisal, enhanced focus, dealing with elements that are beyond one's control, and, once again, mindfulness.

Day 2 Evening

The fourth video of The Awe Project was of a tulip farmer riding a harvesting machine and included various aerial perspectives displaying vast fields of different coloured tulips. Overall, responses from participants were positive, with the themes once again emerging based on the calm-evoking feelings and vibrancy of the colours, among other factors.

The following participants explained the positive emotions they experienced while watching the video:

> I enjoyed this video; tulips are such a beautiful flower with their vibrant colors. I had feelings of joy and warmth.

> I just thought of how vast the fields were… and of course the colors were amazing.

Many participants connected the video with personal, everyday moments they had experienced. This can be examined as both a type of cognitive reappraisal (seeing a seemingly unmemorable event as more memorable) and accommodation of the vastness they were witnessing by relating it to something they had previously experienced:

> Oddly enough I thought of the small flower displays I often see in Costco, and how there is SO much more going on with these flowers!!! LOL, is that strange? Maybe there's a message there. Take the time to really reflect on things!?

> Loved the organized lines LOL… reminded me of watching [their spouse] cut our lawn in perfect straight lines, the fragrant fresh scent of warm months.

This participant further demonstrated being engaged in cognitive reappraisal and finding beauty in something they previously did not care for:

> Perspective. I am not a huge tulip fan. Watching the video and seeing the colours and the vast amount of tulips really makes them beautiful. I am also amazed at a farmer's ability to plant crops and harvest in what appears to be such straight lines. Again, perspective.

The following two participants expanded on the value of perspective and how it filled a gap in their knowledge:

> Thanks for expanding my knowledge, as you really don't know what you don't know.

> Enlightening. I've never seen such fields of tulips, or even thought about them. Beautiful.

This video offered participants an opportunity to experience something they all would have come across ordinarily at various points in their lives (tulips) and to experience it differently. With this video, and based on their replies, participants were able to experience awe in a profound way as an extraordinary response to something ordinary (Graziosi, 2018).

Day 3 Morning

During the development of the program, a concern arose that during the halfway point in the program (Day 3's videos, videos 5 and 6 of 10) participants could experience awe-fatigue. To examine whether this happened, another landscape-based nature video with vast aerial footage and time-lapse clips was shown on the morning of Day 3.

In the text introducing the video and that day's questions, participants were cautioned to try and avoid comparing this video with previous ones. The concerns of participants undergoing awe-fatigue were alleviated, with many sharing intensity-rich, time-captivating, positive emotions in response to the video:

> I was so entrenched in this video that I actually said AWE, while watching it.

> Another amazing video, makes me appreciate where I live that much more… I really enjoy the videos, thank you.

The second question asked participants to engage in another cognitive reappraisal type of reflection. Much in the same way the participants were challenged to avoid a possible pitfall of comparing this video with the first video on Monday morning, they were once again challenged to think of a past event that seemed ordinary but that now, upon further reflection, was filled with awe:

> It reminded me of traveling on planes – I always choose the window seat so I can look at what we're flying over, which may be thought of as ordinary to those who fly often. However, I think flying is such an amazing opportunity to take a moment to appreciate and reflect on our relationship to nature and think of ways to preserve its beauty.

> This video made me think of how fast life is and to remember to try and enjoy it as much as possible. Try not to overlook the beautiful things because there are so many right in front of you. When I was 8 years [old] my father took me to Manhattan for the day. While we were

> there, we went to the top of the Twin Towers. I remember looking down at the City at how small the people and cars were. I'm in awe now thinking about it.

The positive reflections were not limited to traveling or trips to places far away. The following participants reflected on the "ordinary" of both things and people close to them that also evoked a sense of gratitude:

> This made me appreciate where I live. I'm next to the Rocky Mountains and I have beauty at my doorstep that I have taken for granted.

> The video made me think of how telling or moving a specific detail can be, whether big or small. It made me think that connecting with or looking into the eyes of a loved one can generate a similar feeling to the one I received while watching the video.

This video's corresponding questions allowed the participants to experience awe from yet another common elicitor of awe: nature. Additionally, themes continued to be emphasized, including gratitude, profoundness, positive emotions, and mindfulness.

Day 3 Evening

The sixth video in The Awe Project was used to elicit awe through a narrated story of personal triumph and accomplishment, which previous research has shown to elicit awe (Walker & Gilovich, 2021). The video is narrated by Nicholas Vujicic, a man who has tetra-amelia syndrome (he was born without arms or legs). In the video, he describes what it was like suffering from this syndrome, how it led to him having suicidal thoughts as a child, and his life's achievements and positive moments, including meeting his wife and giving motivational speeches.

Many of the participants shared how they were not only moved by his story, but it had a further ripple effect on their lives with respect to their own grit and personal striving:

> I feel motivated to never give up and not to quit when life gets hard.

> Watching this video made me feel inspired because it was clear to see his spirit for life.

Participants also mentioned that the video helped realign their perspective, especially with regard to facing challenges: "Just when you think we have obstacles in life and watching Nick's story made me emotional. It also motivates me to look at the positive and appreciate what I have."

Lastly, this participant acknowledged that perspective and resilience can often be about not necessarily changing what is occurring, but instead changing how one perceives it, which includes acknowledging both the negative and positive aspects of one's life: "Some focus on the bad aspects and forget the little things that are so important. I suppose that 'awe' helps us see those little things clouded by the static of life."

Reflecting on gratitude and connectedness are two critical resilience practices that can support an individual's well-being (Emmons, 2010; Southwick & Charney, 2018). Importantly, in addition to their positive attributes, both gratitude and connectedness can also counterbalance the common thoughts and feelings of people who suffer from depression and have suicidal thoughts. This includes feeling alone, helpless, and isolated from others (Emmons, 2010; Suttie, 2017).

Based on this knowledge, the second question prompted participants to share with the group one nice thing that someone did for them that day and to further explain why they picked it and what it felt like. Adding the last two elements was designed to encourage the participants to spend more time reflecting on what it was and the corresponding emotions, as identifying one's emotions contributes to personal resilience and overall well-being (Boyes, 2018; Lieberman et al., 2007).

Participants repeatedly mentioned how laughter was an integral part of their gratitude reflection. Laughter and humour have been shown to be important aspects of resilience (Martin, 2019; Lonczak, 2022; Peterson & Seligman, 2004; Ruch et al., 2010):

> Today [a co-worker] made me laugh so hard I was crying. It made me feel so good to laugh that hard. I picked that because some people focus on the bad aspects of life and forget the little things that are so important.

Some participants spoke about the impact of what could easily be viewed as trivial, ordinary, or insignificant:

> My wife bought me some snack favorites when she went shopping :-) I picked this because though she spent all day working and has been recouping from an injury, she still thought to do that. What did it feel like: It simply made me happy.

Aside from attempting to elicit awe, this video and corresponding questions helped participants with their own motivation while also allowing them to reflect on moments of gratitude, reappraisal, appreciation, and accomplishments.

Day 4 Morning

The eighth video in The Awe Project involved a motion video graphic depicting the size of the Earth in relation to other planets, the sun, and the universe. Not surprisingly, "smallness," a common theme associated with experiencing awe (Allen, 2018), was mentioned by participants: "Seeing the visuals of the comparisons really puts into perspective how 'small' we are. It's mind boggling, really!"

The following participants also acknowledged the "smallness" that was evoked while further connecting it with meaning and purpose in life. Having a sense of purpose and meaning in life has been shown to support an individual's well-being (Alimujiang et al., 2019; Gander, 2019; Southwick & Charney, 2018). The following statements are also related to how awe can have a self-transcending impact and encourage people to look beyond themselves (Liu et al., 2021; Wong, 2016; Yaden et al., 2016):

> We are so small in comparison and yet have so much to give.

> I knew the earth was so small but didn't realize how small, wow! Even small we have so much beauty and so much to offer.

Participants explained how the videos have allowed them to recall previous events and reflect on perceiving them differently. This type of cognitive reappraisal has previously been associated with experiencing awe (Allen, 2018; Yaden et al., 2017), while it has also been shown to reduce activity in the default mode network (DMN) (Tabibnia, 2020; van Elk et al., 2019). Such a reduction, in certain circumstances, has been associated with supporting a person's overall well-being (Miyagi et al., 2020; Tabibnia, 2020; van Elk et al., 2019):

> Videos like this make me realize how meaningless and minuscule the little things that go wrong are. I shouldn't be angry when someone, for example, cuts me off in traffic; realizing how small we are in comparison to the universe forces me to pause and change my perspective.

Lastly, participants mentioned the time-altering, mindfulness effect the video had on them: "Very interesting video. The more it went on, the more intriguing I thought it was."

The second question asked participants what they liked about the program so far and whether anything had surprised them regarding the program. The mindfulness and time-altering aspect of awe were again frequently mentioned by participants, especially with respect to the program, assuring them of the time dedicated each day to look after their well-being:

> I like that Awe Project… it has encouraged me to take a moment and pause my busy lifestyle for my wellness.

> I'm really happy to undertake this project because it … made me commit and be accountable for moments for myself during the day.

The following participants also connected this daily "pause" with their appreciation of the program, including the breathing practices:

> I love that I am able to take [a] pause in the morning and center myself with the breathing exercise. And at night reconnect and get grounded before heading to bed.

> I've looked forward to beginning and ending my day with this project. I like the combination of the breathing, then video, with a reflection to end. It gets you thinking in different ways.

Additionally, The Awe Project had an impact beyond the specific moments dedicated to it. Here, participants explained how it affected them throughout their day: "I love watching the videos every day. It definitely makes me think more about pausing and taking things in throughout the day."

These participants included the self-transcendental impact the program had with respect to others:

> I have really enjoyed the videos that highlight nature's beauty, and have even sent links to some of my friends. I will keep track of these, because it's such a wonderful reminder of how beautiful the world we live in is.

> I'm also getting myself back into the habit of finding the awe moment of the day to help ground me, as well as help me to be even more empathetic to day-to-day things.

Lastly, multiple resilient terms emerged with respect to the second part of the question, which asked participants what surprised them the most about the program. They noted the calming effect the program created and also evoked gratitude: "How a few minutes in my day can make me feel calm and grateful for what I am able to experience."

The resilience concepts and awe themes of open-mindedness, empathy, connectedness were shared by the following participants:

> One thing that surprised me is how much I enjoy writing and reading the comments.

> One thing I've been surprised by (and enjoyed) is the variety of experiences people have described… it's been nice to hear how awe-inspiring the experience has been for others.

> I knew everyone would have different perspectives and ideas on these videos, but I was surprised at just how different everyone's interpretations actually were.

Even though the interactions were occurring asynchronously through technology, the participants' comments confirmed that connectedness still took place. As previously mentioned, connectedness is a critical aspect of personal resilience and overall well-being. The following participant acknowledged this and noted the ability of technology to contribute to connectedness:

> One thing that has surprised me most about the project is how connected to the rest of the group I feel even though we are not seeing one another. I think this is so because we are all sharing in the same experience at the same time. Again, another reminder of how connected we really are.

The question asking participants what surprised them about the program was included first because "surprise" is associated with experiencing awe (Allen, 2018), so this prompt allowed them to expand on something that is often associated with experiencing awe. Second, it was anticipated that connectedness might be mentioned as something the participants appreciated about the program; therefore, this question also provided an opportunity for further self-reflection and also enhanced group synergy. Lastly, the video's eliciting of a sense of "smallness" further allowed connectedness to both support common feelings of awe and offer participants an opportunity to engage in related resilience practices.

Day 4 Evening

Day 4's evening video consisted of two different video clips. The first video comprised footage of a powerful rainstorm over a body of water surrounded by mountains. The rain came

down quickly and intensely and was contained in a limited area. The second video was from a scientific experiment of a droplet of water falling multiple times at different speeds, in slow motion, and hitting sand, resulting in a ripple effect in the sand. Participants were asked to share a reflection on each of the videos. Additionally, they were asked to also reply to someone's comment from that day or any other day's postings.

Multiple participants shared a variety of positive emotions they experienced while watching the first video, with differing levels of intensity:

> The first video took my breath away.
>
> The first was pretty astounding…

Additional comments included reflecting on the impact of nature: "Nature can remind us that we don't control everything and there is a great natural force around us." This last comment demonstrates how experiencing awe, especially with nature, can evoke the resilience concept of acceptance. Acceptance, in terms of resilience and well-being, refers to acknowledging that certain things are beyond our control and coming to terms with that.

The second video also evoked positive emotions, some of them intense: "I couldn't help but exclaim, 'Wow, that was so cool' for the second one."

Notably, participants shared time alteration (slowing down) reflections that induced gratitude and appreciation, as well as self-transcendent comments, with respect to the second video: "The second video made me think of how important it is to slow things down and take a moment to realize our impact on others."

Lastly, awe has been previously shown to help enhance people's focus (Danvers & Shiota, 2017; Rudd et al., 2012), as acknowledged by this participant: "Second video reminds me of attention to detail."

Both videos also allowed participants to reflect and make a metaphorical connection between the video and their everyday lives: "These videos reminded me how much happens around me that I don't see or notice… It makes me feel more connected to the Earth to see videos like this."

With respect to the second question, some participants replied to previous comments made by others in relation to the two videos they watched that evening. Comments included agreeing with previous postings with respect to the positive aspects of the two videos and also the fact that the videos prompted a reflective moment: "I agree with what you said. The videos make me feel like reflecting. They induce deep thought."

The second question, involving asking the participants to reply to others, was created to potentially promote certain elements of resilience. These include, once again, connectedness, acceptance, and evoking positive emotions. Aside from the clear eliciting of connectedness that can be created through the very act of replying, connectedness could further be heightened by both the person replying and the recipient of the reply by an awareness that they both share similar viewpoints. Sharing a similar perspective with someone has been shown to contribute to rapport building and trust between people (Albarracín, 2009; Thompson, 2015), while also supporting an individual's sense of community and well-being (Southwick & Charney, 2018; Thompson et al., 2022).

Day 5 Morning

The ninth video in The Awe Project is a trailer for *Nature's Wonder*, a 2014 film by Louie Schwartzberg. The first question asked for participants' thoughts on the video while the second one prompted them to share something "awe-inspiring" they wanted to do at some point before the end of the year. This questioning prompt is known as an optimism and prospection practice (Bulley & Irish, 2018; Southwick & Charney, 2018; Thompson et al., 2022). Prospection is related to the resilience practice of optimism, or looking forward to something in the future that is achievable (Allen, 2019; MacLeod, 2017).

