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THE EFFECTS OF TRAUMA ON OCCUPATIONAL FUNCTIONING WITHIN EMPLOYMENT: A LITERATURE REVIEW

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INTRODUCTION

This literature review aimed to understand, through an occupational therapy lens, how trauma affects adults' participation in employment in Aotearoa New Zealand. "Occupational therapy promotes health and wellbeing by supporting participation in meaningful occupations that people want, need, or are expected to do" (World Federation of Occupational Therapy, 2025). Such occupations include self-care, leisure, and productive activities, all of which support wellbeing, but can be impacted by trauma (Edgelow et al., 2020). Meaningful productive occupations can include employment, as a means of financially supporting daily living, and non-financial alternatives such as volunteering.

Adversity from negative life events, or socio-economic circumstances, can determine an individual's ability to fully participate in components of daily life such as schooling (Lund et al., 2013). Trauma occurs from an exposure to a painful or stressful event, or series of events, and causes the individual to re-experience the effects of this exposure, subsequently negatively impacting cognition and mood (Edgelow et al., 2020). Trauma events or adverse experiences can have a lasting effect on mental, physical, social, emotional or spiritual wellbeing, and affect how productive occupations and activities are performed (Aitchison & Suarez, 2021; Donaldson et al., 2018). Successful occupational functioning in employment contexts may be defined as completing expected and required work tasks within the employment setting; but it is notable that these demands will vary depending on the role and the environment (Edgelow et al., 2020).

The Organisation for Economic Co-operation and Development (OECD), advised in 2018 that Aotearoa New Zealand loses five percent of its gross domestic product each year due to mental health and lost labour productivity, which includes health and social care spending for those who are unemployed. The social welfare and beneficiary system, managed by the Ministry of Social Development (MSD) in Aotearoa New Zealand, enables individuals to defer actively seeking employment when they have a medically certified health condition, injury, or disability, with either no capacity to work or the capacity to work fewer than 15 hours per week (MSD, 2023). Research suggests this loss of functional capacity to work can impact mental health and can occur as the result of untreated trauma (Nandi et al., 2004; Stergiopoulos et al., 2011).

The effects of trauma, especially stemming from childhood, have garnered extensive attention in mental health research, yet there remains a gap in knowledge regarding its impact on occupational functioning in employment settings (Howard, 2023; Sienkiewicz et al., 2020). There are few studies exploring the effect of trauma on employment in the context of Aotearoa New Zealand, with available research only alluding to the effects as a secondary finding (Besley & Peters, 2020; Te Pou o te Whakaaro Nui [Te Pou], 2018). This literature review informed the main author's master's research project, which directly interviewed participants within Aotearoa New Zealand on how trauma affected their ability to obtain and sustain employment to fill this gap in the research (Howard, 2023).

In Aotearoa New Zealand, the historical impact of colonisation has resulted in Māori (the indigenous peoples or tangata whenua of the land), being particularly vulnerable to occupational injustices (in other words, restricted participation in occupations due to unjust social constraints). This colonial legacy is evident through disparities in employment, educational, and health outcomes (Bailliard, 2024; Durocher et al., 2014; MSD, 2016). Māori are disproportionately affected by poor mental health, limiting their employment opportunities and exacerbating economic challenges (OECD, 2018). Research from OECD (2018) showed approximately one in four New Zealanders with a severe mental health condition are without income from either work or social benefits, compared to approximately one in ten people within Australia. Consequently, exploring trauma effects, including among Māori, is critical to understanding occupational barriers to employment within an Aotearoa New Zealand context.

Occupational therapists have a unique role in understanding and addressing the impact of trauma on obtaining and sustaining employment, by using trauma-informed and evidence-based practices to support (re)engagement in work and resist re-traumatisation (Edgelow et al., 2020; Substance Abuse and Mental Health Services Administration, 2014). This review examined current literature about the impact of trauma on occupational functioning and on obtaining and sustaining employment, and the role of occupational therapy, then applied the findings to the unique cultural context of Aotearoa New Zealand.

