

Ose Baba!

The individual and community benefits of a weekly drumming session for men seeking asylum in Doncaster, conceived in the wake of the Manvers Riots.



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When we can respect the unknowability of the other and still care for and with them, without translating ourselves into their terms, perhaps we will fare better at building political bridges. (Aruna D'Souza 'Imperfect Solidarities', 2024)



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Many years ago, I used to be a percussionist, but life and difficult circumstances took me away from my music and my friends. (Omar, Drumming Participant)

Background

There are currently 658 people seeking asylum living in Doncaster. Of this number 147 people are living in short term accommodation provided through local council's use of hotels, and the remainder are in longer term supported housing.

Over the last decade the number of individuals requiring support has increased, and accommodation for individuals has expanded from solely being in the city centre, into outlying villages and boroughs. The political climate has changed significantly with a shift away from the mainstream left, (Labour), to the populist right with Reform gaining overall majority on the council in 2025. A shift often attributed to locals fears and concerns about accommodating the asylum-seeking population, (Vintner, 2025). In 2024 a hotel accommodating 200 people seeking asylum in Manvers, Wath Upon Dearne, (12 miles from Doncaster), was stormed by rioters who attempted to set the building on fire, leading to the conviction of 100 Barnsley, Rotherham and Doncaster locals.

People seeking sanctuary are likely to be living with post-traumatic stress disorder, (PTSD), as a result of their experiences in their country of origin, and what they may have experienced during their journeys. In the UK people seeking asylum are at higher risk of living with poverty and financial insecurity. (People whose asylum claim has been approved, (Section 95 support) can apply to receive a £49.18 weekly support for essential items, those placed in accommodation where two daily meals are provided, receive £9.95). They are also more likely

to be experiencing unemployment, lack of adequate housing, social isolation, loneliness, prejudice, stigma, and discrimination, (including assault), all contributing to poor mental health outcomes. (Mental Health Foundation, 2024).

Doncaster's Health and Wellbeing Strategy calls for a more preventative approach to tackling health inequalities and individual wellness – one that addresses the social, economic and environmental factors that determine long-term wellbeing. Access to meaningful creative opportunities is one of these key determinants, recognising their ability to prevent illness, promote wellbeing, and support management and treatment of health conditions (WHO, 2019).

Cast is 'proud to be the theatre for the people of Doncaster and beyond!' (www.castindoncaster.com), and advocates for the power of theatre to inspire, connect, and enrich lives, believing the arts bring proven benefits – from reducing anti-social behaviour and boosting employability to developing transferable skills, improving wellbeing, and strengthening community. Cast's work includes communities facing significant barriers including disability and life limiting illness, past trauma, low income, social isolation, poor mental health and lack of family support, and they are recognised as a 'Theatre of Sanctuary'. A national designation awarded to arts organisations that foster a culture of welcome, safety and inclusion for refugees and asylum seekers.

As part of their ongoing commitment to include people seeking sanctuary, Cast work in partnership with Doncaster Conversation Club, (a small charitable incorporated organisation run by volunteers locally), and a local branch of Changing Lives, (a nationwide charity supporting people experiencing homelessness) <https://www.changing-lives.org.uk/>. Historically they have also delivered creative projects in collaboration with Migrant Action, City of Sanctuary and the Refugee Council.

Idea

The drumming group was born out of feedback and inspiration gathered from the lived experience of participants during previous engagement initiatives held at Cast, in the aftermath of the riots at Manvers in 2024.

An 'Ambassador Scheme', facilitated with Conversation Club and Changing Lives enabled

a large number of people seeking sanctuary to attend theatre performances at Cast for free. This increased communication between the community and theatre engagement staff. Feedback demonstrated particular enjoyment in musical and dance based performances and referred to both missing these activities in their home countries and the mental health benefits of taking part at the theatre.

The 'Welcome Mat' project hosted a quilt at the theatre as part of a national project delivered by Migration Matters. At an 'add-on' visual arts workshop provided as part of hosting the quilt, men seeking asylum volunteered stories of music and dancing connected to their own cultures. The workshop ended in spontaneous joyful performances of dancing and singing in different languages.

Alongside the men's desire for musical expression, staff from both the theatre and Changing Lives recognised the ability of music and dancing to bring connection, emotional processing and being present in the moment, without needing a singular familiar language- important in tackling some of the mental health concerns experienced by the men attending. (Mental Health Foundation, 2024).