Given that this video was again related to nature, participants shared previous themes, which included positive emotions such as a sense of calmness, beauty, self-transcendence, and connectedness:

> The video had me thinking we are all connected and contribute to the beauty of our lives. It doesn't matter how big or small. We all have something to offer.
>
> Just watching these videos and commenting on them afterwards shows the power of experience; shared experience.

The following participant noted this video's self-transcendent aspect of awe: "One line from the video struck me: 'Protect what you love.' I oftentimes forget how vast, expansive, and beautiful our world is, and it's a great reminder that we need to do what we can to preserve nature."

The video also provoked some of the participants to reflect on their gratitude and appreciation for their current surroundings, as well as beyond their local area:

> Loved it! Reminded me that there is awe all around you every day, and try to pause and take it in.
>
> The video reminded me that there is so much more to see on this Earth that I need to travel more.

Notably, the redundancy of the nature-based videos was not perceived by participants as repetitive or mundane, and nor did they view it in an unexciting manner: "As all the videos, this [one] was just as beautiful as the last."

As much as The Awe Project was designed to elicit awe and other resilience-related attributes through brief interventions, the program's design was also intended to go beyond the few minutes of practice each day. From that perspective, the second optimism and prospection-related question prompted the participants to share something specific that they are looking forward to doing that is awe-inspiring. Many responses were related to travel and the outdoors: "One awe-invoking thing I am looking forward to doing this year is hiking to and experiencing the Havasu Falls in Arizona."

Connectedness to both nature and others in a local setting was also shared: "One awe-invoking thing I look forward to is going surfing with my kids. Not just riding the waves myself, but sitting back and enjoying watching them."

The following participant demonstrated the yearning for traveling somewhere exotic, while also demonstrating a key trait of resilience: an acknowledgment of having to adapt, especially with respect to something beyond their control

(e.g., the COVID-19 pandemic): "One awe-invoking thing that I hope still happens is a trip to Bora Bora. Fingers crossed we can travel come late summer. If not, I'll have to find a beach nearby and enjoy all that it has to offer."

Another participant was specific not about the location, but regarding their perspective and approach to their future experiences: "I'm feeling inspired to start paying attention to the little things again – so the awe-invoking thing I'm looking forward to this year is taking time to notice and appreciate small moments."

The video and questions for Day 5 enabled participants yet again to experience awe through a short clip involving nature while also prompting them to look beyond The Awe Project and reflect on the present moment and the future. Mindfulness, or being fully present in the current moment, and also being prospective were once again two themes (among others) that were revealed by analyzing the data for this assignment.

Day 5 Evening

The last video of The Awe Project was of aerial footage of people riding on a microflight, a small flying machine that is in fact a glider with one rear propeller. The pilot, Christian Moullec, takes passengers on a flight around Mont Saint Michel, France, and is able to bring the microflight close enough to flocks of flying geese so that passengers are "flying with" them. Moreover, passengers are close enough to actually touch and even pet the geese while the birds remain undisturbed. The flight has been described as an "extraordinary, unforgettable, almost spiritual experience" (Fly with Birds, n.d.).

Awe Project participants were asked to share a reflection on the video, and the second question prompted them to provide anything they wanted to share with the group about participating in the program now that it had ended.

The concept of teamwork was something many of the participants reflected on with respect to the video. From a resilience perspective, this is associated with connectedness and how it is important to be surrounded by like-minded, gritty people (Duckworth, 2016; Thompson, 2020c):

> I thought of teamwork and leadership as well watching the video and also the concept of working towards a goal. I thought of how working hard can set the example for others to try and become better versions of themselves. Wow… all that from those birds!

> In the military, I worked on jet fighter aircraft. I was always in awe of the planes flying in close formations. The birds are more beautiful and peaceful but also remind me of the teamwork and discipline necessary to fly beautifully but without running into each other.

With respect to the second question, an expression of gratitude for participating in the program was frequently noted:

> Thank you for giving us this experience.

> Thank you again for the opportunity.

Participants also shared their gratitude with respect to having the opportunity to interact and connect with the other participants:

> I feel like it was nice getting to know everyone at least a little.

> I really enjoyed this program. I looked forward to watching the videos and reading all the comments every day.

Mindfulness and a sense of time being altered were also expressed as something participants enjoyed. This is again related to what previous research has described as an important pathway to resilience and overall well-being (Tabibnia, 2020):

> Over the 5 days this gave me a chance to just enjoy these videos and "Be in the moment." Not worry about the things I had to do, but just be.

> Thank you for giving me a little time each day to be outside of myself and in another world away!

Lastly, some participants shared the lasting effect the program will have on them:

> This week reminded me I need to take that time for myself each day… even if it's only 10 minutes!

> I find myself a bit more grounded and calmer. I plan on continuing some breathing exercises in the morning. I … completely agree, this has been amazing.

The final video was selected to provide participants with one last opportunity to feel awe as well as the many other, related, well-being and resilience attributes, such as connectedness, mindfulness, and gratitude.

CONCLUSION

This paper explored the subjective experiences of awe for both individuals and a specific group of participants who took part in a program designed to elicit awe. It also allowed participants to engage in other practices designed to enhance well-being and personal resilience. The Awe Project was motivated by a translational research approach: identify a collection of specific, evidence-based practices supported by empirical data and develop a program in a manner that is accessible, practical, enjoyable, and, most importantly, effective. A program evaluation of pre-existing data using IPA revealed 18 emerging themes, which further supported the existing previous themes and practices related to both experiencing awe and enhancing personal resilience. Based on the individual comments of participants, an analysis of the comments, and the emergent themes, it was found that The Awe Project was able to support an individual's personal resilience and ability to consistently elicit awe.

These findings are consistent with the preliminary analysis of a much larger dataset, yet more work is needed to support these findings. The larger dataset can be used to examine the findings uncovered here to explore whether the themes are consistent or whether additional themes emerge. Additionally, analyzing the awe narratives that were collected from participants as part of the pre-program survey can further contribute to a more in-depth IPA study. Finally, future studies can explore the effectiveness of The Awe Project

in a variety of other ways, including a longitudinal study, using both qualitative and quantitative survey instruments, to determine whether the program had a lasting impact on participants. To support replicability of the findings here as well as with future studies, it is recommended that studies also be conducted by researchers other than the author (who developed the program).

Lastly, it is only fitting to conclude with the words of a participant:

> The thing I've liked most about The Awe Project is it's reminding me to take that time for myself. It's reminding me also to reflect on situations and spend a bit more time analyzing things. What's surprised me the most is the reminder that we can always find time in our day to focus on ourselves. It's very easy to get out of that routine, but so important to make self-care a priority.

CONFLICT OF INTEREST DISCLOSURES

The author has no conflicts of interest to declare.

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ORIGINAL RESEARCH

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A meta-analysis of the impact of community policing on crime reduction

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ABSTRACT

Over the last few decades, many studies have been conducted to understand whether community policing (CP) has an impact on reducing crime rates. Yet there is still substantial controversy surrounding the question of the impact of CP on crime rates. Despite the broad understanding of CP, various types of measurement of crime statistics have led researchers to conduct meta-analyses of the phenomenon. This study combines two previous meta-analyses of CP and Turkish and English online searches. We used the Comprehensive Meta-Analysis (CMA 3.0) statistical program to calculate the effect sizes of previous studies. We employed odds ratio (OR) as the effect size, since it is one of the most appropriate methods for proportions. We found no evidence suggesting that CP has an impact on reducing disorders, drug sales, or property crime, but it does have an impact on reducing crimes such as burglary, gun use, drug use, Part I crimes, and robbery, as well as fear of crime. Depending on crime type, CP can be a promising policing strategy to reduce crimes. Our cross-country study found a statistically significant, positive impact of CP, despite the limitations of including only Turkish- and English-language studies.

Key Words Comprehensive meta-analysis; odds ratio; effect size.

INTRODUCTION

Community policing (CP) or community-oriented policing is a philosophy that challenges the traditional policing orthodoxy. The central tenet of CP is community involvement in solving community problems, including crime. Previous research into the effectiveness of CP could not identify robust, one-tailed results on crime reduction. However, findings suggest that CP may have a positive effect on citizen satisfaction, fear of crime, and trust in the police (Weisburd & Eck, 2004; Skogan, 2004). Measuring the effectiveness of CP presents many challenges, primary among them the very definition of "community policing." There is no standard definition of CP, and the scope of proffered definitions is broad. Community policing strategies and the implementation methods for those strategies are wide-ranging because of the inherent need to tailor strategies to the needs of individual communities.

This study explores the extent to which CP impacts crime rates. We begin with a review of the literature on CP before discussing the meta-analysis methodology and the findings. We conclude with a discussion of the suggestions from our findings for future studies.

BACKGROUND

Community policing emerged during the 1970s as a novel form of community–law enforcement partnership. By the 1990s, the United States Bureau of Justice Assistance – Community Policing Consortium identified the "two core components" of community policing as "community partnership and problem-solving" (Community Policing Consortium, 1994). Greene (1997) identified CP in terms of practices and incentives for greater information sharing between the police and community residents, and as a mechanism to improve police service to the residents. Trojanowicz and Bucqueroux defined community policing as "a new philosophy of policing, based on the concept that police officers and private citizens working together in creative ways can help solve contemporary community problems related to crime, fear of crime, social and physical disorder, and neighborhood decay" (1990, p. 5). Although there remains no standard definition, CP is frequently described in similar ways and the "two core components"—partnerships and problem-solving—remain very much visible in more current discussions of CP despite vast changes to the policing environment since the 1990s. Community policing relies on a comprehensive approach to

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community problems, embracing cooperative partnerships, and the active involvement of citizens in policing to improve quality of life and reduce the fear of crime (Roh & Oliver, 2005; Xu et al., 2005). Stevens (2002) notes that CP focuses on "helping others to help themselves" (p. 64). Community policing, essentially, invites the police to change from a reactive mindset to proactive policing; in other words, from crime fighters to problem-solvers. In more recent years, the United States Department of Justice Office of Community Oriented Policing Services (COPS) has added "organizational transformation" as a third component of community policing, and COPS has explained community policing as "a philosophy that promotes organizational strategies that support the systematic use of partnerships and problem-solving techniques to proactively address the immediate conditions that give rise to public safety issues such as crime, social disorder, and fear of crime" (Office of Community Oriented Policing Services, 2012).

Crime control, maintaining order, and service provision are three functions of policing (Fagan & Tyler, 2004; ABA – Criminal Justice Section, 2020). Neighbourhood watch programs, voluntary service within police departments, citizen police academies, deployment of community service officers, community-based foot patrols, regular meetings with community leaders, and in-service training are typical community policing activities. These activities are directed towards the priorities of community policing: maintaining order and service provision (Zhao et al., 2003). Philosophically, CP promotes organizational transformation, growth of citizen accountability, decentralized decision-making, and greater discretion of line officers in handling calls and autonomy in relationship building (Lumb & Breazeale, 2003; Office of Community Oriented Policing Services, 2012).

Studies that have attempted to discuss premises and propositions of CP have described the purpose of CP as well (Basar, 2016; Akdoğan, 2014; Rosenbaum et al., 2011; Gultekin & Gultekin, 2011; Idriss et al., 2010; Hizli, 2010). The consensus seems to be that CP is a contemporary partnership approach that focuses on working with and engaging in the community. The underlying rationale of CP was to slow down rising crime rates. It was also believed to contribute to police legitimacy and community confidence in police departments. Community policing was initiated to cooperate with members of the community to fight crime.

Community policing is now considered a best practice in contemporary policing and has become an increasingly popular law enforcement strategy internationally, deployed in many countries, including the United States, United Kingdom, Turkey, China, and those adhering to the Organization for Security and Co-operation in Europe (Basar, 2016; Karademir, 2015; Akdoğan, 2014; Gultekin & Gultekin, 2011; Idriss et al., 2010; Hizli, 2010; Zhang et al., 2007; Ekici, 2010; Sozer & Ekici, 2010). Over 25% of the United Kingdom's population and over 40% of the population in the United States live in areas where some type of CP neighbourhood watch program has been implemented (Bennett et al., 2006). The most current figures for the United States based on 2016 Law Enforcement Management and Administrative Statistics (LEMAS-2016) show that 87.4% of police departments (serving 100,000 or more residents) have designated personnel for CP. This ratio is relatively smaller, 28.5%, for police departments serving fewer than 100,000 residents (Hyland & Davis, 2019). Although it has been widely accepted as one of the most popular approaches to modern-day policing, the effectiveness of the strategy is ambiguous. Its impact on reducing crime or crime clearance rates is far from being decisively clear. Traditional police performance metrics have included crime rates, clearance rates, response times, and productivity or workload statistics, especially where the agency's organizational culture emphasizes crime fighting (Hodgkinson et al., 2019). Community policing models are difficult to reconcile with the effectiveness measures used by traditional models because of the proactive aims of CP to prevent crime, increase citizens' quality of life, and reduce fear of crime. MacDonald (2002) also noted that evaluating the effectiveness of police–community partnerships is difficult because of the broad scope of the concept. However, there have also been some longitudinal studies, cross-sectional studies, and multiple site evaluations on the effectiveness of CP programs (Zhao et al., 2009).