METHODS

The literature review was completed with the research question: How does trauma impact on adults' ability to obtain and sustain employment? Research studies on this topic were often from international sources and primarily focused on analysis of quantitative data without consideration of the holistic context or an occupational perspective, such as using volunteering for grading re-employment. This review explored the available research within the field of trauma and employment, the potential relevance of the findings for Māori, and their applicability to occupational therapy within Aotearoa New Zealand. It consolidated existing knowledge of this issue as it applied to occupational therapy practices in Aotearoa New Zealand, an area not examined before.

The initial search strategy used the search terms "trauma" and "employment" and was applied to four health-related databases: Gale academic, Taylor and Francis online, CINAHL, and Cochrane. Searches were completed between 2022 and 2023 and the resulting hits ranged between 19 and 1,102. Initial screening involved reviewing the titles for relevancy to the research question. Articles focused on medical or acute trauma within hospital settings were excluded: such studies almost exclusively reported on employment status only at time of injury or incident, rather than longer-term occupational impacts. Therefore, a secondary search of these databases using the terms "adverse childhood experiences" and "employment" was completed to provide additional articles relevant to childhood trauma and the effects on employment status later in life. Articles were excluded if the research focus was not relevant or the article was not in the English language. The review focused on studies from the last 20 years to maintain relevance to current practice. Reference and citation checking of key articles generated additional relevant articles, which were also included within this literature review. Additional grey literature, such as reports from MSD, was sourced to provide relevance to the Aotearoa New Zealand context in the absence of location-specific research publications.

In total, 24 articles were selected. Fifteen articles used quantitative methodologies, two articles used qualitative methodology, three were systematic reviews, three were literature scans, and one was a scoping review. Only four articles were written within an Aotearoa New Zealand context. The included articles were assessed for suitability and quality using the McMaster Critical Review Forms for qualitative and quantitative research (Law et al., 1998; Letts et al., 2007). The literature found was then further analysed using qualitative narrative analysis for identifying and summarising previous publications with the aim of seeking new study areas that have not yet been addressed; in this case, the impact of trauma on occupational functioning within employment (Ferrari, 2015). Studies were

compared to allow key concepts within the information to emerge to be discussed and evaluated. This process allowed for an in-depth examination of the findings and interpretations presented in each study (Ferrari, 2015). The findings of this analysis are synthesised below.

FINDINGS

Trauma in the Aotearoa New Zealand context

There was a paucity of literature exploring the relationship between trauma and employment in Aotearoa New Zealand, which is important within the unique historical and cultural context of this nation. One literature scan reported that 65 percent of Māori people had experienced one or more traumatic events during their lifetime, additional to experiences of historical and intergenerational trauma (Te Pou, 2018). Trauma experienced by Māori as a result of colonisation was reported to be compounded by experiences of racism, discrimination, and socio-economic disparity, which continue to affect Māori employment rates, income levels, and health outcomes (McClintock et al., 2018). While Māori share similar resilience strategies to those found in western cultures, there are cultural differences aligned with te ao Māori (the Māori worldview) and whānau (family and community) dynamics. Māori focus on collectivist benefits actively expressed through whanaungatanga (connection) and whakapapa (genealogy) relationships, as opposed to values of individualism within western societies (Pihama et al., 2017). Therefore, further research is needed in Aotearoa New Zealand, especially research including Māori perspectives, on how workplaces can become more trauma-informed and accommodating of cultural differences to improve employment rates.

