

Practicing Safe Trad: Why Existing Approaches to Playing-related Musculoskeletal Disorders May Not Help the Irish Traditional Music Community

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Playing-related musculoskeletal disorders (PRMDs) as they affect the Irish traditional music community is a topic which, to date, has received scant attention. The paper draws on data generated through series of four focus group interview studies conducted at the University of Ulster <2 locations? Limerick?> and involving 22 musicians. Specifically, this paper looks at the wider issue of identity within the Irish traditional music community and at how the complexities inherent in this have, perhaps, affected musicians in recognizing, relating to, and dealing with PRMDs. Whether or not the injuries affecting Irish traditional musicians are similar to or different from what other musicians experience, what this study shows is that the sense of self and discrete identity among the Irish traditional music community is so very strong that merely a "one size fits all" approach to addressing these issues is not likely to yield positive results. Health professionals therefore need to be sensitive to such factors when considering their management of PRMDs and to develop approaches along with the traditional music community that are cognisant of their identity as well as their needs. *Med Probl Perform Art* 2013; 28(4):181–187.

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While it may be a romanticized myth that the vast majority of Irish people are engaged with and enthralled by Irish traditional music, it is, however, fair to say that today the scene is thriving at both national and global levels and in diverse contexts as never before. It is, indeed, a "trans-national cultural form and a commodity consumed by vast audiences worldwide."¹ Irish traditional music encapsulates the traditional dance music, airs, and related repertoires of Ireland, is connected to the song traditions in both the Irish Gaelic and English languages, and overlaps (to varying degrees) with the dance tradition in its multiple formats. It is practiced by young and old, male and female, amateurs and professionals, in Ireland both north and south, throughout the diaspora, and by increasing numbers of individuals who have no other connection to Ireland. It may be experienced in a variety of contexts—in the home, through competitions, at concerts, in pub sessions, and via every type of media.²

Among the most significant developments in Irish traditional music since the 1920s has been its gradual introduction into third-level institutions,³ in academic or performance programmes alongside western art music, and, since the mid-1990s, as the focus of stand-alone degree programmes.⁴ The starting point for this study was, in fact, a third-level institution (University of Ulster) where an increasing number of students majoring in Irish traditional music performance appeared to be suffering from playing-related musculoskeletal disorders (PRMDs). This initiated a preliminary investigation into the lack of attention given to the health and well-being of Irish traditional musicians and, ultimately, raised questions about real or perceived barriers for Irish traditional musicians engaging with existing supports for PRMDs available to other musicians on the island of Ireland.

Whilst existing literature acknowledges that PRMDs are a problem for musicians,^{5–7} the focus for the most part has been on western art musicians. A small but significant body of research has been developing on nonclassical performers,^{8–14} which supports the notion that all musicians, irrespective of genre practiced, are susceptible to PRMDs.

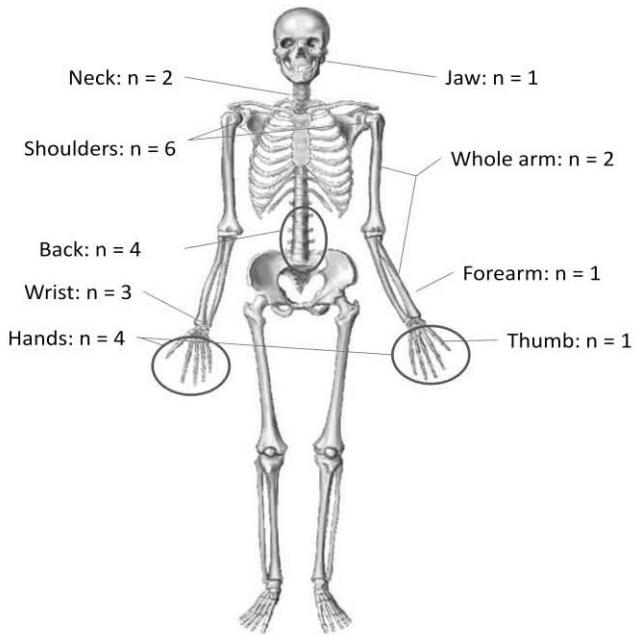


FIGURE 1. Sites of pain in Irish traditional musicians from focus group data.¹⁸ <[source of clipart](#)>