Literature

Consulting the literature demonstrated a wealth of material published over the last 20 years supporting the physical, psychological and social benefits of group drumming, but sparse reference to use of drumming with migrant and refugee populations.

Studies have highlighted positive outcomes for people in later life, (Ihara et al., 2025; Dege & Kerkovius, 2018), people with mental ill-health, (Fancourt et al., 2015; Plastow et al., 2018; Ascenso et al., 2018; Perkins et al., 2016), people experiencing addiction, (Hill et al., 2012; Blackett et al., 2005; Winkelman, 2003), people at risk of offending, (Craddock et al., 2022), specific illnesses such as Parkinsons, (Yoon Irons et al., 2024) and HIV, (Rowe et al., 2023), and neurodiversity- particularly autism, (Friedman et al., 2023; Prisco et al., 2023).

Several studies evidence how drumming impacts positively on mental health using qualitative and quantitative methods to demonstrate what is happening in the brain and the body. Plastow et al found benefit for individuals experiencing anxiety and depression (2018), and Fancourt et al present evidence that cytokines in the body that can act as neuromodulators associated with depression significantly lower after repeated weekly sessions, (2026). The balance of the central nervous system is positively impacted, (Yasuda & Shiraish, 2023), and drumming has been found to activate altered states of consciousness through thalamocortical pathways that can be also characterize psychedelic experiences. (Aparicio-Terres et al., 2025).

Dual brain imaging has shown drumming to offer an effective contribution to treating social-emotional psychopathology- the intersection of emotional regulation and social interactions, (Rojiani et al., 2018). And Perkins et al believe drumming offers *'non verbal communication... connection with life through rhythm... a grounding experience that both generates and liberates energy... a space of connection... feelings of belonging, safety and care [and] new social interactions'* (2016).

Comeau et al. explain how drumming is a key part of many non-western indigenous cultures, essential for healing and community building and, with similar focus as Goudreau et al. evidence the holistic healing benefits and empowering properties of drumming in the aboriginal community (Comeau et al., 2025; Goudreau et al., 2008).

Vinsett et al modified a traditional Ngoma drumming ceremony, (native to Central and South Africa), and found benefits to North American patients', stress levels and mood through elements of altered consciousness and spirituality (Vinsett et al., 2015).

Examples of studies where African drumming is used specifically with refugee groups are surprisingly rare and focus on young people. Elswick et al. (2021), and Dhillon et al. (2019), both developed programmes for refugee youth, and found that drumming groups aided positive acculturation experiences for participants. Elswick's study adapted a trauma treatment programme, (adding African drumming), in order to make it more culturally relevant to the refugee youth participating. Aswell as impact on acculturation, results demonstrated significant reduction in post-traumatic stress (PTSD) symptoms for the young refugees who took part.



Valuing refugees' cultural knowledge and experience is an important part of trauma-based interventions, because it assists in recreating valued social roles and enables participants to maintain their cultural connections and identity (Goodkind et al., 2014 in Elswick et al. 2021)

Finally, Martin & Wood's research demonstrates that drumming is impactful on disadvantaged adolescent males PTSD symptoms, but not their female counterparts, suggesting it is an intervention offering greater benefit for men's mental health (Martin & Wood, 2017).

Hypothesis

Inspired by feedback from people with lived experience of forced migration, the Community Engagement Manager, (CEM), at Cast and the BAME Specialist Support Worker at Changing Lives proposed weekly drumming sessions for men seeking asylum. They hypothesised that holding these sessions at Cast would support the men's mental health, build community amongst participants, and aid in the men's acculturation into Doncaster.

Method

Cast recruited Ghanaian musician Kweku Sackey, now based in South Yorkshire, to deliver weekly one-hour drumming sessions at the theatre.

Men were recruited via Changing Lives and Conversation Club. Recognising difficulties men may have in being aware that sessions were taking place, (due to language barriers and impact of trauma on organisational capacity), and in affording transport to the sessions, Changing Lives incorporated support into the job description of a new role at their service.

The Outreach Migrant Health, Wellbeing & Engagement Navigator was recruited and tasked with meeting men at the hotels; providing taxi's to the sessions, being part of the drumming sessions, supporting the men and using the opportunity to build relationships that would continue outside of the sessions. Having a Changing Lives support member present in the sessions meant the short term one hour intervention was wrapped in the security of longer term support.