Adverse childhood experiences and their occupational implications

The landmark adverse childhood experiences (ACE) study, completed in the United States by Felitti et al. (1998), established the long-term health and employment risks associated with early-life trauma. This study used a standardised 10-item ACE questionnaire and compared the responses to participants' medical histories. Felitti and colleagues (1998) found participants who scored four or more on the ACE questionnaire, compared to those who had experienced no early-life trauma, experienced increased negative impacts on their health and employment as adults. Further international studies using the ACE questionnaire have consistently demonstrated that individuals with higher ACE scores, of four or more, typically experience lower employment rates and higher job turnover, indicating that childhood trauma has lifelong impacts on occupational functioning (Hansen et al., 2021; Hardcastle et al., 2018; Liu et al., 2013; Lund et al., 2013; Metzler et al., 2017; Schüssler-Fiorenza Rose et al., 2016). Sienkiewicz et al. (2020) and Smith et al. (2022) found participants with ACE histories of physical and sexual abuse had worsened occupational functioning within employment than participants with a different ACE profile. Additionally, studies have shown that higher ACE scores are correlated with disruptive adult behaviours, lower cognitive abilities, emotional health problems, difficulties in interpersonal relationships, and physical and mental health disabilities, all of which can affect employment sustainability (Haahr-Pedersen et al., 2020; Hansen et al., 2021; Hardcastle et al., 2018; Lorenc et al., 2020).

Youth and employment transitions

The United Nations (n.d.) defines youth as those aged between 15 and 24. Youth exposed to trauma and adversity can experience disruption impacting academic attainment and their transition from school to employment. Danish cohort studies from Hansen et al. (2021) and Lund et al. (2013) showed that those with higher ACE scores, who did not enter employment or higher education after schooling, had greater negative health and financial impacts. Studies from the United States (Wade et al., 2014) and United Kingdom (Sanderson, 2020) reported that youth with adversities in childhood experienced later socio-economic barriers to employment. These barriers included: limited access to education; lack of resources such as inadequate clothing for work; limited transportation options; having a disability; having children; accessing mental health services; using drugs and alcohol, and experiencing

racism. These issues brought about a reliance on systemic factors such as childcare arrangements; public transport availability and schedules; costs of purchasing items, and availability of health and support services, which impacted on their ability to obtain and sustain employment. Aotearoa New Zealand-based research shows that Māori youth face similar barriers, further compounded by intergenerational trauma and systemic discrimination as ongoing effects of colonisation (MSD, 2016). For example, in Aotearoa New Zealand, Māori are 10 times more likely to experience multiple forms of racism and three times more likely to be unemployed than European or other ethnicities (MSD, 2016; Pihama et al., 2017). No literature was found exploring the relationship between ACE scores and employment status in Aotearoa New Zealand. However, international research found that youth who have experienced adversity are disproportionally represented in unemployment rates (Hansen et al., 2021; Lund et al., 2013; Sanderson, 2020; Smith et al., 2022; Wade et al., 2014).

Adult trauma and occupational functioning

Traumas from natural disasters or physical or sexual attacks have lasting psychological effects on adults, including anxiety, depression, and post traumatic stress disorder (PTSD), which in turn negatively affect their ability to work (Donaldson et al., 2018; Serrano et al., 2021). Studies of earthquake survivors, including those of the Christchurch earthquake in 2011, show that post-trauma symptoms (such as heightened anxiety and dissociation) can lead to job losses and unemployment (Dorahy et al., 2016; Serrano et al., 2021). The impact of trauma is further evident in marginalised communities, as seen in the aftermath of the 2019 Christchurch Mosque shootings. In this context, Muslim wives who had previously relied on their husbands for financial support were forced to navigate their grief and trauma while also facing compounding socio-economic challenges. These challenges included speaking limited English, being unable to drive, and temporary visa statuses, all of which limited employment opportunities (Besley & Peters, 2020).

A systematic review (Huggard et al., 2017) and position paper (Brouwers, 2020) based on international research indicated that frontline workers in emergency services and the military were also identified as at high risk for occupational disruption, exacerbated by frequent exposure to trauma, and resulting in high rates of PTSD, burnout, and moral distress, which often led to job resignations or career changes. Research has shown that unemployment can worsen PTSD symptoms. Nandi et al. (2004) found that those who were unemployed after the September 11 attacks in New York, United States, were 10 times more likely to develop PTSD than employed people. Furthermore, individuals with unresolved PTSD symptoms face greater difficulty returning to work (Edgelow et al., 2020; Stergiopoulos et al., 2011). Trauma responses have been shown to vary depending on individual resilience, past experiences, and the social environment (Te Pou, 2018; Vieselmeyer et al., 2017). Sienkiewicz et al. (2020) emphasised the need for a holistic view of trauma across the lifespan, as both childhood and adult trauma events significantly impact employment status and occupational functioning.