Recent research in the field of Irish traditional music suggests that traditional musicians do experience PRMDs, yet may experience pain and injury in a fashion different to their western art counterparts.¹⁵ Grant and Wilson (2006)¹⁶ suggested that there are, indeed, differences in terms of injuries affecting classical violinists compared with Irish traditional fiddle players in terms of the type of pain experienced and the attitudes surrounding possible preventative strategies. This is reiterated in more recent research: “folk musicians play in unique postural, social, environmental and cultural contexts and may experience pain and injury in a fashion different to their western art counterparts.”¹⁷

FOCUS GROUP STUDY

Four stand-alone focus group interviews were conducted during the period of May 2011 to June 2012 under the approval of the Ethics Committee of the University of Ulster. These took place at two locations, the University of Ulster in Derry/Londonderry and the University of Limerick, where Irish traditional music forms part or all of the focus of under- and post-graduate degree programmes. At the University of Ulster, Irish traditional music was introduced to the BMus curriculum on a limited basis in 2001 before a full-time lecturing post was established in 2007. Irish traditional music forms part of the core curriculum and students have the option of specialising in the subject as performers or researchers. This continues through the postgraduate degrees of MMus and PhD (including in performance practice) which are currently offered. The Irish World Music Academy (formerly the Irish World Music Centre) was established in 1994 under the Directorship of

Professor Mícheál Ó Súilleabháin, a former student of the late Seán Ó Riada, who played a significant role in the integration of Irish traditional music into a third-level institution (University College, Cork) in the 1960s. The Irish World Music Academy currently offers specialised degrees in Irish traditional music and dance performance and/or research at the master’s and PhD level. Traditional music is also catered for by other universities, institutes of technology, and teacher training colleges; in addition, formal education options are available at certificate and diploma levels through courses administered by the Further Education and Training Awards Council (FETAC).

Twenty-two musicians participated in the four focus groups, with 3 participants in the smallest group and 8 in the largest group. All participants played traditional Irish music and had been playing for between 8 and 40 years. Participants included students, music teachers, performers, and a university lecturer. Nine participants engaged with music in more than one way (performing, teaching, writing, music therapy) and many ($n = 11$) played more than one instrument.

The methodology and emergent themes from the analysis of the focus group data is presented in a related paper.¹⁸ <[AU: insert ref to survey paper](#)> The authors found that the participants (students, teachers, and performers) believe that PRMDs are an integral part of being an Irish traditional musician. Within this main theme, two other themes emerged: fear (resulting in the avoidance of accepting PRMDs, and distrust of health professionals and their perceived ability to treat PRMDs) and stresses that contribute to the development of PRMDs (such as the environment, posture, the instrument, the way music is taught, the manner in which music is played, and emotional / psychological issues). All the study participants either had, or knew someone who had, one or more musculoskeletal problems related to playing music (Fig. 1).

The current paper is concerned with the connection between all of these themes: i.e., identity, specifically the identity of Irish traditional musicians as a subgroup within the broad community of musicians. The focus is on how this sense of identity has played a role in shaping Irish traditional musicians response to PRMDs and how it might, ultimately, affect how these are addressed. In his publication, *The Irishness of Irish Music*, John O’Flynn¹⁹ presents a speculative set of associations regarding how “Irishness” in various types of domestic-produced music may (or may not) be perceived: essential Irishness, Irish sound, cultural Irishness, Irish soul, Irishness and inherent musicality, economic Irishness, and mythical Irishness. This highlights the complexities associated with this cultural identity, embracing as it does issues relating to nationality, language, religion, politics, authenticity, and value. Dowling²⁰ has postulated that, ultimately, musicians “find ways to enunciate, perform, and negotiate their own identities. In the process, they collectively define the boundaries of the field of Irish traditional music and construct and maintain various ways of representing that field to the world.”



FIGURE 2. Playing posture of classical violinist.



FIGURE 3. Playing posture of traditional Irish fiddle player.