Several empirical studies describe CP as particularly effective in crime prevention. Zhang et al. (2007), for example, suggest that the collaboration between the community, the police, and local government has a positive effect on crime control. That is, increasing collaboration leads to lower crime rates. Xu et al. (2005) found a significant effect of CP variables (working with community and crime prevention) on disorder. Zhao et al. (2006) analyzed 50 studies on CP and its effects on reducing the fear of crime. They found that a reduction in fear was shown in 31 of the studies, no change in fear was shown in 18, and only one study reported an increase in fear. Roh & Oliver's 2005 study on CP and fear of crime is consistent with the findings of Zhao et al. (2006) regarding CP and decreases in fear of crime. MacDonald (2002), in one of the most visible patrol beat studies, the Kansas City gun experiment, found that a significant reduction in gun crimes was shown in the experimental beat that used CP. MacDonald also found that proactive policing methods were effective in preventing violent crime. Zhao et al.'s (2003) findings on the implementation of CP on all core functions of policing were statistically significant and therefore suggest that CP programs are effective when used to control crime, decrease social disorder, and deliver services to the community. Some researchers consider CP a necessity, the only way to counter rising crime rates and to ensure public support for police crime control efforts (Hancer, 2008). Neighbourhood watch programs, a frequent strategy of CP, have been associated with a significant decrease in crime rates, ranging from a 16% to 26% decrease (Bennet et al., 2008; 2006; and Bennet & Holloway, 2004). Another study reports a 75% decrease in burglary rates in neighbourhoods where the Kirkholt Burglary Prevention Project was implemented (Forrester et al., 1988). In a separate victimization survey, another study reported offenses decreased from a total of 247 reported offenses in 979 households before neighbourhood watch to 174 reported offences in 1,060 households after neighbourhood watch was implemented, which indicates a decrease of between 25% and 16% (Bennett & Holloway, 2004). Exploring the impact of CP on four selected US cities (Chicago, Lowell, Newark, San Diego), Weiss (2005) noted decreases in violent and property crime rates in the target cities from 1993 through 2002 according to a qualitative analysis (pp. 172–173). Importantly, Newark and Lowell are credited for larger decreases in violent and property crimes

due to the intensive CP training and accountability. Weiss (2005) also foresaw that insufficient federal funding of both traditional and CP efforts, due to the change in public mood and bureaucratic priorities in the wake of the September 11 attacks, might lead to a resurgence of crime rates, as agencies beleaguered with new challenges returned to more comfortable traditional policing methods.

However, not all empirical studies provide supporting evidence for the effectiveness of CP. Some argue the ineffectiveness of CP programs in crime control and ultimately in lowering crime rates (Gill et al., 2014; Idriss et al., 2010; MacDonald, 2002; Greene, 1997; and Bennett & Lavrakas, 1989). Mukherjee & Wilson (1987) contend the reduction of burglaries in the Kirkholt Burglary Prevention Project may have simply been the result of displacement of crime to other neighbourhoods. Similarly, Henig (1984) argues that, in the examination of neighbourhood watch programs, there is no definitive evidence to suggest that crime has dropped in neighbourhoods with a watch program, nor do reported crimes fall more rapidly in such areas. Even though the program makes people feel safer, which consequently decreases fear of crime, it does not have any significant effect on crime control. Some researchers state that CP can be effective in rural areas but not in urban settings. Community policing initiatives can only be effective in isolated cities and when implemented vigorously, because simply adopting a plan and training is not enough to counter criminal activity (MacDonald, 2002). Most urban police departments operate using the same methods that they did before adopting their versions of CP (MacDonald, 2002). Many, for instance, continue employing their pre-CP approaches to fight crime, with the exception that more information is gathered by the community (Greene, 1997). Xu et al. (2005) suggest that the only way that CP can impact crime is if the departments work to incorporate disorder control into their operating strategies.

Is CP effective to reduce crime rates? To address this question, two meta-analytical reviews have been published so far: Bennett et al. (2006) examined whether neighbourhood watch programs reduce crime. They analyzed 18 studies and reported that neighbourhood watch reduced crime in 15 of the 18 studies. The odds ratio (OR) was used as the effect size to determine how well neighbourhood watch works. In reviewing the 18 studies, they found that neighbourhood watch was successful in reducing crime (OR = 1.19). This OR of 1.19 means that crime was 19% greater in the control area compared with the experimental area. Using the formula (1 – 1/OR), it can also be inferred as a 16% decrease in crime in the experimental area compared with the control area.

More recently, Gill et al. (2014) conducted a meta-analysis. They tested for effects of CP on crime, disorder, fear of crime, citizen satisfaction, and police legitimacy. They found 25 reports that measured pre- and post- changes in outcomes in experimental and control areas. The findings of this meta-analysis suggest that CP has limited effects on crime and fear of crime. However, their findings revealed that CP increases trust in the police and satisfaction with law enforcement services, and this eventually leads to greater public willingness to report crime to the criminal justice system. Notably, this creates a "reporting effect" that masks actual crime reductions. Paradoxically, greater willingness to report crimes to the police may inherently increase the number of reported crimes by the police creating an increase in crime statistics for jurisdictions that were successful in promoting better community relationships and information sharing. However, their findings show that CP strategies have positive effects on perceptions of disorder and police legitimacy (Gill et al., 2014).

METHODS

This meta-analysis is intended to glean a deeper understanding of CP and how it is understood and implemented around the world. Some countries accept it philosophically as a new way of policing, whereas others see it as simply a public relations tool. There are numerous CP strategies which are scalable based on cultural and environmental factors. From the inception of CP, there has been persistent debate regarding its effectiveness on crime reduction. Besides the literature about CP and its strategies, there is also quantitative research measuring the effectiveness of CP on crime reduction. The findings of this research are not clear cut, with different, and at times conflicting, research results regarding the effectiveness of CP. In the current study, we aimed to extend and consolidate previous analyses. This meta-analysis intended to analyze whether CP is effective in crime reduction based on the findings of previous research. The following research questions are addressed in this study: (1) Does CP reduce crime? (2) Do the impacts of CP vary across countries? And finally, (3) do the impacts of CP vary by crime type?

Inclusion Criteria

This meta-analysis expanded the two previous meta-analyses on the effect of CP on crime[1] reduction undertaken by Gill et al. (2014) and Bennett et al. (2006). First, we combined these two previously conducted studies, then added newly conducted research to our analysis. Bennett et al.'s meta-analysis had three inclusion criteria: (1) the type of intervention; "stand alone neighborhood watch schemes, neighborhood watch, property marking and security surveys" (p. 440) (2) outcome; the types of crimes included in the review were "crime against residents, crime against dwellings and other (street) crimes occurring in residential areas" (p. 441), and (3) evaluation design. They added this evaluation design criteria to select the highest quality research for the review. They used the Maryland Scientific Method Scale (SMS). This scale consists of five points; 1 referring to the weakest design and 5 referring to the strongest design regarding general internal validity. Applying Sherman & Eck (2002), level 3 is mandatory for evaluations to be considered as having a reasonable level of certainty. Bennett et al. followed this interpretation and employed level 3 for the evaluation design. In practice this means that the selected research must have at least one experimental group and at least one control group to compare the results.

Gill et al.'s (2014) analysis had the following inclusion criteria. The first was that studies should employ at least one of the CP strategies which involve "consultation or collaboration between the police and local citizens" (p. 7). These consulta-

[1] Crime types included in this meta-analysis are the categories/types created in previous research. Some categories may overlap and seem conflicting (i.e., burglary and robbery as a category as well as being "Part 1 crimes"), but they reflect different research at different times and places.

tions or collaborations should concern solving community problems and include activities such as police officers' visits to houses, information sharing, and partnership building for crime prevention. The second criterion was that the research should be based on a quantitative analysis relying on the data from control and comparison groups and pre–post intervention measures of effects. The third was the unit of analysis. Eligible studies should be conducted in police jurisdictions. The fourth criterion is that the research should analyze CP's impact on at least one type of crime or disorder, such as arrests, incident reports, or victimization reports, or on other relevant definitional measures, such as citizen satisfaction with police, fear of crime, or citizen perception of police legitimacy. The final (fifth) criterion was the publication year of the study, with eligible research being published after 1970, when interest in CP started to increase and thus became a recognizable phenomenon.

The inclusion criteria for the current meta-analysis are consistent with the criteria of the above-mentioned two meta-analyses. In addition, we employed three more inclusion criteria: (1) we included studies either in English or Turkish to incorporate a more international perspective; (2) we selected studies which were designed to be a quantitative analysis; and (3) we employed the unit of analysis criterion: studies conducted in a police jurisdiction or in a part of police jurisdiction were selected.

Search Strategy

We conducted searches in English and in Turkish. First, we searched the following electronic databases and websites in English: EBSCOHOST, Proquest, JStor, Google Scholar, and PsycINFO. Second, we searched Google Scholar in Turkish and the thesis and dissertation search engine of the Turkish Higher Education Institute (YOK-Turkish acronym). Third, we searched library catalogs of Western Illinois University, Rutgers University, and the Hague University of Applied Sciences.

Eligible Publications

The above-mentioned process resulted in 230 publications, excluding studies used in Bennett et al.'s (2006) and Gill et al.'s (2014) meta-analyses. After inspecting the abstracts of these studies, we identified 210 as unique publications, especially in Turkish. Further scrutiny of these studies yielded 57 eligible studies for further examination in the meta-analysis. Overall, we excluded 48 of these studies due to not meeting the previously stated inclusion criteria (for example, lack of sufficient statistical data, providing only graphics of the results, or not including an outcome evaluation of one of the CP strategies). This left 9 studies covering 14 evaluations that were included in the meta-analysis. Studies were included in the meta-analysis if they provided sufficient data that could be used for calculating effect sizes. The list of studies in the meta-analysis is presented in Table I below. Although there is a total of 32 studies on the list, there are 60 evaluations in the meta-analysis. The difference is due to the fact that some of the studies include more than one evaluation (different crime types or different cities) of the effectiveness of CP. For instance, the study conducted by Braga et al. (2012) includes two different evaluations: one is the effectiveness of CP on drug sales and the other is on property crime. Skogan & Harnett (1997) conducted their analysis in five different regions: Austin, Englewood, Marquette, Morgan, and Rogers.

Coding and Statistical Procedures

We created a data set combining the studies used in the meta-analyses of Bennett et al. (2006) and Gill et al. (2014). This combination yielded a total of 46 eligible studies to include in the meta-analysis. Adding 14 more evaluations to this combination created a sample size of 60 evaluations for the meta-analysis.

We coded a range of relevant information from each study: outcome, country of the study, and year of the study.

TABLE I List of studies included in the meta-analysis

	Studies Included in Bennett et al.'s (2006) and Gill et al.'s (2014) Meta-Analyses	Newly Added Studies
1	Anderton, K. J. (1985)	Bozkurt, M. F. (2011)
2	Bennett, T. H. (1990)	Demir, S. (2008)
3	Breen, M. D. (1997)	Hyland, S. S., & Davis, E. (2019)
4	Cirel, P., Evans, P., McGillis, D., & Whitcomb, D. (1977)	Kucuk, M. (2012)
5	Collins, P., Greene, J. R., Kane, R., Stokes, R., & Piquero, A. (1999)	MacDonald, J. M. (2002)
6	Connell, N. M., Miggans, K., & McGloin, J. M. (2008)	Palaci, M. (2008)
7	Cordner, G., Roberts, C., & Jacoby, K. (1999)	Roh, S., & Oliver, W. M. (2005)
8	Forrester, D., Chatterton, M., & Pease, K. (1988)	Xu, Y., Fiedler, M. L., & Flaming, K. H. (2005)
9	Giacomazzi, A. L. (1995)	Zhang, L., Messner, S. F., & Liu, J. (2007)
10	Henig, J. R. (1984)	
11	Jenkins, A. D., & Latimer, I. (1986)	
12	Koper, C. S., Hoffmaster, D. A., Luna, A., McFadden, S., & Woods, D. J. (2010)	
13	Lowman, J. (1983)	
14	Matthews, R., & Trickey, J. (1994a)	
15	Matthews, R., & Trickey, J. (1994b)	
16	Pate, A. M., Wycoff, M. A., Skogan, W. G., & Sherman, L. W. (1986)	
17	Research and Forecasts Inc. (1983)	
18	Segrave, M., & Collins, L. (2005)	
19	Skogan, W. G., & Hartnett, S. M. (1997)	
20	Tilley, N., & Webb, J. (1994)	
21	Tuffin, R., Morris, J., & Poole, A. (2006)	
22	Uchida, C. D., Forst, B., & Annan, S. O. (1992)	
23	Wycoff, M. A., & Skogan, W. G. (1993)	

We documented the pre- and post-intervention result measure statistics in the experiment and control areas, including the statistical assessments used and any reports of statistical significance, to calculate effect sizes.

We used the Comprehensive Meta-Analysis (CMA 3.0) statistical program to calculate effect sizes. We employed diverse approaches for calculating effect sizes based on the outcome measure and the presentation of findings in the original research. We used odds ratio (OR) as the effect size because it is the most appropriate for proportions, where OR > 1 signifies a favourable outcome for the treatment groups (i.e., CP).

Data Analysis

Meta-analysis is useful in standardizing the findings of different studies to ascertain a uniform effect size for each discrete research variable and a weighted mean effect size for groups of research. Thus, calculating the effect size (OR in this study) to conclude how well CP works is the main goal of this meta-analysis. Two models are used for this calculation: the random effects model and the fixed effects model. One of the main concepts that have been extensively discussed in the meta-analysis is choosing the effect models (Field, 2005). The main difference between these two effects models is based on the null hypothesis. The null hypothesis in the fixed effects model is "there is a zero effect in every study" (Borenstein et al., 2009; p. 83). In the random effects model, the null hypothesis is "the mean effect is zero" (p. 83). Although some scholars (Rosenthal, 1991) rely on the level of heterogeneity across studies to determine the effects model, Borenstein et al. (2009) suggest using the effects model based on the expectations of the researcher. The eligible studies for the meta-analysis had various methodologies comprising CP intervention; thus, we assumed a random effects model.

Some of the eligible studies included several comparisons and multiple outcomes for the same concept. Computing the effect size for these studies can be done in several ways. Setting the unit of analysis as the study itself instead of the outcomes is the first alternative, which causes the loss of valuable information and creates selection bias because it pushes the meta-analyst to choose one of the outcomes to compute the effect size. The second alternative is considering each of the outcomes as the unit of analysis, which, however, ignores the fact that the outcomes of one study cannot be considered independently. The third alternative, employing the average effect size of the various outcomes in one study, was identified as the best alternative in this case (Malle, 2006).

RESULTS

Table II presents a summary of the characteristics of the studies included in the meta-analysis. All of the studies were published between 1977 and 2012. More than half (60%) of the studies were conducted in the United States. Studies conducted in the United Kingdom comprised 28.3%. Four studies were conducted in Turkey and one each from China, Canada, and Australia. Most evaluations included burglaries (20) and fear of crime (16).