Contribution of employment to wellbeing

Most studies in this review were quantitative in focus and limited by definitions of employment status as either employed or unemployed, without factoring in part-time or voluntary work as a means of spending time productively. However, Sanderson (2020) and Wade et al. (2014) used qualitative methods to explore the relationship between complex socio-economic factors and trauma which significantly impacted employment status, and found that part-time and voluntary employment were still beneficial for some individuals making their first steps into employment.

Employment was reported to provide more than income; it contributed to personal growth, identity, routine, life purpose and meaning, and access to opportunities, providing material comfort, a sense of belonging, and social connection (Edgelow et al., 2020; Jarman et al., 2016; MSD, 2016; Nandi et al., 2004). Studies have shown that individuals with supportive employment report higher life satisfaction and mental health resilience, which buffer against the impacts of trauma (Edgelow et al., 2020; Jarman et al., 2016; Nandi et al., 2004; Te Pou, 2018).

However, without supportive workplace environments and compassionate employers, trauma survivors found it difficult to sustain employment due to ongoing psychological and cognitive challenges (Edgelow et al., 2020). Due to their unique position and skillset for this area of practice, it has been proposed that occupational therapists can guide employers in creating trauma-informed workplaces, providing strategies that reduce re-traumatisation and enhance job retention (Edgelow et al., 2020).

Trauma-informed occupational therapy interventions

Edgelow et al., (2020) identified occupational therapists as playing a key role in supporting trauma recovery through workplace interventions, including graded work exposure and adapting workplace environments to be more trauma informed. Their scoping review suggested occupational therapists could also work with those providing supportive psychotherapy-based interventions following trauma to help individuals regain occupational roles or alternative meaningful employment and aid their recovery. Interventions included promoting work skills development and graded work exposure, where individuals gradually resumed tasks to desensitize PTSD responses (Edgelow et al., 2020). Occupational therapists can also use trauma-informed practices and interventions to help individuals manage symptoms that affect job performance, such as anxiety or emotional dysregulation (Stergiopoulos et al., 2011). Further findings suggest that educating employers on workplace accommodations can support trauma survivors in returning to work and maintaining employment (Jarman et al., 2016). Further research on the effectiveness of occupational therapy interventions on supporting people to obtain and sustain employment following trauma is required.

DISCUSSION

This literature review explored research on the impact of trauma on obtaining and sustaining employment, which highlighted the multifaceted challenges that those who have experienced trauma faced in achieving stability in their occupational functioning. Adverse childhood experiences and adult trauma disrupt emotional and cognitive functioning, posing barriers to employment and wellbeing. The literature provided some insights into how the impacts of trauma experienced at any life stage can have an effect on employment. However, it did not address the cumulative effect of experiencing trauma across the lifespan on employment outcomes.

In Aotearoa New Zealand, Māori communities face additional barriers to employment due to the effects of intergenerational trauma from colonisation and structural inequities (Tuhiwai Smith & Pihama, 2023). These inequities emphasise the need for culturally informed and responsive occupational therapy practices which benefit whānau groups by supporting relevant individuals into employment to allow their occupational performance to flourish in suitable workplace environments.

Occupational therapists can offer guidance to employers and workplaces for modifying occupations and environments, where practically possible, to manage work-related trauma. As demand for trauma-specific return-to-work programmes grows, occupational therapists have an opportunity to develop evidence-based best practices to support sustainable employment outcomes. While occupational therapy offers opportunities for trauma-informed approaches in workplaces, there remains a lack of specific research within Aotearoa New Zealand on the impact of trauma on obtaining and sustaining employment. Future research should focus on developing culturally safe and responsive interventions that support those who have experienced trauma to obtain and sustain employment.