PERCEPTIONS OF IDENTITY AMONG IRISH TRADITIONAL MUSICIANS

The participants in our focus groups clearly identified that they were “traditional” musicians coming from a “traditional” background; while it was not explicitly defined, “they simply KNEW what this was, even if they couldn’t articulate it.”¹ Data from the focus groups reveal that participants consistently referenced classical music as the marker against which they defined or described themselves, even in instances when, as individuals, they had little or no direct experience with this genre. O’Shea had previously referenced this predilection: “the concept of a uniquely Irish music was constructed around this identity and was brought into relief by defining it against ‘foreign’ and ‘European’ music. Musicians who are part of this mainstream have accepted this doctrine.”²¹ <AU: pls check ref nos.> Participants clearly distinguished between the two genres: “you want to mark to yourself and others ‘I don’t do classical’ or ‘I do folk’ and you show that in your performance...” (P15) and “if you played classical music, you would probably have a different mindset in how you play and what you do” (P2).

Traditional musicians believe that they are different from classical musicians in many ways, and this belief framed much of the discussion related to specific aspects of performance, such as posture, instrument hold, practice, environment, and transmission (i.e., the teaching and learning of traditional music).

In terms of posture, there was a consensus that classically trained musicians are taught about this aspect of performance practice and that posture training or correction was not within the traditional culture: “you hear that classical musicians, well, they take their posture and their performance very seriously” (P7) and “when I was learning the fiddle, I learned traditional first, but then I did do a bit of classical to help me with my posture and technique and

stuff” (P3). There was also a perception that classical musicians can play either seated or standing, whereas traditional players are almost always in a sitting position during a session (although some may stand in a concert setting), and the sitting posture is different between the two types of musicians.

Another identified difference relates to how the instrument is held. For example, a classical violinist will hold the violin between the chin and shoulder (with or without a shoulder rest), and the violin will be parallel to the ground (Fig. 2). In contrast, the traditional fiddle player will adopt a distinctly different posture where the fiddle is usually rested against the trunk anywhere from the neck to the front of the shoulder (Fig. 3). The player usually sits in a primarily flexed or slouched posture, and the fiddle is therefore pointing down toward the ground. There may also be differences in how the bow is held in the right hand and in the posture of the left wrist and hand, where the classical position is with a straight or flexed wrist (wrist down) and the traditional position is with the wrist held in extension (wrist up). In many cases, the classical approach was perceived as “correct” with the associated (incorrect) implication that classically trained musicians did not get PRMDs: “I think that the classical technique in holding the fiddle up, using things like the shoulder rest, all those aids that are there to kind of take away from the source of the strain” (P2) and “I did do a bit of classical to help me with my posture and technique and stuff...and I learnt I was holding the bow wrong so then I had to change that all that round” (P3).

The environment for traditional music versus classical music also had marked differences according to the focus group participants. Since the 1960s revival period, concert performances of traditional music have become increasingly common, following the “experiment” of Seán Ó Riada with the ensemble Ceoltóirí Chualainn, which was

the catalyst for bands such as the Chieftains and later Planxty, the Bothy Band, De Dannan, and Altan. There was agreement that classical musicians tended to prepare themselves more and give themselves time to warm-up prior to a performance. This contrasted with the traditional experience where there is typically little or no pre-performance preparation, thereby increasing the risk of developing symptoms whilst playing: "I find that [for] the traditional music gigs you're just told 'Right lads! Ready to go'... and you're going ... you don't even have time to tune the fiddle" (P8).

Again, comparison is made to classical musicians' practice: "Classical musicians have unions and they have breaks every ... 45 minutes or whatever it is, but we don't seem to follow any rules at all like that" (P2).

The social aspect of being a traditional musician is hugely important and there is "a feverish focus of constant music and learning."²² For most, the emphasis is purely on the joy of playing, the love of the music; other factors are irrelevant. Ciaran Carson, in *Last Night's Fun: A Book about Irish Traditional Music*, captures this essence:

We used to play in pubs, houses, buses, cars and aeroplanes; we played on roadside verges, backs of lorries and street corners; in backyards, gardens, haystacks, alleyways and entries; in chip-shop doorways and in Chinese restaurants; we played in schools and old folks' homes and hospitals; we played for visiting Ambassadors and Lord Mayors of small local boroughs; ... we played for dancers and non-dancers; we played on boats on seas on loughs; we played for the life-boat man in Orkney on his night-shift; we used to love to play in public toilets for their great acoustics.²³