Test of Heterogeneity

Cochran's Q statistics were used to verify heterogeneity across the studies included in the meta-analysis. The result of Cochran's Q statistics is given in Table III. The results led us to determine the significance level of the dispersion in the effect sizes. The forest plot in Figure 1 presents a visual depiction of this dispersion among the effect sizes of the studies.

The overall OR under the fixed effects model is 1.095 ($p < 0.001$). A test of overall heterogeneity is found to be significant (percentage of total variance (I^2) = 81.5% (Variance (Q) = 318.455, degrees of freedom (df) = 59, $p < 0.001$). These results suggest that significant dispersion (81.5%) exists between studies that are not due to chance alone. Heterogeneity indicates that variance can be explained by moderator analysis.

Table III also shows the mean OR for the 60 evaluations is 1.197 using the random effects model. This mean effect size is statistically significant at $p < 0.001$. A mean OR of 1.19 can be inferred to mean that listed crimes were 19% greater in the control area compared with the treatment area or that it

TABLE II Characteristics of the studies included in the meta-analysis

Parameter	Item	N	%
Outcome	1 Burglary	20	33.3
	2 Disorder	5	8.3
	3 Drug sales	3	5.0
	4 Fear of crime	16	26.7
	5 Guns and drugs	5	8.3
	6 Part 1 crimes	4	6.7
	7 Property crimes	5	8.3
	8 Robbery	2	3.3
	Total	60	100.0
Country	1 Australia	1	1.7
	2 Canada	1	1.7
	3 China	1	1.7
	4 Turkey	4	6.7
	5 United Kingdom	17	28.3
	6 United States	36	60.0
	Total	60	100.0
Parameter	**Min.**	**Max.**	**Mode**
Year	1977	2012	1986

TABLE III Overall effects and test of heterogeneity

	Effect Size Estimate					
Model	**k**	**OR**	**95% CI**		**Z**	***p***
Fixed	6w0	1.095	1.070	1.120	7.784	0.000
Random	60	1.197	1.197	1.111	4.717	0.000

Test of Heterogeneity				Tau Squared		
Q-Value	df(Q)	*p*	I^2	Tau squared	S.E.	Tau
318.455	59	0.000	81.473	0.042	0.024	0.206

k = number of studies; OR = odds ratio, effect size; CI = confidence interval; Z = Z-score; p = significance level; Q= variance; df = degrees of freedom; I^2 = percentage of total variance; S.E. = standard error.

decreased by 16% (1 – 1/OR) in the treatment area compared with the control area.

Standardizing the results across studies to produce a uniform effect size for each individual study is the main advantage of the meta-analysis over other types of reviews. A summary of the results of the 60 evaluations included in the meta-analysis is given in a forest plot in Figure 1. The figure shows that 14 evaluations had an OR < 1, indicating an unfavourable effect on crime, and 46 evaluations had an OR > 1 indicating a favourable effect on crime. Thus, in the majority of the evaluations, CP was associated with an anticipated change in crime (a reduction).

Moderator Analysis and Meta Regression

Two categorical moderators were defined in the meta-analysis: outcome and country. These categorical moderators are used in moderator analysis to examine the potential for differences in the overall effect sizes of the studies. The results of the moderator analysis are presented in Table IV.

Moderator analysis of the outcome indicated a significant effect on the variation of the ORs. There are major differences between the ORs of the studies based on their outcomes ($Q_B = 63.2$, df = 7, $p = 0.000$). Studies measuring burglary (OR = 1.122), fear of crime (OR = 1.275), guns and drugs (OR = 1.443), Part 1 crimes (OR = 1.168), and robbery (OR = 1.606) have ORs > 1. We can conclude that CP is effective to reduce these types of crime. On the other hand, CP has no effect on reducing crimes related to disorder, drug sales, and property crime (OR = 0.861, 0.394, and 0.935, respectively).

There was significant effect on the variation of the effect sizes (OR) for the countries (Table V). There is a major difference between the ORs of the studies based on where they were conducted ($Q_B = 28.0$, df = 5, $p = 0.000$). The only study that had an OR < 1 was Australia, which means that CP had no effect in this study. However, other countries (Canada, China, Turkey, UK, and USA) had ORs > 1, indicating that CP was effective in reducing crimes. Studies conducted in Turkey (OR = 1.672; $p = 0.001$) demonstrated significantly larger effect than the other included countries.

The integer moderator variable is the year of the publication and is subjected to meta-regression analysis. The results are given in Table VI below.

The results of the meta-regression showed that the year of the publication is not significant in predicting the variations in the effect size.

Publication Bias

The funnel plot for observed and predicted studies is presented in Figure 2. Asymmetry of the funnel plot indicated the potential for missing studies.

Fail-safe N, with alpha set at 0.05, indicated that 857 missing studies with a zero effect size would bring the *p*

TABLE IV Findings of moderator analysis based on outcome

Group	Effect Size Estimates			Test of Heterogeneity			ANOVA Results			
Outcomes	**k**	**OR**	***p***	**Q**	**I^2**	***p***	**$Q_{W\ Df=52}$**	***p***	**$Q_{B\ df=7}$**	***p***
Burglary	20	1.122	0.002	36.78	48.35	0.008	255.251	0.000	63.2	0.000
Disorder	5	0.861	0.592	67.64	94.09	0.000				
Drug sales	3	0.394	0.391	37.33	94.64	0.000				
Fear of crime	16	1.275	0.001	47.77	68.60	0.000				
Guns and drugs	5	1.443	0.028	16.19	75.29	0.003				
Part 1 crimes	4	1.168	0.072	16.43	81.75	0.001				
Property crime	5	0.935	0.44	23.74	83.15	0.000				
Robbery	2	1.606	0.526	9.37	89.33	0.002				

k = number of studies; OR = odds ratio, effect size; *p* = significance level; Q= Variance; I^2 = percentage of total variance; Q_w = Qwithin; Q_B = Qbetween; df = degrees of freedom.

TABLE V Findings of moderator analysis based on country

Group	Effect Size Estimates			Test of Heterogeneity			ANOVA Results			
Country	**k**	**OR**	***p***	**Q**	**I^2**	***p***	**$Q_{W\ Df=54}$**	***p***	**$Q_{B\ df=5}$**	***p***
Australia	1	0.907	0.465	0.00	0.00	1.000	290.478	0.000	27.978	0.000
Canada	1	1.490	0.482	0.00	0.00	1.000				
China	1	1.171	0.030	0.00	0.00	1.000				
Turkey	4	1.672	0.001	7.25	58.62	0.064				
United Kingdom	17	1.249	0.000	20.04	20.16	0.218				
United States	36	1.150	0.006	263.19	86.70	0.000				

k = number of studies; OR = odds ratio, effect size; *p* = significance level; Q= variance; I^2 = percentage of total variance; Q_w = Qwithin; Q_B = Qbetween; df = degrees of freedom.

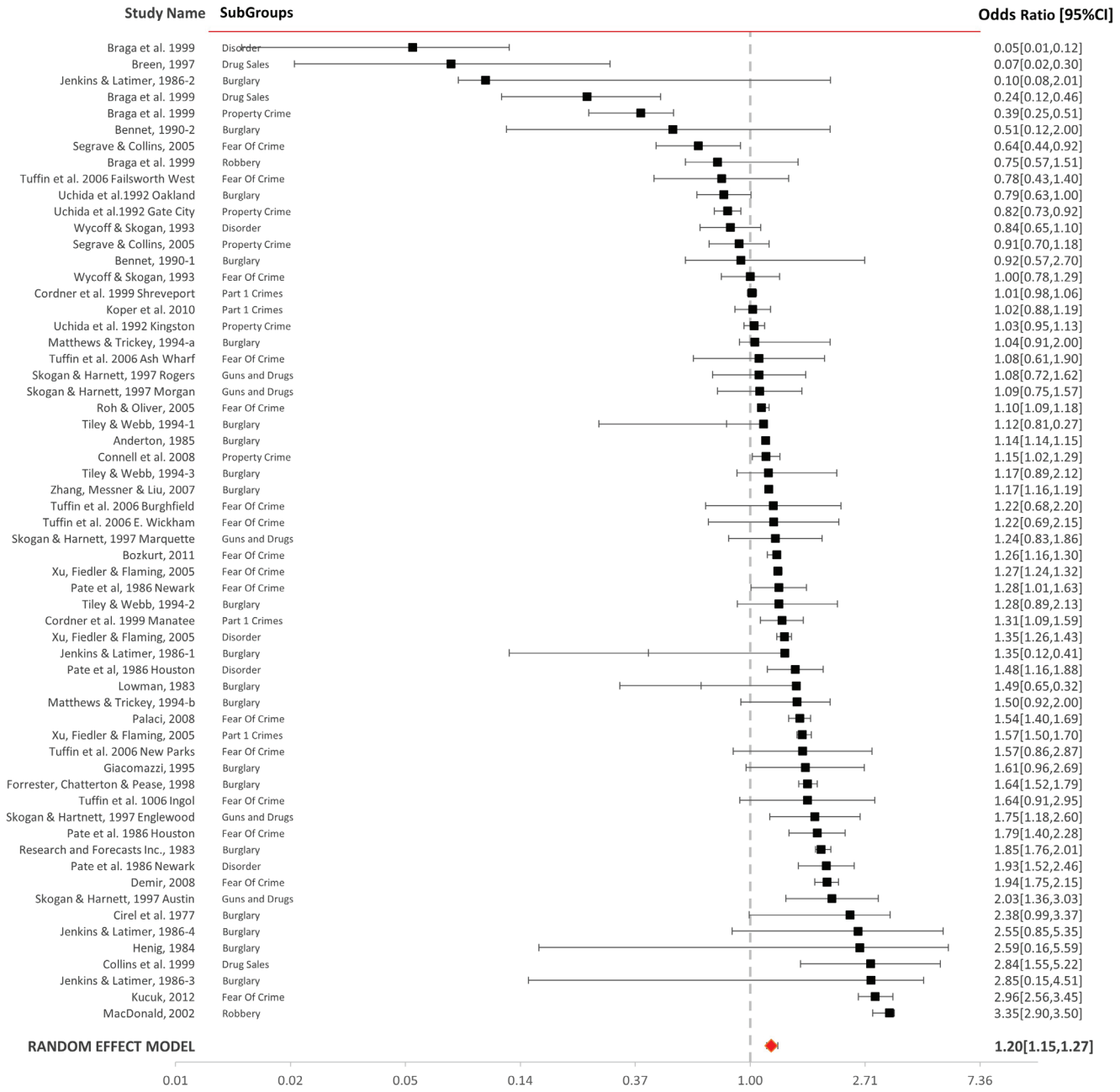

FIGURE 1 Forest plot – summary of the results of the 60 evaluations included in the meta-analysis
CI = confidence interval.

value higher than the alpha, i.e. nullify the significant effect at $p > 0.05$.

DISCUSSION

We conducted a meta-analysis to examine the effects of CP on crime rates. We included studies that tested the effects of CP or one of its strategies, such as neighbourhood watch, on crime rates. In general, the results provided evidence for the potential positive intervention of CP in reducing crime, which is consistent with the findings of the previous meta-analysis conducted by Bennett et al. (2006) but not consistent with the findings of Gill et al. (2014). Bennett et al. (2006) focused on one of the most known and common tools of CP, the neighbourhood watch. They concluded that neighbourhood watch was related to a relative reduction in crime of about 16%. Although they could not precisely identify the reasons for this finding, they posit that neighbourhood watch was related to a reduction in crime because surveillance increases, social control is enhanced, and the opportunity for crime decreases with neighbourhood watch programs.

On the other hand, Gill et al. (2014), could not find evidence supporting the notion that community policing resulted in crime prevention. In particular, they could not find evidence

TABLE VI Findings of the meta-regression

Covariate	B	S.E.	95% CI Lower	95% CI Upper	Z	*p*
Intercept	7.5277	9.6607	-11.4068	26.4623	0.78	0.4359
Year	-0.0037	0.0048	-0.0132	0.0058	-0.76	0.4469

B = regression coefficient; S.E. = standard error; CI = confidence interval; Z = Z-score; *p* = significance level.

of the association between CP and fear of crime. However, they found that citizen satisfaction with the police increases with CP.

The current meta-analysis found no evidence suggesting that CP had an impact on reducing disorders, drug sales, or property crimes. However, the current study found evidence that CP had an impact on reducing crimes such as burglary, fear of crime, guns and drugs, Part 1 crimes, and robbery. Despite variations in location, CP indicated significant reductions in crimes, except for Australia, where CP did not show any impact. The primary explanation for these differences in the findings may be the different research settings of the three meta-analyses.

Our findings show that generalization about the relationship between CP and crime reduction depends on crime type. Discrediting CP wholesale through critiques related to overbroad definitions or ambiguity regarding its implications underestimates its positive effects on crime reduction in several important areas, such as burglaries, Part 1 crimes, robberies, and gun and drug crimes. These results can provide insights for policy-makers and law enforcement agencies in deciding on the future implementations of CP.

LIMITATIONS AND RECOMMENDATIONS

This study provides insights into the effects of CP on crime reduction, but certain limitations need to be mentioned. First, we selected studies meeting the basic requirements, but we did not further examine the quality of each of the studies included in the meta-analysis. The possibility of variance in the quality of the studies could have affected the results. Second, we excluded certain studies, such as those published in languages other than English and Turkish and those that were not peer-reviewed. These inclusion and exclusion criteria should be considered when interpreting the findings.

Several recommendations can be made regarding future research. First, a multi-lingual team of researchers from different countries could be established to incorporate a greater number of studies written in different languages. We still do not know whether the impact of CP on crime reduction is culture-bound, given that all included studies were written in English and Turkish. This may give a clearer, more inclusive understanding of CP and its impact on crime reduction in a broader international and cross-cultural context. Second, we also recommend that researchers use reliable and valid measures and techniques to assess the impact of CP strategies on crime reduction. Third, it is advisable that future studies use a standardized method with clear and complete data about the methodology and findings (e.g., sample size, mean age, effect sizes) so that meta-analytic conclusions can be drawn in a more complete approach.