Limitations

This narrative literature review was conducted in partial contribution to the first author's master's qualification; thus, it was beyond the scope to include an exhaustive and systematic search of databases. Therefore, it is possible additional relevant literature was not included. Minimal literature was found from the unique sociopolitical context

of Aotearoa New Zealand's health and employment systems, which may limit the transferability of the findings. However, this review has highlighted the limited published research on the topic in Aotearoa New Zealand. It also provides some understanding on how trauma impacts employment in this context.

CONCLUSION

The evidence that trauma impacts on the occupational functioning of those seeking to obtain and sustain employment is robust; however, this review did not find examples of literature reporting previously traumatised peoples' experiences of successfully obtaining and sustaining employment. It is suggested that much of the literature reviewed would be enhanced by considering a definition of employment that is more inclusive (for example: part-time and voluntary positions). Further, more qualitative research is warranted to determine differences between the effects of trauma experienced at different life stages, in order to further understand how these effects subsequently impact employment. From an occupational perspective, the literature signposts a range of trauma-informed interventions that occupational therapy can contribute to in supporting someone to obtain and sustain employment. However, further empirical studies are required to evaluate peoples' experiences of these interventions and their impact on employment and wellbeing outcomes. It is crucial that any occupational therapy interventions are developed and delivered in a culturally safe, trauma-informed and responsive manner to reduce social inequities and enhance trauma recovery and wellbeing.

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Nicola Howard is a New Zealand registered Occupational Therapist. She completed her undergraduate degree in the United Kingdom, before moving to New Zealand. She completed her Master of Occupational Therapy degree with research focused on how trauma affects the ability to obtain and sustain employment in Aotearoa New Zealand.

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REFERENCES

Aitchison, B. J., & Suarez, M. (2021). Chapter: Introduction to trauma and the role of occupational therapy. In A. Lynch, L. Tekell & R. Ashcroft (Eds.) T*rauma, occupation, and participation: Foundations and population considerations in occupational therapy.* AOTA Press.

Bailliard, A. (2024). Occupational justice. In G. Gillen & C. Brown (Eds.), *Willard & Spackman's occupational therapy* (14th ed., pp. 139–160). Wolters Kluwer.

Besley, T., & Peters, M. A. (2020). Terrorism, trauma, tolerance: Bearing witness to white supremacist attack on Muslims in Christchurch, New Zealand. *Educational Philosophy and Theory, 52*, 109–119. https://doi.org/10.1080/00131857.2019.1602891

Brouwers, E. P. M. (2020). Social stigma is an underestimated contributing factor to unemployment in people with mental illness or mental health issues: Position paper and future directions. *BMC Psychology, 8,* Article 36. https://doi.org/10.1186/s40359-020-00399-0

Donaldson, W., Jury, A., & Poole, S. (2018). *Trauma-informed care: Literature scan*. Te Pou o te Whakaaro Nui. https://www.tepou.co.nz/uploads/files/resource-assets/Trauma-informed Care Literature Scan Final.pdf

Dorahy, M. J., Renouf, C., Rowlands, A., Hanna, D., Britt, E., & Carter, J. D. (2016). Earthquake aftershock anxiety: An examination of psychosocial contributing factors and symptomatic outcomes. *Journal of Loss and Trauma, 21*(3), 246–258. https://doi.org/10.1080/15325024.2015.1075804

Durocher, E., Gibson, B. E., & Rappolt, S. (2014). Occupational justice: A conceptual review. *Journal of Occupational Science, 21*(4), 418–430, https://doi.org/10.1080/14427591.2013.775692

Edgelow, M., Harrison, L., Miceli, M., & Cramm, H. (2020). Occupational therapy return to work interventions for persons with trauma and stress-related mental health conditions: A scoping review. *Work, 65*(4). https://doi.org/10.3233/WOR-203134

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) study. *American Journal of Preventive Medicine, 14*(4), 245–258.

Ferrari, R. (2015). Writing narrative style literature reviews. *Medical Writing, 24*(4), 230–235.