Much of the music happens within the context of sessions, in environments that are not designed for performance, and so may contribute to poor posture and PRMDs. A phenomenon dating from the 1960s, the session involves any number of musicians participating in informal music-making, often in a pub setting.²⁴⁻²⁶ While for many there is certainly the sense of utopia around the session, it is critical that the session is not romanticised; there too can be a darker, more uncomfortable undercurrent where complex issues such as insider/outsider or experienced player/ beginner dichotomies are played out. Typically, the musicians arrange themselves in a loose circle formation, perhaps around a table. There is a hierarchy in terms of the positioning with the most respected, experienced musicians sitting at the heart of the session; the important criteria is that the players can hear and see each other in order to keep time, dictate tune changes, inform accompanists of chord changes, etc. Many of the participants may have their backs to the "audience," i.e., the other patrons of the establishment; while the music is very much for the participants, "the importance of good listeners positioned around the musicians cannot be overstated as they help to bring the best out of the musicians and make the session a success."²⁷

In terms of the music played, there is no set repertoire or formula—the music that happens is very much dictated by the personnel involved at any given time, their mood, their standard of playing, and the circumstances surrounding the session. There is, however, an unstated understanding of what will happen.²⁸ A natural leader or leaders of the session will emerge who will dictate the order, duration, and type of tune played. Dance tunes (typically reels) are the most common tune type played; tunes are played in groups or sets, each repeated a number of times.

In addition, there is a complex, nonverbalised set of etiquette surrounding the session to which participants are expected to adhere. While the publican may reserve a corner of the room for the session players, no thought whatsoever is given to health and safety measures. Musicians may prefer to be seated next to a fire or on a non-carpeted area of the pub; chairs without armrests may be requested (and may or may not be available); after that, there is no discussion about spatial arrangement. Seating may be on wooden benches, upholstered lounges, low barstools. If more participants than expected arrive to play, patrons nearby may be encouraged to offer their seats; otherwise, the musicians will perch on table ends, instrument cases, beer kegs, and whatever is available to allow them get as close as possible to the "inner circle" of the session. Those who end up on the outer perimeters will crouch over as much as is needed in order to hear the (unamplified) tunes being led from inside of the circle.

Once positioned, the session may last anything from 2 to 3 hours to considerably longer, perhaps 6 to 8 hours at a festival or on any occasion when all the elements are simply in place for a really "good tune." Participants may leave the session occasionally to visit the bar or bathroom; it is regarded as poor form to leave a good seat in a session unattended for long periods when someone else could have the chance to use it. Marathon sessions—of 4 hours upward—are popular among today's younger players; it is almost regarded as a badge of honour (or perhaps a rite of passage) at certain festivals and summer schools to play for such extended periods, often through much of the night. This represents a significant change in Irish traditional music practice. Prior to the 1960s, the music was, almost exclusively, associated with the dance; when dance was taken out of the equation (through the evolution of new performance contexts, such as the session, which not only foregrounded the music but actually eliminated the dance), the parameters for performance changed irrevocably. One outcome of this has been that musicians are now exposed to situations where they can become so caught up in the music for extended periods that they are, perhaps, more susceptible to performance-related injury than they were before. Compounded with the fact that alcohol consumption is typically part of the experience, the potential for encountering PRMDs in such situations is greatly increased.

There was a perception among the focus group participants that the way in which traditional music is taught (i.e., the transmission process) may contribute to PRMDs.

Irish traditional music is essentially an oral/aural tradition, playing is generally “by ear,” and teaching/learning of the music is not dependent on, but may incorporate, any system of written notation; at no time does written notation inform performance. While in the past, the music was passed from generation to generation informally—what Irish poet Seamus Heaney acknowledges as “The Given Note”²⁹—the formalisation of classes began with the Pipers’ Club in the 1800s and later with Comhaltas in the 1950s. Today, classes are available on a weekly basis, through such organisations or with private teachers; summer schools and festival workshops abound, online classes are available; and students may now (since the 1990s) follow grade exam syllabi offered (since 1997) by the London College of Music (now Thames Valley University) and Comhaltas (since 1998) to mark their progression.