Fourth, when country-level implications are reviewed, researchers should be mindful of how robust the organizational commitment to CP strategies actually was during the study period, mindful that lower prioritization of CP activities may be prevalent in the last decade and a half. In short, jurisdictions may express a commitment to CP in their mission or value statements, and other public relations materials; however, upon critical examination, this may not be evident in terms of their day-to-day financial and resource commitments as expressed in their actual operational deployment strategies. An examination of personnel allocation, for instance, will help illuminate the true picture and whether a shift in policing philosophy from traditional to CP-oriented

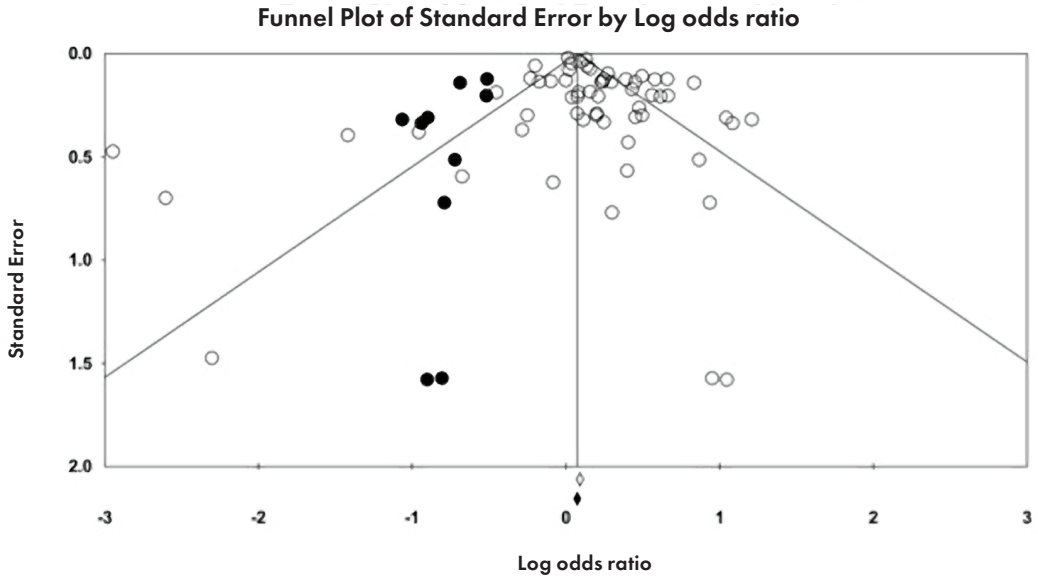

FIGURE 2 Funnel plot

has truly occurred beyond words or aspirations. Community expectations, police management and leadership, and accountability are to be given focus for policy implications in this sense. Prior research suggests that the gradual but steady impact of CP is proven, especially in the United States (Sozer & Merlo, 2012). The impacts, however, may not be manifest when organizations give lip service to a CP ethos that is not supported meaningfully with time, effort, and resources.

In the Turkish context, for instance, CP is assigned to a specific department called the "Community Supported Policing" Bureau ("Toplum Destekli Polislik"), which undertakes small-scale community interventions and activities. Unfortunately, CP is not fully implemented as a philosophical approach in all branches of the National Police but rather as a specific and passive policing position among individual officers. Turkey has sharply disengaged from European Union standards in police procedures, philosophy, and basic human rights (Human Rights Watch Report, 2022) after the corruption scandal (commonly known as "December 17/25 Corruption Scandal") concerning the ministers and the current President in 2014. Since then, the ruling government has pressured the police to prioritize suppression of opposition as opposed to crime prevention and community safety. In addition, the country was plunged into a state of emergency rule for over two years following the coup attempt in 2016 and the state of emergency rules have been practically exercised by the ruling government since, despite some ostensible changes. Researchers must therefore be cognizant, as demonstrated by the example of Turkey previously discussed, of the macro-level political environment of studied jurisdictions and its tremendous impacts on the policing strategies.

Finally, there are many opportunities for research into CP as various jurisdictions, with vigorous commitments to the philosophy, continually innovate with regard to their outreach and community interaction strategies. It would be interesting, for instance, for future meta-analyses to place greater emphasis on the effect of other tools of CP, such as social media outreach, specific deployment strategies, such as increasing foot and/or bicycle patrols in neighbourhoods, and the impact of citizen police academies.

CONFLICT OF INTEREST DISCLOSURES

The authors declare that there are no conflicts of interest.

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ORIGINAL RESEARCH

Journal of
COMMUNITY SAFETY & WELL-BEING

Cost analysis of the Saskatoon Mental Health Strategy (MHS) court

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ABSTRACT

Housing inmates, particularly those living with mental health concerns, is a very expensive prospect. Mental health courts (MHCs) are designed to divert justice-involved individuals living with mental health concerns away from the traditional criminal justice system and to mitigate some of the issues commonly seen in these systems. Given this diversion, it would seem that MHCs could reduce costs associated with crimes committed by this population. While intuitive, these cost savings are an untested assumption as there has been very little research examining the costs of these programs, particularly in Canada. Thus, this study presents the findings from a cost analysis of the Saskatoon Mental Health Strategy Court in Saskatchewan, Canada. Results demonstrated that Court costs increased in the first and second year post-Court entry. Most concerningly, a large proportion of these increased costs seem to be attributable to administrative charges applied by the Court. Recommendations for MHC operation and potential impacts of the cost analysis are further explored.

Key Words Mental health court; administrative charges; recidivism.

INTRODUCTION

Housing inmates in Canadian institutions is an expensive prospect, and costs related to incarceration are on the rise. According to Sagynbekov (2015), the marginal costs of each individual housed in the Saskatchewan corrections system is quite high, with estimates of $22,000 in the short-run, $35,000 in the long-run, and $65,000 for remanded inmates. Overall, maintaining federal justice-involved individuals in the community tends to be less cost-intensive ($32,327 per year) compared with housing an inmate in a prison setting ($125,466 per year; Public Safety Canada Portfolio Corrections Statistics Committee, 2020). While there are no equivalent publicly available cost figures for housing individuals in provincial custody facilities from across the country, we would expect a similar reduction in costs at the provincial level. The cost savings of diversion to outpatient settings at the provincial level was demonstrated by Jacobs and colleagues (2016) who found that outpatient management ($881/year) for psychiatric care in Alberta was less expensive than inpatient care for not criminally responsible cases ($274,723/year), other inpatient cases ($58,159/year), and federal psychiatric cases ($126,315). Given these drastic differences in cost, diverting justice-involved individuals living with mental health concerns seems prudent.

MENTAL HEALTH COURTS

Diversion can be achieved through participation in mental health courts (MHCs), which are designed to divert justice-involved persons with mental health concerns away from the traditional court system into community-based treatment (Baillargeon et al., 2009; Schneider et al., 2007). Operating under the principles of therapeutic jurisprudence, MHCs attempt to provide personalized treatment in order to disrupt the cycle of recidivism for justice-involved individuals living with mental health concerns (Lurigio & Snowden, 2009; Rankin & Regan, 2004; Schneider, 2008; Wiener et al., 2010; Winick, 2002; Winick & Wexler, 2003). While individuals are housed in the court system, MHCs provide intervention in the community through the use of multidisciplinary teams including community agencies that provide comprehensive, holistic services (e.g., group or individual therapy; medication; connections to social, vocational, and residential services) to clients (Lurigio & Snowden, 2009; Rankin & Regan, 2004; Wiener et al., 2010; Winick, 2002).

Common features of MHCs include a process of screening and determining client eligibility based on the current charge and prior criminal history, dedicated program staff (e.g., a presiding judge, prosecutor, mental health agency representatives and community service workers), regular

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court hearings, clients accepting responsibility for their behaviour and voluntarily entering into the program, case management services targeted to the client, compliance monitoring, charges being withdrawn/reduced after successful completion of the program, and access to services in the community (see: Campbell et al., 2015; Cissner et al., 2018; Hahn, 2015; Human Services and Justice Coordinating Committee [HSJCC], 2017; Reich et al., 2015; Schneider, 2008).

Mental Health Court Costs

While, logically, MHCs seem to be an effective strategy to optimize criminal justice spending, this is a largely untested assumption as there are very few studies that have examined the cost of these programs—particularly in Canada. An evaluation of the Durham Region Drug and Mental Health Court in Ontario, Canada, indicated that there were large crime-related costs avoided by the participants of the court (i.e., $6,779 per participant). These savings yielded a benefit-to-cost ratio of 1.74:1, providing evidence for the savings reported by the court (Bekker & Scott, 2014). Data from the United States paints a similar picture, with reductions in justice-related (Kubiak et al., 2015; Lindberg, 2009; Ridgely et al., 2007; Steadman et al., 2014) and mental health–related (Kubiak et al., 2015) spending for court participants. While these substantial savings were reported by the courts, it is important to note that, in almost all cases, the court's initial expenditures increased, later being offset by these justice and health savings (Lindberg, 2009; Steadman et al., 2014; Ridgely et al., 2007).

The Saskatoon Mental Health Strategy Court

Bringing together a multidisciplinary team of community stakeholders and legal professionals, the Saskatoon Mental Health Strategy (MHS) Court aims to assist justice-involved individuals living with mental health conditions, fetal alcohol spectrum disorder (FASD), or cognitive impairments (Barron et al., 2015; Saskatchewan Law Courts, n.d.). The MHS Court is comprised of a designated Provincial Court Judge, a crown prosecutor, defence counsel, and representatives from a variety of services including Mental Health and Addiction Services, Saskatoon Community Corrections, FASD Network, Elizabeth Fry Society, Social Services, Saskatoon Crisis, and Saskatoon Community Mediation Services (Barron et al., 2015). Other community organizations that provide support to MHS clients include The Lighthouse Supported Living, The Salvation Army, Housing First, Community Living, Saskatchewan Brain Injury Association, Partners in Employment, 601 Outreach, Saskatoon Police Service, and various drug and alcohol treatment programs. Together, these court personnel and community organizations are the MHS Court professionals who strive to meet the needs of the clients. Since the MHS Court has no program funding, there is no dedicated coordinator, case manager(s), or data tracking or program staff. Justice-involved persons in custody, and those accused of driving offenses, sexual offenses, or offenses with a mandatory minimum sentence[1] are not eligible for the Court (Saskatchewan Law Courts, n.d.). In addition, the alleged criminal behaviour and mental illness must be related in order to qualify (Saskatchewan Law Courts, n.d.). Provincial Court Judges provide referrals to the MHS Court based on assessments of individual clients and their mental health needs. A guilty plea is required, as the MHS Court is a sentencing court, and only pre- and post-plea matters are considered (Barron et al., 2015). Previous evaluations of the MHS Court have shown that professionals involved in the Court believed it was meeting its goals despite some challenges (Mathias et al., 2019; Zidenberg et al., 2021a) and mixed perceptions of the client experience (Dell, 2020). Further, clients had improved justice- and health-related outcomes following their participation in the Court (Zidenberg et al., 2020; Zidenberg et al., 2021b). Specifically, findings indicate that arrest recidivism was low for clients involved with the Saskatoon MHS Court although the seriousness of the charges received tended to increase after entry into the court. Of note was the fact that a large proportion of the recidivist cases and convictions resulted from system-generated or non-compliance issues. Additionally, clients were able to access several mental health services and treatments post-Court entry, while their hospitalizations and emergency room utilizations declined in the 1-year post-Court-entry period (Zidenberg et al., 2020; Zidenberg et al., 2021b). The purpose of the current study is to provide a cost evaluation detailing the outcomes of the MHS Court's first year cohort of defendants (see Zidenberg et al., 2020, and Barron et al., 2015, for more information regarding the Court's operation). This study was guided by the following question: Did involvement with the MHS Court reduce costs of clients who participated?

[1] While Mandatory Minimum sentences have recently been repealed for a number of offences (see https://www.canada.ca/en/department-justice/news/2021/12/mandatory-minimum-penalties-to-be-repealed.html), they were in effect during the time period of this study.

METHODS

In order to answer the research question, the research team conducted a pre–post cost analysis of the first-year cohort of the Saskatoon MHS Court. The current cost analysis utilized (1) court case data from the Saskatchewan Ministry of Justice (MOJ) for the first cohort of MHS Court participants (N=89) from 2014 and (2) Gabor's (2015) cost estimates by court cases type, in August 1, 2014, Canadian dollars adjusted for inflation (see Table I). The authors were unable to obtain length of custodial and community sentences required to fully estimate transactional costs of MHS clients and instead elected to estimate costs by court case type. Thus, arrests that did not lead to arraignment in court were excluded from this cost analysis. Ethics approval to conduct this study was granted by the University of Saskatchewan's Behavioural Research Ethics Board (Beh# 14-290).

Measures

Case type variables were computed for the following periods: 2- and 1-year prior (i.e., pre-Court entry date); the instant case; in-program; and 1- and 2-year recidivism (i.e., post-Court entry date). Case type was categorized as homicide, sexual assault/rape, assault, aggravated assault, robbery, motor vehicle theft, arson, burglary, theft, fraud, or other/administrative (breach of probation, failure to appear, and failure to comply). If a case had multiple charges, the charge with the highest cost estimate according to Gabor's (2015) study was used to determine case type. Case type count variables were then multiplied by the

TABLE I Cost estimates by cost category per case type in Canadian 2014 dollars (Gabor, 2015)

Case Type	Cost Category	Mean Cost (Outliers Removed)
Homicide	Victims' tangible/direct	1,222,126.83
	Victims' intangible	3,038,838.81
	CJS costs	399,582.98
	Criminal career	176,469.11
	Total cost	4,837,017.73
Sexual assault/rape	Victims' tangible/direct	25,545.84
	Victims' intangible	86,593.36
	CJS costs	13,097.89
	Criminal career	11,134.97
	Total cost	136,372.06
Assault	Victims' tangible/direct	40,002.59
	Victims' intangible	14,502.50
	CJS costs	4,381.34
	Criminal career/no data	—
	Total cost	58,886.43
Aggravated assault	Victims' tangible/direct	10,125.10
	Victims' intangible	73,699.73
	CJS costs	12,550.72
	Criminal career	2,569.80
	Total cost	98,945.35
Robbery	Victims' tangible/direct	5,706.12
	Victims' intangible	11,991.09
	CJS costs	9,371.48
	Criminal career	4,953.45
	Total cost	32,022.14
Motor vehicle theft	Victims' tangible/direct	6,318.72
	Victims' intangible	552.58
	CJS costs	846.26
	Criminal career	439.03
	Total cost	8,156.59
Arson	Victims' tangible/direct	24,481.18
	Victims' intangible	15,462.43
	CJS costs	5,308.82
	Criminal career	705.90
	Total cost	45,958.33
Burglary	Victims' tangible/direct	1,891.66
	Victims' intangible	786.00
	CJS costs	2,426.85
	Criminal career	823.16
	Total cost	5,927.67
Theft	Victims' tangible/direct	444.45
	Victims' intangible	113.32
	CJS costs	732.29
	Criminal career	140.25
	Total cost	1,430.31
Fraud	Victims' tangible/direct	40,848.22
	Victims' intangible/no data	—
	CJS costs	3,384.37
	Criminal career	797.77
	Total cost	45,030.36
Administrative/ other	Victims' tangible/direct	17,262.65
	Victims' intangible	22,633.45
	CJS costs	5,788.89
	Criminal career	2,396.04
	Total cost	48,081.03

CJS = criminal justice system.

associated costs and tallied to compute total costs for the respective time period. The "instant case" was the case transferred to the MHS Court during the initial year of operations (including administrative charges): the first scheduled appearance or MHS Court entry date was used to determine eligible cases for all other time periods. "In-program" court cases occurred between the MHS Court entry date and the last date the case appeared on the MHS Court docket. In-program court cases for up to 365 days were included in the 1-year recidivism cost computation and in-program court cases for up to 730 days were included in the 2-year recidivism cost computation.