A six-month pilot was enabled by Common Ground Resilience Funding, (money from the Secretary of State for Housing, Communities & Local Government), distributed by City of Doncaster Council to fund activity to quickly build resilience against community tensions and strengthen cohesion.

A further six months was then funded by UKRI Creative Health Boards project, (a partnership project comprising Sheffield Hallam University, University of Sheffield & Doncaster HDRC working with cultural assets in Doncaster).

Impact

Individual

A modal average of 12 men attended sessions regularly, (sometimes up to 17 attended). And over the course of the 12 month period 49 different individuals took part (this number reflects the transient nature of the asylum-seeking population and people being moved from Doncaster).

In oral interviews, using google translate on mobile phones, the men described benefits to their mental health – feeling safe, calm, relaxed and free from worry temporarily, which gave longer term mental health benefit.

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The drumming sessions are really uplifting and calming at the same time. When I'm there, focused on the rhythm, nothing else matters and I'm able to forget my worries at that moment. It's been very helpful for my mental health, giving me a space to disconnect, relax, and feel present in the moment. (Participant)

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The drumming sessions is our safe space, provides peace and urges good human interaction and fosters multicultural understanding and empathy. It's been a joy to be a part of. (Participant)

The men describe the sessions as helping them to feel more positive about Doncaster and its people, and to feel part of a community with each other and with Doncaster more widely. Due to language barriers and financial circumstances, the men struggle to find opportunity to meet together socially with a shared focus that is not their problems. Drumming offers, for many, the only opportunity for constructive creative social activity in the week and brings the psychological benefit of a shared focus bigger than their individual parts.

Case Study: Omar

Omar arrived in the UK in 2024 having fled his home country of Iraq due to the injustice and persecution he experienced. Once part of a group of eight friends back home, he explains four of them are now scattered across Egypt, Germany, USA and the UK, and four are dead.

His mother and sister have been placed in Sweden and he has not seen them since leaving. His mother, 80, is currently facing deportation back to Iraq and this is obviously very worrying for him.

Omar arrived in Doncaster after nine days in London, then five months in Leeds. He was one of the men who played and sang at the Cast event, inspiring the inception of the drumming groups, and has attended the groups since they began 18 months ago. He now takes a key role in recruiting new participants and helping facilitate sessions.



‘Many years ago, I used to be a percussionist, but life and difficult circumstances took me away from my music and my friends.’

Omar explained that after the occupation of Iraq, and the rise of Islamic militia’s, playing and participating in music was forbidden and to be connected to music and culture was dangerous.

‘More than one of my friends who played music was killed, and senior musicians were killed and displaced. Actors too. In the name of religion.’

Arriving in Doncaster he was traumatized and deeply depressed:

‘Initially I didn’t leave the house. When I first arrived in Doncaster, during my first year, I was in a very difficult psychological state. I didn’t leave the house because I was separated from my family, and I stopped interacting with anyone.’

He credits the drumming with a key role in improving his mental health:

‘After I got to know Cast and the drum team, day by day, week by week, I started to improve and I began socializing and playing instruments.’

‘I forget everything, I forget all the problems. I forget all the persecutions or psychological problems that I am going through. I consider myself a different person. I go back to very beautiful days when we lived through music and concerts. This psychological treatment is 100% better than pills or doctors.’

He describes the positive impact it has had in his acculturation into his new home:

‘Honestly half my love for Doncaster is due to Cast and the people I have met at Cast. That’s why I have become attached to Doncaster and I don’t want to leave.’

‘Being part of this group feels like finding a piece of my soul that I had lost... These sessions are healing; they remind me that no matter where we start over, our rhythms stay within us. My deepest thanks to the organizers for this wonderful initiative and for giving me the chance to feel like a musician again.’

Omar Alsheikhle (Participant and Volunteer)

Community

Two years after the riots the men continue to experience racism on a weekly, if not daily basis. One example being when a taxi driver, booked by Cast to bring the men to the drumming group, verbally assaulted the men and wouldn't transport them. The presence of the Outreach Migrant Health, Wellbeing & Engagement Navigator, (OMHWEN), at the hotels, escorting the men, was important in this case in ensuring both safer travel for the men and in reporting the incident to the firm and the police.

Prior to Yoge being in post as the OMHWEN, men returning from the theatre in the evening had been attacked in a racially motivated incident in a local park. This contributed to understanding the need to escort the men to and from their premises

– particularly when dark – and has been part of partnership working with Changing Lives to deliver a wrap around service for the men enabling them to participate.