The structure of lessons in terms of the content, the number of students, and the timetable of classes are different for classical and traditional students, according to participants of the focus groups. With traditional music, the initial imperative is to master a tune as soon as possible; preparatory work, such as learning about posture or developing a basic level of musical literacy, are not encouraged; the impetus is to get a tune “out” of the student as quickly as possible:

“I think people, especially in trad, they want to go away with their tune, or want to go away with having learnt something. Whereas in classical, you’re working on a piece, when you’re young, for weeks and you just perfect bits of it, so you can just spend ages on a bar or a phrase. We don’t really do that.” (P14)
“When you’re given an instrument, it’s just like ... just make a noise, and this is where the notes are, here you go—happy days—and you play that?.” (P1)

“I ... just went to the local music teacher, he showed you how to hold the bow and that was it. ‘Just hold the fiddle, hold the bow,’ ‘put that up there, there’s your bow, work away.” (P8)

Besides one week-long diploma offered by Comhaltas (*Teastas i dTeagasc Ceolta Tíre*) since 1980, no formal qualification exists for the teaching of traditional music. Thus, no regulations or standard teaching methodologies exist. Imitation is arguably the most common practice involved in the learning process, where the student effectively attempts to mirror their teacher’s actions and sound. Alluding to Hall’s theory of social synchrony,³⁰ Turino has referred to the “choreography of similar body positioning and motion” which leads to “comfort in congenial social interactions.”³¹

Given the informality of even the most formal teaching environments within Irish traditional music, this notion of synchrony may well be relevant in this instance. The teacher often sees him/herself as equipping the student with the basic tools, of “getting them started”; at a later stage in the student’s musical development (a number of years later, typically), the teacher-student relationship will dissolve, generally by mutual consent; at this point the student is deemed ready to go beyond merely learning to further explore the complexities of the tradition and, most

importantly, to craft their own voice within it. However, evidence suggests that the basic learning instilled by the teacher will, more often than not, continue to inform the development of the student throughout their musical life.³² For this reason, it would seem critical that awareness of PRMDs is heightened among those responsible for engaging with the transmission process at this primary level.

PERCEPTIONS OF PRMDS

Within the Irish traditional music community, a culture of silence and stoicism exists around the issue of PRMDs. Irish musicians are not unique in this, of course. There is a fear that acknowledging PRMDs may have negative consequences, such as having to stop playing or loss of employment,^{33–35} and so many musicians will ignore pain in order to keep playing, thus maintaining their identity and place as a musician in the community, reasserting normality, and reaffirming one’s sense of self.^{36–39} However, it seems the tide has gradually begun to turn on the awareness and acknowledgment of this issue. All of the participants in the focus groups had experience of, or knew of someone who had experience with, PRMDs; all acknowledged that they would play through the pain rather than deal with it:

“I think people will look for help only when they are really in such a state that they can’t play anymore. Most people will go into denial—at least, that is my experience—and will say ‘I am tough, I can play through this’ and then, of course, it gets worse. Finally, when they can’t do anything else, that is when they will go and seek help, when they have to either seek help or stop playing.” (P17)

However, perhaps the increase in levels of PRMDs and the awareness that a recognised condition does exist, perhaps the profiling of the issue by some leading musicians in the community in recent years, perhaps the increase in the numbers striving to make a living as professional musicians, or perhaps a not-yet-articulated sense of responsibility by those promoting traditional music performance in third-level institutions have all contributed to some fledgling conversations around the subject and the shift in stigma associated with it. While this is certainly progress and is to be encouraged, it is important to note that little or no practical interventions have yet materialised to either respond to or prevent PRMDs within the Irish traditional music community.

Certainly other musicians in Ireland have been dealing with PRMDs in a more public way for longer, and organisations such as the British Association of Performing Arts Medicine (BAPAM), with established centres in Ireland, have made a very important contribution to classically trained musicians across the island. While BAPAM, in theory, offers services to the Irish traditional music community, the actual uptake on this has been minimal; in reality, it has not successfully infiltrated the traditional music community to any significant level. The newly

formed body, Performing Arts Medicine Ireland, which includes traditional musicians on its executive, will hopefully provide a much-needed bridge between traditional musicians and the trained community of professionals who may be able to support and help them.