Analytic Approach

While Canadian estimates are available for policing, court proceedings, adult and youth custody, community supervision (Gabor, 2015), and mental health addictions by the Policy and Research Unit (Mental Health Commission of Canada, 2017), the evaluation team was unable to obtain length of custodial and community sentences required to fully estimate transactional costs of MHS clients. Instead, Gabor's (2015) cost estimates, which itemized total costs of crime by case type, were used to conduct the pre-post cost analysis. The main benefits of this technique are that it is intuitively easy for policymakers to understand, and Gabor (2015) provided cost estimates in August 1, 2014, Canadian dollars, which were appropriate for analyzing cost of clients with an MHS Court entry between November 18, 2013, and November 17, 2014. Gabor's (2015) cost estimates itemized costs of crime by court case type for four categories of costs:

1. Victim costs (including property losses, lost wages, and medical costs due to injuries)
2. Criminal justice system costs (law enforcement, court, corrections, programs and services)
3. Criminal career costs or the opportunity cost lost when someone forgoes legitimate employment in lieu of a criminal career
4. Intangible costs (loss in quality of life, pain and suffering of victims).

Gabor's (2015) cost estimates were based on a literature review of global publications from 1988 to 2016. To avoid the problem of overestimating costs due to outliers, cost estimates were computed using Gabor's (2015) "mean cost, outliers removed" estimates for case types (homicide, sexual assault/rape, assault, aggravated assault, robbery, motor vehicle theft, arson, burglary, theft and fraud) with the exception of administrative cases, which Gabor (2015) did not estimate. Three decisions were made to avoid overestimations of costs: homicide cases were excluded when estimating administrative and other case costs due to extremely high and low homicide cost estimates in some of the studies used by Gabor (2015); mean costs with outliers removed were used to estimate case costs; and cases were counted only once, coded based on the charge with the highest cost estimate. Cost estimates for administrative cases—coded as breach of probation, failure to appear and failure to comply charges—and other cases were based on the average cost for all case types, excluding homicide. No additional adjustments were made to Gabor's (2015) estimates. For more information about the ranges included in this study, see Zidenberg et al. (2020).

Demographics

Ninety-two defendants participated in the MHS Court in the first-year cohort, that is, were transferred into the MHS Court between November 18, 2013, and November 17, 2014. Due to issues with aliases, the Saskatoon Police Service provided data for 91 MHS clients; however, two clients missed their MHS initial appearance and were dropped from the program. As such, the Ministry of Justice did not provide criminal records for those two individuals. From a practical standpoint, data from the 89 clients in this study constitute the first-year cohort population. Clients were born between 1950 and 1995 with a median birth year of 1985. Clients were processed by the MHS Court for index offenses committed between March 2008 and May 2014 (only three index offenses occurred before 2010), indicating that Court entry was triggered by an administrative charge stemming from a prior arrest. Administrative charges were recorded as their own charge in our dataset, allowing for them to be entry triggers despite not being the index offense that landed the client in contact with the criminal justice system. The vast majority of "administrative and other" were administrative charges (78%; e.g., failure to appear and failure to comply). Information on client gender and ethnicity or other demographic variables was unavailable.

RESULTS

Total Cost

As can be seen in Table II, approximately one quarter (26%) of instant cases were assault and less than one-fifth (16%) were administrative. Client costs associated with the time periods by cost type are displayed in Figure 1. Referring to Table II, when cases are analyzed by pre–post MHS Court entry, the administrative cases constitute the vast majority of clients' pre-Court cases: approximately half of 1-year pre-Court (52%; 75/145 cases) and 2-year pre-Court (48%; 173/357 cases) cases were administrative. The rate of administrative cases increased post-Court entry, to approximately two-thirds in the 1-year post-Court (62%; 207/336 cases) and 2-year post-Court (60%; 333/555 cases) periods. Detailed costs for these periods are presented in Table III. Based on Gabor's (2015) mean costs excluding outliers estimate, total cost of the instant case was slightly over 4 million dollars. The majority of this expense was attributed to victim tangible ($1.9M) and intangible ($1.7M) costs, while the criminal justice system cost accounted for approximately 10% of the total cost ($447,063).

Totals costs increased in both the 1- and 2-year pre–post intervals. Total 1-year recidivism cost (1-year post-Court cases: $14.6M) was more than double the total 1-year pre-Court cost ($6.7M). Again, the vast majority of costs were attributed to victim tangible and intangible costs for both periods, while criminal justice system costs accounted for slightly more than 10% of total costs (see Figure 1; grey bar). Although total costs of clients' criminal behaviour increased each successive year after MHS Court entry, total cost increase was less drastic in the second year. Total 2-year recidivism cost exceeded total

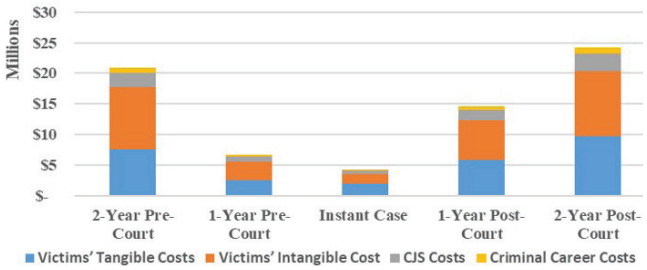

FIGURE 1 Total cost: Victim, criminal justice system and criminal career costs (millions of dollars). CJS = criminal justice system.

TABLE II Case type by time period

Case Type	Instant Case	2-Year Pre-Court Cases	1-Year Pre-Court Cases	1-Year Post-Court Cases	2-Year Post-Court Cases
Homicide	0	1	0	0	0
Sexual assault/rape	3	2	2	1	2
Assault	23	28	11	24	43
Aggravated assault	2	2	0	2	2
Robbery	2	2	2	1	3
Motor vehicle theft	9	26	8	37	57
Arson	1	1	0	1	3
Burglary	4	5	3	2	8
Theft	3	7	2	8	11
Fraud	2	0	0	5	6
Administrative/other	40	283	117	255	420
Youth Criminal Justice Act	*2*	*29*	*4*	*3*	*4*
Administrative	*14*	*173*	*75*	*207*	*333*
Other	*24*	*81*	*38*	*45*	*83*
Total	89	357	145	336	555

2-year prior cost ($24.2M vs. $20.9M), with the highest costs attributed to victim tangible and intangible costs.

Administrative vs. Non-Administrative Cases

For this section of the cost analysis, cases generated by compliance failure were classified as "administrative," which included breach of probation, failure to appear, and failure to comply with conditions charges. All other cases, referred to as "non-administrative"—homicide, sexual assault/rape, assault, aggravated assault, robbery, motor vehicle theft, arson, burglary, theft, fraud, and other—result from actual criminal behaviour (see Figure 2 for case counts by type). Given that the mean cost for administrative cases was higher than both violent and non-violent cases, the majority of the costs to the Court stemmed from administrative charges.[2] Figures 3 and 4 detail the victim, criminal justice, and criminal career costs for administrative and non-administrative cases itemized in Table IV. As seen in Figure 5, it is evident that clients' non-conforming behaviour shifted from non-administrative pre-Court (see Figure 4 for a detailed breakdown of non-administrative costs) to administrative post-Court (see Figure 3 for a detailed breakdown of administrative costs). Criminal recidivism also increased in the 1- and 2-year pre–post intervals, but at a more modest rate than with non-compliance/administrative cases (see orange portions of the stacked bars in Figure 1).

Furthermore, the brunt of clients' criminal behaviour costs were tangible (e.g., loss of property, wages, and medical costs) and intangible (e.g., pain and suffering) costs borne by victims. Consequently, as illustrated in Figure 5, from a cost

[2]Given space considerations, this analysis has been omitted from this manuscript. See Zidenberg et al. (2020) for detailed information related to administrative, violent, and non-violent costs.

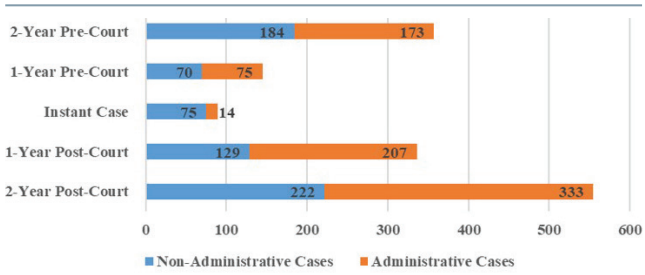

FIGURE 2 Case counts: Non-administrative vs. administrative cases

TABLE III Total cost: Gabor's (2015) mean excluding outliers estimate

Total Cases	Instant Case	2-Year Pre-Court Cases	1-Year Pre-Court Cases	1-Year Post-Court Cases	2-Year Post-Court Cases
Victims' tangible costs	$1,890,812	$7,511,622	$2,579,376	$5,883,395	$9,757,608
Victims' intangible cost	$1,693,977	$10,229,295	$3,011,815	$6,403,959	$10,571,633
Criminal justice system costs	$447,063	$2,275,129	$785,949	$1,693,145	$2,811,083
Criminal career costs	$154,259	$909,082	$318,775	$655,925	$1,088,662
Total cost	$4,186,110	$20,925,128	$6,695,916	$14,636,423	$24,228,986

TABLE IV Total cost: Administrative vs. non-administrative cases

	Instant Case	2-Year Pre-Court Cases	1-Year Pre-Court Cases	1-Year Post-Court Cases	2-Year Post-Court Cases
Administrative cases					
Victims' tangible costs	$241,677	$2,986,439	$1,294,699	$3,573,369	$5,748,464
Victims' intangible costs	$316,868	$3,915,586	$1,697,508	$4,685,123	$7,536,937
Criminal justice system costs	$81,044	$1,001,478	$434,167	$1,198,300	$1,927,701
Criminal career costs	$33,545	$414,541	$179,703	$495,980	$797,880
Total cost	$673,134	$8,318,018	$3,606,077	$9,952,773	$16,010,982
Non-administrative cases					
Victims' tangible costs	$1,649,135	$4,525,183	$1,284,677	$2,310,026	$4,009,145
Victims' intangible costs	$1,377,108	$6,313,709	$1,314,306	$1,718,836	$3,034,696
Criminal justice system costs	$66,018	$1,273,651	$351,782	$494,844	$883,382
Criminal career Costs	$120,714	$494,568	$139,073	$159,945	$290,782
Total cost	$3,512,976	$12,607,110	$3,089,839	$4,683,650	$8,218,005

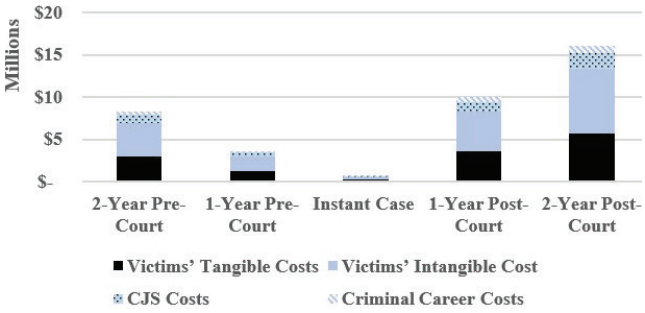

FIGURE 3 Cost of administrative cases: Victim, criminal justice system and criminal career costs (millions of dollars). CJS = criminal justice system.

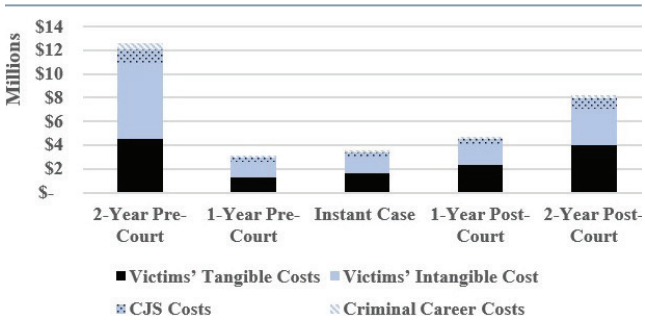

FIGURE 4 Costs of non-administrative cases: Victim, criminal justice system and criminal career costs (millions of dollars). CJS = criminal justice system.