Opportunities to perform (not initially planned as part of the programme, but an organic development at the request of community festivals and creative platforms), have had a positive impact on local perceptions of people from other cultures and people seeking asylum. The group have performed in the theatre, supporting professional companies like Breakin' Convention (<https://www.breakinconvention.com/>), and at community events and festivals – e.g. Doncaster Pride and Migration Matters Sheffield.

Case Study: Breakin' Convention Performance

To celebrate the Breakin' Convention tour coming to Cast local street dance and break-dancing troupes were invited to perform in the theatre prior to their show. There was also a breakdance 'cypher', (lino square for spontaneous improvised dance for a gathered crowd) in the theatre foyer.

The drummers performed between dances by two local secondary schools. The audience consisted predominantly of the teenagers and their families. As the drummers began – singing in native language and drumming and moving in ways unfamiliar to the families- there was nervous laughter and many people looked shocked and awkward.

During the performance the audience became immersed in the beat and the music- clapping along and joining in. By the time the men walked off the stage the audience were whooping and clapping them all the way out of the door.

After the performance some of the men joined in the cypher, dancing with local break-dancing teachers and local youth.

The evening both reminded people where the beats and rhythms of current music trends originate from, and also provided opportunity – a safe place – for initial fearful reactions to change and develop into joyful sharing and enjoyment across cultures.

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What touches my heart the most is seeing refugees and local citizens blending together as one big family. In those moments, the music helps me release the anxiety and stress of daily life; it's a space where I can truly let go and find peace.
(Participant)

Building Diversity in the Workforce

In a primarily white creative health workforce in Doncaster, the project has enabled and nurtured new paid and voluntary positions increasing skill and diversity in delivery. Kweku Sackey the group facilitator is of Ghanaian heritage, Ajide Adeyemi holding the group when Kweku is away and leading on some performances, is Nigerian, and Omar Alsheikhle who now has a key volunteering role at the theatre, is Iraqi. Increasing diversity in the workforce is aligned with City of Doncaster Councils Equality Inclusion and Diversity objectives – particularly around Developing a Workforce Culture.

Conclusions

The drumming group established and delivered by Cast and Changing Lives is a strong example of good practice in creative health, evidenced in the way it meets the recommendations outlined in the Creative Health Quality Framework. A framework for excellence in creative health produced by the Creative Health and Wellbeing Alliance (CHWA), and funded by Arts Council England (ACE).

At a provider level it responds to key recommendations for creative health organisations and their partners, particularly:

- Involve people with lived experience in the development and delivery of the work.
- Find out about local health needs, priorities and inequalities and develop work responding to those needs.
- Coproduce work with creative practitioners from the outset.
- Invest time in building strong sustainable partnerships.

- Develop shared solutions to identified needs by pooling resources, sharing expertise and working together across sectors.
- Develop partnerships that will support the delivery of sustainable social impacts (CHWA, 2025).

And at a strategic level it offers opportunity for commissioners and funders to follow the guidance to:

- Target investment and policy around work informed by lived experience.
- Target investment and policy towards work that responds to clearly identified needs informed by local health priorities, and inequalities.
- Develop joined up approaches to policy and funding informed by wider health needs, priorities and inequalities.
- Support work that is based on established ideas and relationships (CHWA, 2025).

The group has delivered the potential outcomes hypothesised by the CEM at Cast and the BAME Specialist Worker at Changing Lives. It has a beneficial impact on the men's mental health, assists them in building community and supports their acculturation into Doncaster. A further unexpected benefit has been a positive impact on the wider community perception of people seeking asylum in Doncaster. An organic development in the project due to the men performing locally.

The group offers an incredibly cost-effective intervention requiring approximately £20 per man attending/£250 weekly, roughly £1,000 yearly cost per individual. The annual cost of PTSD treatment per individual in the UK has been calculated to be £14,780 (Montgomery-Marks et al., 2025).



Recommendations

Until now the group has survived moving from one small pot of funding to another and has not found more secure longer-term funding. The positive impact of drumming on the men's mental health could potentially reduce their need for mental health support, or amount of support, through the NHS and Voluntary Sector. The drumming group therefore represents an avenue of investment in keeping with the NHS 10 Year Health Plan targets of moving care into the community and prioritising prevention, and a good value investment opportunity.