The Irish music community, with its own unique identity and values, does not easily or readily embrace change or outside intervention, even when, to the outside world, it would appear to be in the best interest of the musicians involved. Case in point: a number of years ago, the Arts Council of Ireland/*An Chomhairle Ealaón*, in response to a successful government lobbying campaign by the traditional music community, was challenged to find new ways in which to engage with that community in order to encourage them toward funding paths, none of which the traditional music community felt was accessible to them. From a starting point of general distrust, disenchantment, and scepticism on the part of the traditional musicians, the Arts Council, through strategic recruitment and the drafting and implementing of a policy that promised to “engage, enable, and empower” the traditional arts community, succeeded in making huge strides toward opening a new conversation. By reimagining and reconstructing previous *modus operandi* and engaging with the traditional music community in ways that were sensitive to and respectful of their experiences and expectations, the traditional music community felt that the Arts Council finally “got it” and responded positively and enthusiastically.⁴⁰ Ultimately, the message here is that even though (often fairly significant) funding was at stake, the traditional music community had no interest in pursuing it while they felt misunderstood and disrespected. Only when this culture was interrogated, reviewed, and reformed was progress made, to the good, I would suggest, of both parties involved.

When it comes to the issue of PRMDs, it seems that a similar situation may well exist. Whether or not the injuries affecting Irish traditional musicians are similar to or different from what other musicians experience, what this study has shown is that the sense of self and discrete identity among the Irish traditional music community is so very strong that merely a “one size fits all” approach to addressing these issues is not going to yield positive results. Health professionals will need to be sensitive to these factors when considering their management of PRMDs and to develop approaches *along with* the traditional music community that are cognisant of their identity as well as their needs.

REFERENCES

- O’Shea H: *The Making of Irish Traditional Music*. Cork, Cork University Press, 2008.
- Carolan N: What is Irish Traditional Music? Dublin, Irish Traditional Music Archive, 1987.
- McCarthy M: *Passing it On: The Transmission of Music in Irish Culture*. Cork, Cork University Press, 1999.
- Valley F (ed): *The Companion to Irish Traditional Music*. Cork, Cork University Press, 2011.
- Wu SJ: Occupational risk factors for musculoskeletal disorders in musicians: a systematic review. *Med Probl Perform Art* 2007; 22(2):43–51.
- Halleland HB, Harris A, Sornes S, et al: Subjective health complaints, stress, and coping in orchestra musicians. *Med Probl Perform Art* 2009; 24(2):58–62.
- Paarup HM, Baelum J, Holm JW, et al: Prevalence and consequences of musculoskeletal symptoms in symphony orchestra musicians vary by gender: a cross-sectional study. *BMC Musculoskel Disord* 2011; 12(1):223.
- Raeburn SD: Occupational stress and coping in a sample of professional rock musicians. *Med Probl Perform Art* 1987; 12(2):41–48.
- Newmark J, Salmom P: Playing-related complaints in nonclassical instrumentalists: a pilot questionnaire survey. *Med Probl Perform Art* 1990; 5(3):106–108.
- Barr D, Potter P, Van Dusen L, Burke J: Prevalence of medical problems associated with playing the Great Highland bagpipe: survey results and comparisons to other musicians. *Med Probl Perform Art* 2005; 20(4):163.
- Hoffman JS, Cunningham DR, Lorenz DJ: Auditory thresholds and factors contributing to hearing loss in a large sample of percussionists. *Med Probl Perform Art* 2006; 21(2):47.
- Curk AE, Cunningham DR: A profile of percussionists’ behaviors and attitudes toward hearing. *Med Probl Perform Art* 2006; 21(2):59.
- Buckley T, Manchester R: Overuse injuries in non-classical recreational instrumentalists. *Med Probl Perform Art* 2006; 21(2):80.
- Brodsky M: Blues musicians’ access to health care. *Med Probl Perform Art* 1995; 10(1):18.
- O’Connor G, McNamara B: A review of neurological abnormalities associated with the practise of music. *Irish Med J* 2009; 102(5):156–157.
- Grant CS, Wilson IM: Playing-related musculoskeletal disorders in student violinists: a focus group pilot study. Presented at the CPS Conference, 2006. <AU: pls give conf title, location and date>
- Dunne B, Pettigrew J: ‘It’s not like I can just stop’: the lived experience of pain in Irish traditional fiddlers [summary of MA thesis]. *Spéis Journal of The International Council for Traditional Music, Ireland* 2011;(3):12. Available at www.ictm.ie; accessed on Nov 20, 2012.
- Wilson IM, Doherty L, McKeown L: Perceptions of playing-related musculoskeletal disorders in Irish traditional musicians: a focus group study. *Work* 2013, In press. <AU: pls update in press ref>
- O’Flynn J: *The Irishness of Irish Music*. United Kingdom, Ashgate, 2009. <AU: pls give city of publisher>
- Dowling M: Rambling in the field of modern identity: some speculations on Irish traditional music. *Radharc* 2007; 5(5):56–70. 2006; 5 (7): 107–134. <AU: pls confirm citation data>
- Valley F: The Apollos of Shamrockery: traditional music in the modern age. In Stokes M, Bohlman PV (eds): *Celtic Modern: Music at the Global Fringe*. Scarecrow Press, 2003. <AU: pls give city of publisher>
O’Shea H: *The Making of Irish Traditional Music*. Cork, Cork University Press, 2008. <DUPL REF 1>
- Valley F: Festivals for all folks: There’s more to English folk festivals than Morris dancing, and Irish musicians enjoy a high profile on the circuit. *The Irish Times* 1994, Jul 7.
- Carson C: *Last Night’s Fun: A Book about Irish Traditional Music*. London, Jonathon Cape, 1996.
- Hamilton SC: The session: a socio-musical phenomenon in Irish music [MA thesis]. Belfast, Queen’s University, 1978.
- Fairbairn H: Group playing in traditional Irish music: interaction and heterophony in the session [PhD thesis]. Cambridge, Corpus Christi College, 1993.
- Foy B: *Field Guide to the Irish Music Session*. Roberts Rinehart Publishers, 1999. <AU: pls give city of publisher>