Haahr-Pedersen, I., Perera, C., Hyland, P., Vallières, F., Murphy, D., Hansen, M., & Cloitre, M. (2020). Females have more complex patterns of childhood adversity: Implications for mental, social, and emotional outcomes in adulthood. *European Journal of Psychotraumatology, 11*(1). https://doi.org/10.1080/20008198.2019.1708618

Hansen, C. D., Kirkeby, M. J., Kjelmann, K. G., Andersen, J. H., & Møberg, R. J. (2021). The importance of adverse childhood experiences for labour market trajectories over the life course: A longitudinal study. *BMC Public Health, 21*(1). https://doi.org/10.1186/s12889-021-12060-5

Hardcastle, K., Bellis, M. A., Ford, K., Hughes, K., Garner, J., & Ramos Rodriguez, G. (2018). Measuring the relationships between adverse childhood experiences and educational and employment success in England and Wales: Findings from a retrospective study. *Public Health, 165,* 106–116. https://doi.org/10.1016/j.puhe.2018.09.014

Howard, N. (2023). *How does trauma impact on adults' ability to obtain and sustain employment?* [Master's thesis, Otago Polytechnic]. https://doi.org/10.34074/thes.6349

Huggard, P., Law, J., & Newcombe, D. (2017). A systematic review exploring the presence of vicarious trauma, compassion fatigue, and secondary traumatic stress in alcohol and other drug clinicians. *Australasian Journal of Disaster and Trauma Studies, 21*(2), 65–72.

Jarman, V., Hancock, N., & Scanlan, J. N. (2016). Maintaining my employment: Learning from people living and working with mental illness. *British Journal of Occupational Therapy, 79*(11), 660–668. https://doi.org/10.1177/0308022616639978

Law, M., Stewart, C., Pollock, N., Letts, L., Bosch, J., & Westmorland, M. (1998). *McMaster critical review form-Quantitative studies*. McMaster University Occupational Therapy Evidence-Based Practice Research Group.

Letts, L., Wilkins, S., Law, M., Stewart, D., Bosch, J., & Westmorland, M. (2007). *Guidelines for critical review form: Qualitative studies (Version 2.0).* McMaster University Occupational Therapy Evidence-Based Practice Research Group.

Liu, Y., Croft, J. B., Chapman, D. P., Perry, G. S., Greenlund, K. J., Zhao, G., & Edwards, V. J. (2013). Relationship between adverse childhood experiences and unemployment among adults from five US states. *Social Psychiatry and Psychiatric Epidemiology, 48,* 357–369.

Lorenc, T., Lester, S., Sutcliffe, K., Stansfield, C., & Thomas, J. (2020). Interventions to support people exposed to adverse childhood experiences: Systematic review of systematic reviews. *BMC Public Health, 20*(1). https://doi.org/10.1186/s12889-020-08789-0

Lund, T., Andersen, J. H., Winding, T. N., Biering, K., & Labriola, M. (2013). Negative life events in childhood as risk indicators of labour market participation in young adulthood: A prospective birth cohort study. *PLoS ONE, 8*(9). https://doi.org/10.1371/journal.pone.0075860

McClintock, K. K., Haereroa, M., Brown, T., & Baker, M. (2018). *Kia hora te marino: Trauma informed care for Māori.* Te Rau Matatini.

Metzler, M., Merrick, M. T., Klevens, J., Ports, K. A., & Ford, D. C. (2017). Adverse childhood experiences and life opportunities: Shifting the narrative. *Children and Youth Services Review, 72*, 141–149. https://doi.org/10.1016/j.childyouth.2016.10.021

Ministry of Social Development. (2023). *Clients who have a health condition or are injured or disabled.* https://www.workandincome.govt.nz/map/income-support/main-benefits/jobseeker-support/clients-who-have-a-health-condition-or-are-injured-01.html

Ministry of Social Development. (2016). *The social report 2016–Te pūrongo oranga tangata.* https://socialreport.msd.govt.nz/paid-work/unemployment.html