There is a gap in the literature for evidence of the impact of African drumming on the mental health and acculturation of adult male refugees and migrants. The initial findings here could inform future research partnerships and publication for Cast and Changing Lives.

The literature that does exist, (Elswick et al., 2021; Dhillon et al., 2019; Martin & Wood, 2017), provides evidence of benefit of the intervention of African drumming being delivered to refugee children. Home Office statistics demonstrate there are currently 43 unaccompanied refugee children residing in Doncaster, and drumming could be an impactful and cost-effective weekly intervention for this community too. This is potentially a further creative health intervention/partnership for Cast to explore.

Bibliography

Aparicio-Terres, R., Lopez-Mochales, S., Diaz-Andreu, M., & Escera, C. (2025). The neurobiology of altered states of consciousness induced by drumming and other rhythmic sound patterns. *Annals of the New York Academy of Sciences*, 1550, 55-70. <https://doi.org/10.1111/nyas.15403>

Ascenso, S., Perkins, R., Atkins, L., Fancourt, D., & Williamson, A. (2018). Promoting well-being through group drumming with mental health service users and their carers. *International Journal of Qualitative Studies on Health and Well-being*, 13(1), 1484219. <https://doi.org/10.1080/17482631.2018.1484219>

Blackett, P. S., & Payne, H. L. (2005). Health Rhythms: A preliminary inquiry into group-drumming as experienced by participants on a structured day services programme for substance-misusers. *Drugs: Education, Prevention and Policy*, 12(6), 477-491. <https://doi.org/10.1080/09687630500342881>

Comeau, G. (2025). *Mental health research: The healing power of Indigenous drumming*. Open Access Government. <https://openaccessgovernment.org/article/mental-health-research-the-healing-power-of-indigenous-drumming/188768>

Craddock, L., Kells, M., Morgan, L., & Shah-Beckley, I. (2021). Drumming, singing and ceremony within a psychologically informed planned environment for women on the offender personality disorder pathway. *The Journal of Forensic Practice*, 24(2), 123-137. <https://psycnet.apa.org/doi/10.1108/JFP-05-2021-0026>

Culture, Health & Wellbeing Alliance. (n.d.). *Creative Health Quality Framework*. <https://www.culturehealthandwellbeing.org.uk/sites/default/files/Creative%20Health%20Quality%20Framework.pdf>

Degé, F., & Kerkovius, K. (2018). The effect of drumming on working memory in older adults. *Annals of the New York Academy of Sciences*, 1432, 242-250. <https://doi.org/10.1111/nyas.13685>

Dhillon, K. K., Centeio, E. E., & Dillon, S. (2020). Drumming and dancing: Creative movement for convention refugee youth in a physical activity space. *Sport, Education and Society*, 25(3), 318-331. <https://doi.org/10.1080/13573322.2019.1589444>

Elswick, S., Washington, G., Mangrum-Apple, H., Peterson, C., Barnes, E., Pirkey, P., & Watson, J. (2022). Trauma Healing Club: Utilizing culturally responsive processes in the implementation of an after-school group intervention to address trauma among African refugees. *Journal of Child & Adolescent Trauma*, 15(1), 155-166. <https://doi.org/10.1007/s40653-021-00387-5>

Fancourt, D., Perkins, R., Ascenso, S., Atkins, L., Kilfeather, S., Carvalho, L., Steptoe, A., & Williamson, A. (2016). Group drumming modulates cytokine response in mental health service users: A preliminary study. *Psychotherapy and Psychosomatics*, 85, 53-55. <https://doi.org/10.1159/000431257>

Faulkner, S., Wood, L., Ivery, P., & Donovan, R. (2012). It is not just music and rhythm: Evaluation of a drumming-based intervention to improve the social wellbeing of alienated youth. *Children Australia*, 37, 31-33. <https://doi.org/10.1017/cha.2012.5>