27. Lennon C: *Musical Memories*. Dublin, Worldmusic Publications, 1993.
28. ÓhAllmhuráin G: *A Pocket History of Irish Traditional Music*. Dublin, The O'Brien Press, 1998.
29. Heaney S: *Opened Ground, Poems 1966–1996*. London, Faber and Faber, 1998.
30. Hall E: *Beyond Culture*. New York, Anchor, 1977.
31. Turino T: *Music as Social Life—The Politics of Participation*. Chicago, Univ of Chicago Press, 2008.
32. Doherty L: *Dinny McLaughlin, From Barefoot Days: A Life of Music, Song and Dance in Inishowen*. Donegal, Druid Publications, 2005.
33. Alford AA, Szanto A: Orpheus wounded: the experience of pain in the professional worlds of the piano. *Theory Soc* 1996; 25(1):1–44.
34. Cazden J: Music keeps us healthy, and vice versa. *Folkworks* 2002. <AU: pls give journal vol, page nos.>
35. Heinan M: A review of the unique injuries sustained by musicians. *J Am Acad Phys Assist* 2008; 21(4):45–50.
36. Zaza C, Charles C, Muszynski A: The meaning of playing-related musculoskeletal disorders to classical musicians. *Soc Sci Med* 1998; 47(12):2013–2023.
37. Park A, Guptill C, Sumsion T: Why music majors pursue music despite the risk of playing-related injuries. *Med Probl Perform Art* 2007; 22(3):89–96.
38. Neaton M, Giebenhain J, Schmalenberger S, et al: Pain and the performing musician: the interplay of culture, cancer and identity. In: Fernandez J (ed): *Making Sense of Pain: Critical and Interdisciplinary Perspectives*. Oxford, Inter-Disciplinary Press, 2010: pp185–194.
39. Guptill CA: The lived experience of professional musicians with playing-related injuries: a phenomenological inquiry. *Med Probl Perform Art* 2011; 26(2):84–95.
40. Arts Council Annual Reports. Available from http://www.artscouncil.ie/en/publications/annual_reports.aspx; accessed November 20th, 2012.