Nandi, A., Galea, S., Tracy, M., Ahern, J., Resnick, H., Gershon, R., & Vlahov, D. (2004). Job loss, unemployment, work stress, job satisfaction, and the persistence of posttraumatic stress disorder one year after the September 11 attacks. *Journal of Occupational and Environmental Medicine, 46*(10), 1057–1064. https://doi.org/10.1097/01.jom.0000141663.22902.0a

Organisation for Economic Co-operation and Development (2018). *Mental health and work: New Zealand.* https://www.oecd.org/newzealand/mental-health-and-work-new-zealand-9789264307315-en.htm

Pihama, L., Smith, L. T., Evans-Campbell, T., Kohu-Morgan, H., Cameron, N., Wahine, T. T., & Southey, K. (2017). Investigating Māori approaches to trauma informed care. *Journal of Indigenous Well-Being, 2*(3), 18–31.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2014). *SAMHSA's concept of trauma and guidance for a trauma-informed approach*. HHS Publication No. (SMA) 14-4884.

Sanderson, E. (2020). Youth transitions to employment: Longitudinal evidence from marginalised young people in England. *Journal of Youth Studies, 23*(10), 1310–1329. https://doi.org/10.1080/13676261.2019.1671581

Schüssler-Fiorenza Rose, S. M., Eslinger, J. G., Zimmerman, L., Scaccia, J., Lai, B. S., Lewis, C., & Alisic, E. (2016). Adverse childhood experiences, support, and the perception of ability to work in adults with disability. *PLoS ONE, 11*(7). https://doi.org/10.1371/journal.pone.0157726

Serrano, C., Leiva-Bianchi, M., Ahumada, F., & Araque-Pinilla, F. (2021). What is the association between post-traumatic stress disorder and unemployment after a disaster? *International Journal of Occupational Medicine and Environmental Health, 34*(6), 755–766.

Sienkiewicz, M. E., Amalathas, A., Iverson, K. M., Smith, B. N., & Mitchell, K. S. (2020). Examining the association between trauma exposure and work-related outcomes in women veterans. *International Journal of Environmental Research and Public Health, 17*(12), 1–16. https://doi.org/10.3390/ijerph17124585

Smith, M. L., Herbert, A., Hughes, A., Northstone, K., & Howe, L. D. (2022). Socioeconomic position and adverse childhood experiences as risk factors for health-related behaviour change and employment adversity during the COVID-19 pandemic: Insights from a prospective cohort study in the UK. *BMC Public Health, 22*(1). https://doi.org/10.1186/s12889-022-14184-8

Stergiopoulos, E., Cimo, A., Cheng, C., Bonato, S., & Dewa, C. S. (2011). Interventions to improve work outcomes in work-related PTSD: A systematic review. *BMC Public Health, 11*. https://doi.org/10.1186/1471-2458-11-838

Te Pou o te Whakaaro Nui. (2018). *Trauma-informed care - Literature scan, section three.* https://www.tepou.co.nz/uploads/files/resource-assets/Trauma-informed Care Literature Scan Section Three Final.pdf

Tuhiwai Smith, L., & Pihama, L. (2023). *Ora: Healing ourselves: Indigenous knowledge, healing and wellbeing.* Huia.

United Nations. (n.d.). *Global issues: Youth.* https://www.un.org/en/global-issues/youth

Vieselmeyer, J., Holguin, J., & Mezulis, A. (2017). The role of resilience and gratitude in posttraumatic stress and growth following a campus shooting. *Psychological Trauma: Theory, Research, Practice, and Policy, 9*(1), 62–69. https://doi.org/10.1037/tra0000149

Wade, R., Shea, J. A., Rubin, D., & Wood, J. (2014). Adverse childhood experiences of low-income urban youth. *Pediatrics, 134(*1). https://doi.org/10.1542/peds.2013-2475

World Federation of Occupational Therapy. (2025). *About occupational therapy.* https://wfot.org/about/about-occupational-therapy