- Friedman, Z. L., Ochoa, J., Prisco, D., & Seruya, F. M. (2023). Connected rhythm: A scoping review of therapeutic drumming as an intervention for autistic individuals. *The Open Journal of Occupational Therapy*, 11(4), 1-17. <https://doi.org/10.15453/2168-6408.2133>
- Goudreau, G., Weber-Pillwax, C., Cote-Meek, S., Madill, H., & Wilson, S. (2008). Hand drumming: Health-promoting experiences of Aboriginal women from a northern Ontario urban community. *Journal de la Santé Autochtone*, 72-83. <https://doi.org/10.18357/ijih41200812317>
- Hars, M., Herrmann, F. R., Gold, G., Rizzoli, R., & Trombetti, A. (2014). Effect of music-based multitask training on cognition and mood in older adults. *Age and Ageing*, 43(2), 196-200. <https://doi.org/10.1093/ageing/aft163>
- Hays, T., & Minichiello, V. (2005). The meaning of music in the lives of older people: A qualitative study. *Psychology of Music*, 33(4), 437-451. <https://doi.org/10.1177/0305735605056160>
- Hill, J. C., Hains, B., & Ricketts, K. (2017). Drumming: An innovative alternative for drug addicted individuals. *Journal of Alcohol and Drug Education*, 61(2), 7-24. <https://remix.berklee.edu/mhi-citations/1341>
- Kokal, I., Engel, A., Kirschner, S., & Keysers, C. (2011). Synchronized drumming enhances activity in the caudate and facilitates prosocial commitment—If the rhythm comes easily. *PLoS ONE*, 6(11). <https://doi.org/10.1371/journal.pone.0027272>
- Martin, K. E., & Wood, L. J. (2017). Drumming to a new beat: A group therapeutic drumming and talking intervention to improve mental health and behaviour of disadvantaged adolescent boys. *Children Australia*, 42(4), 268-276. <https://doi.org/10.1017/cha.2017.40>
- Montgomery Marks, P., Bandyopadhyay, S., Belle Weisman, C., & Bose, T. (2025). Economic burden of PTSD in the UK: A systematic review and economic analysis. *BMJ Open*, 15(7). <https://doi.org/10.1136/bmjopen-2024-084394>
- Perkins, R., Ascenso, S., Atkins, L., Fancourt, D., & Williamson, A. (2016). Making music for mental health: How group drumming mediates recovery. *Psychology of Wellbeing*, 6(11). <https://doi.org/10.1186/s13612-016-0048-0>
- Plastow, N. A., Joubert, L., Chotoo, Y., Nowers, A., Greef, M., Strydom, T., Theron, M., & van Niekerk, E. (2018). The immediate effect of African drumming on the mental well-being of adults with mood disorders: An uncontrolled pretest–posttest pilot study. *American Journal of Occupational Therapy*, 72, 7205345010. <https://doi.org/10.5014/ajot.2018.021055>
- Rojiani, R., Zhang, X., Noah, A., & Hirsch, J. (2018). Communication of emotion via drumming: Dual-brain imaging with functional near infrared spectroscopy. *Social Cognitive and Affective Neuroscience*, 1047-1057. <https://doi.org/10.1093/scan/nsy076>
- Rowe, K., Ruiz Pozuelo, J., Nickless, A., Nkosi, A. D., dos Santos, A., Kahn, K., Tollman, S., Wagner, R. G., Scerif, G., & Stein, A. (2023). The adolescent HIV executive function and drumming (AHEAD) study: A feasibility trial of a group drumming intervention amongst adolescents with HIV. *AIDS Care*, 35(11), 1796-1814. <https://doi.org/10.1080/09540121.2023.2195607>
- Vinesett, A. L., Price, M., & Wilson, K. H. (2015). Drumming and well-being. *The Journal of Alternative and Complementary Medicine*, 21(8), 460-465. <https://doi.org/10.1089/acm.2014.0247>
- Vinter, R. (2025, April 19). ‘We need to get back to British’: Concern over immigration in Doncaster before local elections. *The Guardian*. <https://www.theguardian.com/politics/2025/apr/19/concern-over-immigration-doncaster-before-local-elections>
- Winkelman, M. (2003). Complementary therapy for addiction: “Drumming out drugs.” *American Journal of Public Health*, 93(4), 647-651. <https://doi.org/10.2105/AJPH.93.4.647>
- Yasuda, N., & Shiraishi, H. (2023). Effects of dynamic Japanese drumming performance on autonomic nervous system and immune function in a traditional performing arts group. *Journal of Science and Medicine in Sport*, 26(2), S115S116. <https://doi.org/10.1016/j.jsams.2023.08.148>
- Yoon Irons, J., Williams, A., Holland, J., & Jones, J. (2024). An exploration of people living with Parkinson’s experience of cardio-drumming: Parkinson’s Beats. *International Journal of Environmental Research and Public Health*, 21, 514. <https://doi.org/10.3390/ijerph21040514>