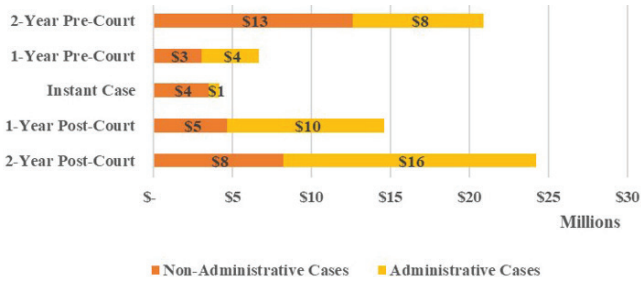

FIGURE 5 Total costs: Non-administrative vs. administrative costs (million dollars)

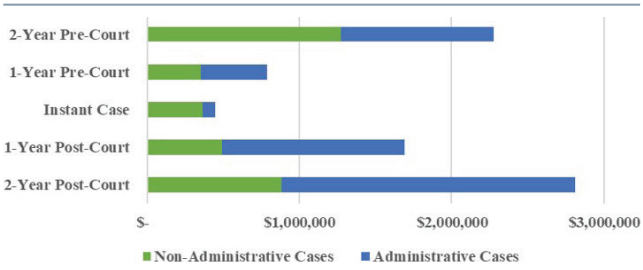

FIGURE 6 Criminal justice costs: Administrative vs. non-administrative costs

standpoint, the burden pre- vs. post-Court entry switched from non-administrative (i.e., criminal behaviour) to administrative charges (failure to comply with conditions/orders). Administrative cases accounted for 54% of total costs 1-year pre (close to $4M out of approximately $7M), and 40% of total costs 2-year pre-Court (approximately $8M out of close to $21M). In contrast, post-Court entry administrative case costs accounted for about two-thirds of total recidivism costs (almost $10M out of $14.5M 1-year post-Court; and approximately $16M out of $24M 2-year post-Court cost).

Criminal Justice System Cost

As noted previously, the justice system covers about 10–12% of the total societal cost of crime. This section focuses on the cost burden to the criminal justice system, rather than to society as a whole. Clients' criminal justice costs are illustrated in Figure 6. Similar to clients' total costs, administrative/non-compliance cases accounted for the majority of post-court criminal justice costs. As illustrated in the blue portions of the stacked bars in Figure 6, much of the 1-year and 2-year criminal justice recidivism costs resulted from administrative charges—71% of 1-year recidivism (slightly over $1M), and 69% of 2-year criminal justice recidivism cost (almost $2M) were due to non-compliance issues.

DISCUSSION

Participation in the MHS Court increased costs associated with clients' criminal and compliance behaviours. These increases in costs at the 1- and 2-year intervals were primarily due to an increase in administrative (i.e., non-compliance) cases and not due to the commission of new crimes. Total costs more than doubled in the 1-year pre–post interval, when clients were under supervision of the MHS Court. In the 2-year interval, when fewer than 1 in 10 clients were under the MHS Court supervision, clients' recidivism and the cost of this recidivism only increased by 16%. The increase in costs associated with participation in the Saskatoon MHS Court is not entirely surprising as increases in initial spending seem to be extremely common among MHCs that have been studied (Lindberg, 2009; Steadman et al., 2014; Ridgely et al., 2007).

Given that the administrative recidivism is higher than prior administrative offenses, and the court does not use in-program sanctions and incentives as an alternative or supplement to legal sanctions, the 1- and 2-year interval cost patterns strongly suggested an over-supervision effect of the MHS Court resulted in increased total and criminal justice related costs. While the effect of over-supervision in MHCs is largely unexplored, deleterious effects of over-supervision on prosocial associations have been observed in a number of forensic contexts. These negative impacts can include interruptions of prosocial associations in the community and increased exposure to antisocial associates through increased contact with the criminal justice system (Andrews & Bonta, 2010; Dishion et al., 1999; Jung, 2021; Lowenkamp & Latessa, 2005; Pederson & Miller, 2021). These negative impacts of over-supervision are supported by the Risk–Needs–Responsivity (RNR) approach commonly used in forensic contexts (Andrews & Bonta, 2010). Specifically, the Risk principle—which states that the intensity of interventions should be matched to the level of risk posed by the individual—is well supported by meta-analyses and seems to apply to this situation (Wormith & Zidenberg, 2018). A recent study focusing on the supervision of sexual offenders found that low-risk individuals supervised at high levels

were more likely to have compliance issues compared with their peers supervised at more appropriate levels (Pederson & Miller, 2021). If the clients of the Saskatoon MHS Court are facing similar issues of over-supervision, it would be reasonable to assume that the mismatch of risk and supervision could be driving the cost increases noted in this analysis. However, without a matched comparison group to determine whether this increase in administrative cases was due to changes in the Saskatoon MHS Court's policies and practices for charges such as breach of probation, failure to comply, and failure to appear, it is impossible to make any definitive conclusions about an over-supervision effect, thereby necessitating more research into this area. Employing the use of validated risk assessments to inform the provision of adequate and appropriate services and supervision, and hiring a dedicated MHS Court Co-ordinator to support clients' attendance at Court and related appointments, as well compliance with court orders, may also reduce non-compliance issues (Mathias et al., 2019). Additionally, it is worth noting that we are unaware of which community-based services were provided to individual clients, leading to a bit of a "black box" of treatment conundrum. A similar "black box" effect has been found for drug courts, resulting in a significant reduction in addictions but not recidivism (Lowenkamp et al., 2005; 2006; Shaffer, 2011). Further exploration into this "black box" of treatment would be beneficial for determining both cost and other outcomes of the Court. Ensuring treatment integrity has also been shown to be important to ensuring meaningful effects on recidivism (Lowenkamp et al., 2010)

Jurisdictions differ on their treatment of administrative or non-compliance charges. The Toronto MHC responds to compliance issues by adjusting case management and services, rather than generating a new charge—and subsequently, new arrest, court case, and conviction (HSJCC, 2017). A similar approach by the MHS Court could potentially save the province of Saskatchewan $16M within a 2-year period. If subsequent cohorts of the MHS Court have a similar criminal and mental health background as the first-year cohort, reducing the use of administrative charges for non-compliance—similar to the Toronto MHC model (HSJCC, 2017)—could potentially save the province almost $2M in criminal justice costs in the 2-year post-Court entry period.

Generally, our findings suggest the use of administrative charges should be reconsidered by MHCs. Considering many of the clients in this study had an administrative-based arrest or conviction, indicating an issue with compliance, this could be a larger issue present in the MHC diversion system. While compliance should still be considered, the high volume of administrative charges is in defiance of one of the main goals of the Saskatoon MHS Court and MHCs more generally—to divert justice-involved individuals away from the traditional court system and to connect them to services (Baillargeon et al., 2009; Schneider et al., 2007). In light of this goal, alternate means of ensuring compliance may be more appropriate for the Court, including, but not limited to, the implementation of judicial referral hearings (Public Prosecution Service of Canada [PPSC], 2020). Under s. 523.1(2) of the Criminal Code, judicial referral hearings are permissible for administrative breaches that have not resulted in physical or emotional harm, property damage, or emotional loss to a victim (PPSC, 2020). Judicial referral hearings have the potential to preserve public safety while reducing recidivism and costs. Additionally, the use of judicial referrals would be more consistent with the concept of therapeutic jurisprudence on which the Court is based, which emphasizes celebrating successes rather than punishing mistakes.

CONCLUSION

In conclusion, initial expenditures for the Saskatoon MHS Court increased by $14,636,423 for the 1-year recidivism period and were more than double the total 1-year pre-Court costs ($6,695,916). The majority of these costs can be attributed to administrative costs, pointing to a potential for over-supervision. This study may offer some evidence that over-supervision in the context of MHCs can have negative impacts, including an increase in costs associated with programming. Alternate approaches to supervision and compliance should be considered to remain consistent with the therapeutic jurisprudence approach on which MHCs are based.

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CONFLICT OF INTEREST DISCLOSURES

No funding was provided for this research and the authors have no conflicts of interest to declare.

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SOCIAL INNOVATION NARRATIVES

Journal of
COMMUNITY SAFETY & WELL-BEING

The agony of proposing system-wide change

Cherri Greeno,* Kim Nicholson,† Roshan Pinto,‡ and Michael Williams§

ABSTRACT

Canadian Association of Chiefs of Police (CACP) Executive Global Studies 2020–2022 cohort members share the challenges, fears, and pride experienced while exploring the future of policing…for police.

Key Words Systemic change; collaboration; public trust in policing; innovation; professionalization of policing; police reform.

INTRODUCTION

Feel comfortable with the uncomfortable.

This was the theme that quickly emerged during our 2020–2022 Canadian Association of Chiefs of Police (CACP) Executive Global Studies Program, which saw 24 senior-level police executives travel to 14 countries in search of one answer—what is the future of policing…for police?

This question would be a difficult one to answer at the best of times, but try tackling it when the policing profession is in crisis, when there are calls to defund or, worse, abolish the police altogether. Nevertheless, we were committed to the task at hand.

During our journey, we conducted hundreds of interviews with police, military, and other experts from around the world. We brought our research back, discussed, debated, and ultimately revealed what we believed was the answer to improving the policing profession throughout Canada.

However, we knew that revelation was not what was expected of us.

We were expected by most of our stakeholders to deliver a *thing*. A material object or program. Something concrete. A tangible item that police leaders across the country could use to make change.

As we mapped out our research, we quickly realized it wasn't a *thing* we could deliver, but rather an *idea*.

It wasn't an action. It wasn't structured. It wasn't a gift-wrapped solution.

Instead, it was a thought. A concept. A call for a change in mindset.

Before that change of mindset could occur, we had to deliver a harsh message and it had to resonate—police leaders across Canada must overcome the prevailing reflex to act alone.

As a beginning, we asked police leaders in Canada to think about the development of a special purpose body that would bring together a diverse group of thinkers to take steps towards acting in unison as a profession and to forever change the landscape of Canadian policing.

THE PROPOSITION

Under the banner of the Canadian Policing Initiative (CPI), the identified body would be charged with the challenging task of establishing the architecture to change our thinking and to unite police leaders in a common objective, wherever it might be most suitable to do so. Through our Global Studies 2020–2022 research, five key areas were identified as immediately suitable for sector-wide unification, and we believe these can help to form the focus and agenda of the initial CPI body, who would be tasked to further develop parameters, priorities, and opportunities in a *design sprint* model.

The five streams we proposed as an ideal place to start the pan-Canadian discussions are as follows:

1. Wellness
2. Professionalization
3. Leadership Development
4. Innovation and Technology
5. Community Engagement Methods

As we began to work on our proposal, we admittedly grew more and more uncomfortable. We were struggling to find any comfort in the unfamiliar and unpredictable journey this was turning into. How do we propose a system-wide change with an *idea*? Especially an idea that we knew top police leaders in the country were likely not ready to hear? After all, our own research assumption was premised on police culture being resistant to change.

We were headed into the great unknown. And, needless to say, it was frightening.

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We found ourselves recalling scenes from the children's fairy tale *The Emperor's New Clothes*. Do you recall the crowd of followers who were so caught up in believing that they could never be led astray that they ignored what was right in front of their faces? How about the small, rather insignificant voice in the crowd challenging the leader whose ego was more important than the truth, not only to himself, but also to the ever-reassuring crowd? It takes courage to state the obvious, to say you cannot agree with long-established patterns, and in our case, to tell the "system" it is naked, while so many others continue to see it fully clothed. When you do, there's no going back. That's how it felt to be part of the Global Studies 2020–2022 program.

THE EVIDENCE

Despite the challenges we were facing, we knew our idea was possible. Why? Because there was evidence—both internationally and nationally—to suggest the unified approach we were proposing had been done—and done well—in the past and is actually flourishing in other countries.

Internationally, our collective research identified impressive and varied models of a unified approach in the countries we visited, each of them backed by ample evidence, data, and trend lines that supported the transformative impact of a collective approach on the pace and scope of change.

In the United Kingdom, what started as an online national police well-being resource, Oscar Kilo has grown into a recognizable brand and trusted service across the country. By actively promoting that it's OK to focus on mental health and take care of one another, organizational culture is shifting, members are talking, and police leaders are listening. So powerful has the OK movement become that it has made its way into popular culture, frequently referenced in British policing shows, and is evident on bus shelters throughout the United Kingdom.

In Scotland, Norway, Finland, and Iceland, the concept of true leadership and professionalized policing is held in high regard. In Norway and Finland, a 3-year Bachelor of Police Services is required to be completed prior to applying for a police position. No different than any other post-secondary profession, such as nursing, teaching, or the trades, policing is promoted as a viable career choice to high school students. Because of the prestige associated with acquiring a degree, police officers are viewed as "educated professionals," which has translated into respect and confidence in the public's eye and created a greater pool of diverse candidates. Professionalization of policing and the concept of a degree program were also seen in Croatia, New Zealand, Australia, the United Kingdom, and Spain.

In Colombia, when faced with increased public trust issues, the Colombian National Police realized that, to make meaningful change within their organization, they needed to consult with and hear from the public. Adopting a business-type model, their leaders went into the community and conducted interviews with residents, leaders, and university executives. This may not sound revolutionary, but it's *how* they did this community consultation that is unique. They took their consultation process into the homes of the family members of their employees to gain true insight into how the employees viewed the organization. They didn't just talk to them. They listened. And they took action.

In Australia and New Zealand, innovational success was driven largely by the Australia New Zealand Policing Advisory Agency (ANZPAA). Appropriate for our research theme, ANZPAA's purpose is to "position policing for the future." ANZPAA provides balanced and impartial advice on current and emerging priorities, identifies and responds to risks and opportunities, and supports policing to solve complex problems and create preferred futures. The agency proactively partners with policing and key stakeholders to generate and share innovative ideas, enhancing outcomes for policing and communities. They also provide consistent good practice and explore ways to optimize resources in a cost-effective and sustainable way. Notably, ANZPAA has tracked a growing uptake of the advice and services they offer, with many more agencies now using their trend forecasting and other analyses to inform local policy and practice.

In New Zealand, the high level of trust between police and the Māori people was unmistakable. The New Zealand Police place a lot of focus on authentically inclusive engagement, collaborating with and including the Māori people in everything they do. This ranges from providing guidance in the development of procedures and business plans to the recruitment of new members. This collaboration has resulted in strong, positive relationships between the two co-existing societies—thanks to many years of nation-wide, dedicated efforts.

What was more compelling than all the discoveries from our international research was the fact that we saw the mindset to act together happen right here in our own country—with Community Safety and Well-Being (CSWB). As just one example, this loosely defined CPI concept, as proposed, reflects and builds upon the proven success of the Ontario Working Group (OWG) approach. By drawing on Saskatchewan initiatives, the informal OWG led that province through wide and rapid expansion of CSWB Plans and, ultimately, ushered in supporting legislation in just 4 short years. In fact, the widespread adoption of CSWB as a core policing philosophy now spans every province and territory, and no specific entity or structure has ever "owned" the mandate.

We know how to do it, but we have never come together in quite this way for the benefit of our own sector. We're fragmented by jurisdictional boundaries, real and perceived. Frankly, they're used as a shield and too frequently become the excuse for maintaining status quo or going at it alone. And yet, Canadian police find ways to transcend these boundaries in the case of an emergency or when there's an operational requirement, such as a protest or a cross-border investigation. Yet, somehow, the idea of coming together to create a single innovation plan for the use of body-worn cameras or to develop a standard curriculum for senior police leaders is incomprehensible.

In fact, we were acutely aware that the Global Studies 2008 cohort's suggestion for a pan-Canadian approach to professionalized policing was collecting dust, along with the outcomes from subsequent cohorts whose findings implied something similar. We concluded that nothing was done due to the simple fact that there was resistance, an outright refusal to accept that change was necessary. Someone told us, "You can't change the system without changing minds," and it's a brilliant summation of where we currently are as a policing profession. It's also the biggest hurdle to achieving system-level change. This was—is—our struggle.

THE CHALLENGE

Ultimately, our call to action is as simple as it is complex. On the one hand, we are simply looking to engage in new, open-minded conversation, one to which others will be welcomed, and one we can no longer choose to avoid. The complexity derives from the myriad directions this new conversation might lead, and frankly, we are excited by those possibilities. Imagine if we were able to suspend the jurisdictional reflexes and let the art of the possible become the new ethos to guide this work. How might our public and our stakeholders respond when they see the Canadian policing sector acting together to introduce, develop, and advance a new decade of reform?

The weight of knowing that we were on the path to proposing significant change was daunting. After all, we weren't simply presenting the idea to a group of our peers. We were presenting it to the most recognized and influential leaders in the field. As Inspectors, Superintendents, and civilian professionals, we were outranked. Why would they listen to us? Doubt began to overtake most of us, and we questioned whether proposing such a drastic recommendation would be a career killer.

But we also asked ourselves, "If we don't do it, who will?"

In the end, we decided to be ok with not necessarily feeling ok. Instead of fearing rejection, we would challenge it. If no one on the inside challenged the system, we knew that system would forever be resistant to change.

THE MESSAGE

There should be no regrets in identifying gaps, researching emerging trends, and trailblazing a successful path for the future. Regardless of our fears, we were confident that our research led us to the conclusion that this change is necessary, and that necessity became our driving force. As Plato said, necessity is the mother of invention. And we knew that overcoming our own personal fears to capitalize on a critical moment in time was the only way to drive that necessary change.

As the program concluded and our recommendations were revealed, we knew we had contributed not only to significant change in the policing profession but to our own personal growth as well. While we didn't think it possible at first, we did learn to feel comfortable with the uncomfortable. As a result, we emerged stronger leaders, stronger individuals, and stronger police professionals.

We hope our own learning will encourage other CSWB professionals, wherever they may fit within the system, to keep asking the most difficult questions, to recognize the most compelling answers even when others have not, and to drive necessary change in the system forward without reservation. If we don't do it, who will?

We learned something else, too. Once you know the right thing to do, it is almost impossible not to do it.

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BOOK REVIEW

Journal of
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Improving community outcomes and social equity through leveraged police leadership – A chapter review

Bree Claude*

Improving community outcomes and social equity through leveraged police leadership. In I. Bartkowiak-Théron, J. Clover, D. Martin, R. F. Southby, & N. Crofts (Eds.). *Law Enforcement and Public Health: Partners for Community Safety and Wellbeing* (pp. 85–109). Springer.

INTRODUCTION

It is an honour to have been invited to write a chapter review for "Improving Community Outcomes and Social Equity Through Leveraged Police Leadership" (Taylor et al., 2022). This chapter was written by four police practice experts from the Canadian community safety and well-being context and outlines a police leadership imperative that they propose will move policing beyond law enforcement to become a key influencer of public health outcomes. They call to action a "new mission" for police leadership and do not shy away from acknowledging the tense and precarious social context of policing in our current era.

Before digging into this chapter, I am compelled to declare the lens that I bring to this review. As a 23-year public servant working in social programs and social policy, a social sciences doctoral candidate, and a community practitioner, it is safe to say that I am not an expert in police leadership. I have spent much of my career working and leading alongside many human services, including police, to achieve community-level outcomes. On this journey, I have witnessed police leadership that inspires change, collaboration, and collective action and police management that is closed, non-collaborative, non-trusting, and rigid. I have also observed the impact of the role of this key community player on the community and social ecosystem. This outsider and partner lens is supplemented by critical and complexity theory assumptions. I have chosen these two paradigms as they reveal my assumptions about society: that certain groups are privileged in society over others (critical theory) (Kincheloe & McLaren, 1994) and that societies function as dynamic complex systems that cannot be understood through the actions of any single agent, but rather insights emerge through better understanding of the combined activity of all involved (Lichtenstein, 2015). I declare this framing and associated assumptions to support the integrity of this review and also to illustrate that the authors who invited me to conduct this review are indeed living the challenge they present in this chapter—to create space for divergent and diverse perspectives to tackle the social and community challenges that we must face together. In the following pages, I humbly share the insights that I have gleaned from this chapter and offer some reflections.

This chapter on police leadership contained many features that I would hope to see covered in the description of a new policing mission to transition from a crime-fighting, law-enforcement focus to a committed, much needed leadership role in the achievement of improved public health. The authors outline the importance of authentic leadership, the requirement to think and work in multi-sectoral and multi-disciplinary ways, the role of innovation, failure, and learning and the police leader's role in creating open organizational learning systems that ensure the conditions for all these preceding characteristics.

The authors begin this work by shining a light on the police norms of the past. They describe the traditional, rigid nature of police leadership, based on "top-down hierarchical management structures supported by command-and-control systems, policies, and procedures" (Taylor et al., 2022, p. 88). Among other characteristics, this legacy leadership approach promoted risk aversion, discouraged innovation and creativity, encouraged a common worldview, discouraged diverse thinking, valued action over reflection, censured internal critics, and prized loyalty over all else. It is the position of the authors that, while many police organizations are 40 years into a "community policing" focus, the traditional leadership styles and subsequent organizational cultures do not generate the collective community outcomes that will make our communities safer and healthier. The authors propose that the police leadership of the future must be dramatically different (in fact, almost the opposite) from what it was. This call to action is supported through the authors' own personal police leadership

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perspectives and through outlining police leadership examples from Scotland, the United States and Canada.

While this chapter offers many insights, the authors bundle the requisite police leadership characteristics into the following three dimensions:

- Leaders with the courage and passion to expand the mission
- Leaders able to shift their focus from positional power to multi-sector influence
- Leaders who develop, serve, and support their own members.

Expanding the mission is the first step in embracing the link between policing and public health outcomes. The authors reference the importance of upstream work and declare that "social determinants of health and social determinants of criminal justice are one and the same" (Taylor et al., 2022, p. 104). The authors acknowledge the profound influence of individual adverse experiences on life course trajectories, detrimental health outcomes, and poor outcomes more generally, including encounters with the law (Struck et al., 2021). For these police leaders, expanding the mission depends on a strong and pragmatic focus on changing individual and community health outcomes and recognizing the contributing role that policing can have on these higher-level outcomes.

The proposal that policing shift from positional power to multi-sectoral influence is congruent with a systems and complexity lens. Recognizing that communities are complex and dynamic systems reminds us that relationships between entities and the impacts they have on one another are non-linear and precise predictions of impacts are not possible. Outcomes can be influenced, though not precisely predicted, when care and attention are given to relationships in community. "Each of these outcomes cannot be traced to the actions of any single agent in the system; they emerge due to the combined activity of everyone involved" (Lichtenstein, 2015, p. 448). The quality and nature of relationships between police and other human services and police and citizens will be key factors in transitioning from positional power to multi-sector engagement. This is made even more challenging as police continue to hold powers that are not shared with other community entities or citizens, including the power to execute the law and use force when necessary. Working in this integrated way, it will be important to acknowledge and declare the positionality of police leadership. "Knowledge can never be objective because of our inescapable historicity. We are always situated in a particular "horizon" of understanding that is based on a combination of cultural and personal presuppositions (prejudices)" (Willis, 2007, p. 112). Systems change and transformational leadership requires reflection, openness, assessment, and consideration for social inequities and the influence of power dynamics. Holding awareness of the unavoidable position of power that the police hold and showing up openly and consistently to the "new mission" is likely to create authentic conditions under which new community patterns and relationships can emerge.

The authors' third focus is on police leaders' obligation to develop, serve, and support their own members on this collective journey. It seems logical that if we are seeking innovation, adaptation, and renewed relationships to create conditions for improved safety and well-being within communities, we are best served by creating these same conditions within our own organizations. Working in human services, I have witnessed and been a part of organizational cultures that were not well and were not safe. When working with traumatized citizens, the realities of vicarious trauma and post-traumatic stress add additional pressure on the team and on leaders to create conditions for wellness. "Organizations that provide services to traumatized individuals, families and/or communities are susceptible to becoming traumatized systems" (Hormann & Vivian, 2005. p. 159). The authors propose a recognition of open and closed system dynamics and acknowledge the closed and rigid organizational traditions of policing cultures.

Through a holistic and systems-level view, the authors further point to the connection between these legacy policing approaches and the current questions being raised about the legitimacy of policing. A result of these traditional approaches, according to the authors, is a strained relationship between police and the communities they serve. "[L]ingering adherence to [these] approaches to criminal justice, all relics of the 'professional policing' era from decades ago, have driven a wedge between police and those who need them most, while driving frustration and stress levels to a breaking point for far too many police professionals" (Taylor et al., 2022, p. 106). The consequences of these limiting approaches to police leadership and accompanying organizational cultures are evident in a post-2020 world that has been fueled by stresses and decisions related to the COVID pandemic, the symbolic and catalytic death of George Floyd at the hands of a police officer, the Black Lives Matter movement, calls to defund police, and, closer to home, the demand for tangible action on Indigenous truth and reconciliation following the discovery of thousands of unmarked graves near former residential schools. These police leaders name the connections and call out a requirement to face these legitimate criticisms. "Successful police executives will be those who quickly recognize and abandon the folly of continuing to model a defensive reflex in the face of community-driven demands for long overdue changes in policy, practice, and in the essential culture of the policing professional" (Taylor et al., 2022, p. 105). The authors further acknowledge that it is time for police organizations to "confront and dismantle the intractable traces of colonialism and systemic racism that plague their communities, and yes, which also infect their organizations" (Taylor et al., 2022, p. 106).

These statements, coming from renowned police leaders, are bold and aspirational and they leave the reader wondering to what extent the "dismantling of colonialism and systemic racism" can occur through a shift-in-leadership approach. While the proposed transformations to policing leadership in this chapter are critical to changing legacy police systems, many would suggest that these shifts in leadership will be insufficient in creating the changes we seek without also being accompanied by a critical lens and understanding of the institutional, hegemonic structures that are supporting ongoing colonization and systemic racism. Systems change has been identified as "shifting the conditions that are holding a problem in place" (Kania et al., 2018, p. 3). It might be suggested that leadership approach and mindset is one condition and is accompanied by many other structural conditions that are continuing to generate colonialism and systemic racism in our institutions. While leadership is likely a significant part of the

solution going forward, how does meaningful change occur within institutions that have yet to critically examine their own structures, instruments, and ways of being that remain stuck on a colonizing path? Like many other social institutions (including education, child welfare, and religion) in Canada and in most colonized nations across the globe, police forces have been consistently employed as a government-sanctioned tool of colonization.

> Historically, the police enforced laws that were designed to control and ultimately eliminate Indigenous peoples through forced assimilation, dislocation and deprivation. These practices included the implementation of a pass system to limit the freedom of movement and the gathering of Indigenous peoples, the criminalization of cultural and spiritual practices, and the forceful removal of Indigenous children from their families and communities in order to deliver them to residential schools against their will. (David & Mitchell, 2021, p. 27)

Just as the authors are transparent about the connection and influence of command-and-control policing on their members and the relationships with the community that ensue from taking such an approach, the role of police as an integral tool in colonization, racism, and genocide must also be declared and accounted for. As a former child welfare worker who did not understand my own connection to the horrid legacy that came before me and the current practices that keep us sleepwalking in colonialism, I share these reflections humbly and with a desire to address not only the symptoms of broken relationships between police and the communities they serve, but to also acknowledge and reconcile the root.

As further guidance on moving forward, the authors propose a concept of "reverse engineering, which requires leaders to examine issues from a macro-level rather than becoming fixated on individual, sector-specific examples" (Taylor et al., 2022, p. 102). Using the example of individual pathways through systems, they further propose that complete transformation is possible when "deconstructing the issues at hand, and thoroughly examining the parts that make the whole" (Taylor et al., 2022, p. 102). What the authors term "reverse engineering" would perhaps more accurately be labelled an examination of relationships and patterns through a systems and complexity lens. It is not the individual parts that create insights on pathways through human services systems as an example but rather the relationships and patterns between these multi-sector systems that reveal opportunities for change and innovation. To understand a complex social system fully and completely is not possible and while "systems thinkers pursue the ideal of comprehensiveness, [they] know that this is unattainable" (Midgley, 2008, p. 66). Understanding nuances of relationships between components is attainable and will increase opportunities for collective influence and change while enhancing the macro-analysis that is proposed in this chapter.

As a final takeaway, I am inspired by the innovation, reflection, and inspiration in this chapter and the commitment to working authentically and collectively with community as "a legitimate business practice, [and not] merely an empty, catch-phrased marketing strategy" (Taylor et al., 2022, p. 92). Our current systems and relationships between sectors are perfectly designed for the results we are achieving today, and, in order to change the outcomes, we must change how we engage and work together as a broader, social sector ecosystem. These leader-authors have declared a call to action that creates momentum, hope, and possibility for renewed outcomes in our communities, and these are approaches that change systems. "Passion and aspiration are key drivers of emergence…the positive energy that emergence draws from aspiration, leads to much more creativity and greater potential for successful innovation" (Lichtenstein, 2015, p. 447). I look forward to the impact this work will have on global policing and communities, and, like the authors, I "remain optimistic that we are closer than ever to the tipping point of change" (Taylor et al., 2022, p. 93).

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Correction to: Implementation of a post-overdose quick response team in the rural Midwest: A team case study

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