MASTERCLASS

Conflict in Practice-based Settings: Nature, Resolution and Education

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Abstract

In this masterclass we review the evidence regarding the nature of conflict within healthcare practice settings, discuss ways of preventing and resolving conflict, and consider how practice-based education, focusing on conflict and negotiation, may help learners achieve positive outcomes. Conflict is a serious state, which is often prolonged and arises from incompatibility or divergent interests and values. However, conflict may also be used as a productive force for change. Conflict has been included as a core competence for healthcare professionals in a number of competency frameworks because of the recognition that inter- and intra-professional conflict affect patient safety and outcomes, as well as having detrimental effects on staff morale, and on physical and mental health. We discuss how conflict may arise from several triggers – personal, professional and organisational. In particular, disparities in values may lead to conflict, while good communication is fundamental to optimal practice. The history of the development of the health professions includes many examples of conflict between professional groups. A healthy practice environment should encourage constructive conflict management, recognising that conflict will always arise. Early experiences of working and learning together represent important learning opportunities for students, enabling the development and practice of teamwork skills, as well as helping them to recognise and understand the different values, perspectives, roles and responsibilities of team members. Learning opportunities based on real-life scenarios and patient experiences provide a focus common to all professional groups, allowing students the opportunity to explore their differences and similarities. The key messages are: conflict occurs frequently in practice-based settings both inter- and intra-professionally, and learners need to be able to recognise and deal with conflict, including through negotiation.

Keywords: conflict, negotiation, teamwork, collaborative practice, education, inter-professional

Introduction

Conflict has a number of meanings. Commonly, we consider conflict as violence and akin to war, a negative experience with poor outcomes. The dictionary definitions stress that conflict is a serious state, which is often prolonged and arises from incompatibility or

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divergent interests and values. Conflict brings disharmony. In health care, conflict has been described as occurring when 'behaviour is intended to obstruct the achievement of some other person's goals' (NHS Institution for Innovation and Improvement 2008, np). However, conflict is not entirely negative: it may also be transformational in a positive way and can be used as a productive force for change.

The importance of managing conflict in the healthcare workplace has been highlighted by its designation and inclusion as a core competence of healthcare professionals in a number of competency frameworks (see examples below).

A National Interprofessional Competency Framework – (CIHC 2010)

Interprofessional conflict resolution is the sixth of six competencies: learners/practitioners actively engage self and others, including the patient/client/ family, in dealing effectively with interprofessional conflict. Specific competencies include:

- recognising the potential for conflict and taking constructive steps to address it.
- working effectively to address and resolve disagreements, including analysing the causes of conflict and working to reach an acceptable solution.

The Interprofessional Education Collaborative Panel (IPEC 2011)

Under-communication: Use respectful language appropriate for a given difficult situation, crucial conversation, or interprofessional conflict; contributes to conflict resolution (p23).

Conflicts can occur inter- and intra-professionally, and between individuals or within teams. They may be related to healthcare work or be precipitated by personal attitudes and behaviour unrelated to healthcare delivery. However, whatever the cause of the conflict, it is likely to impact on patient care if unresolved and prolonged, affecting team processes and performance. Inter- and intra-professional conflict affect patient safety and outcomes, as well as having detrimental effects on staff morale, and on physical and mental health.

This masterclass aims to:

- review the literature as to the nature and manifestations of conflict within practice settings;
- explore how conflict arises within inter-professional teams;
- provide evidence-guided strategies for the prevention, management and resolution of conflict, including discussing values;
- discuss educational interventions to meet learning outcomes in the area of conflict and negotiation.

The nature of conflict in the practice setting

There are many reasons why conflict occurs in the clinical workplace:

- poor and miscommunication
- role ambiguity in relation to one's own role and understanding of others' roles and responsibilities
- hierarchies and power gradients within the clinical setting
- leadership or the lack of
- differences in personal and professional values in oneself and with others
- differences in goals
- inequality, or perception of inequity, in relation to remuneration and workload

- lack of trust
- · lack of confidence in others
- lack of respect shown to colleagues.

Conflict may arise from several triggers – personal, professional and organisational. While practice-related factors such as professional identity, stereotyping, in- and out-group behaviour (Tajfel 1979) and boundary crossing may lead to conflict, we must not forget that human beings, while social animals, are diverse in many ways. Some people dislike and/or are unable to work with each other for complex and multiple reasons.

At a basic level, individuals and team members fall out. This falling out may be caused by a conflict such as a disagreement about client management, workload or time keeping and may subsequently lead to conflict which affects client care. Learners coming into practice settings may already have interpersonal conflicts with their peers arising from previous encounters, or these may develop in the high-pressured environment of the clinical setting.

Jehn (1995) has categorised team conflict as relating to task, relationship (affective) and/or process. Thus, team members may disagree about a specific **task** or goal. In practice-based settings, for example, there may be conflict in relation to a client's management plan, whether they are fit enough to be discharged or have access to the level of support they require in the community. Such conflict is usually resolved through discussion and negotiation, ideally in collaboration with the client and their carers, as appropriate. **Affective** conflict is due to relationship issues and personal disagreements leading to negative emotions such as anger. Such conflict may also arise from matters totally unrelated to work-based activities. People 'fall out' over the way they dress, how they speak, their values, biases and prejudices etc. **Process** conflict arises from disagreement about how the team works together, for example: how often it meets; how decisions are made; how client-centred it is, the style of leadership and so on. In addition to these three, in health care, workload and remuneration inequalities (or perceived inequity) can lead to difficulties. Workload is also a potential trigger for conflict between learners in groups or teams, especially if related to a team-based assessment or assignment.

Manifestations of conflict in practice-based settings

Conflict can result from emotional factors and result in an emotionally charged workplace that affects others not directly involved in the initial conflict. Clinical practice settings are stressful places for many reasons, particularly for learners as they grapple with new rules and roles, jargon, professional socialisation, death and dying, pain and suffering, and increasing responsibility. Clinical work requires a huge amount of emotional labour, one definition of which is 'the management of emotions and emotional expression in order to conform with organisational requirements and expectations' (Van Dijk & Brown 2006, p101, drawing on a number of sources). Practitioners learn to hide their emotions in order to cope with their work; learners are less able to do this and are commonly less resilient in the face of stress and challenge. Emotions are of short duration but high intensity, while moods last longer and are of low intensity (Fridja, 1986). Negative moods have been found to be a significant predictor of interpersonal conflict within teams with subsequent reduction of team performance (Jordan et al. 2006), which may manifest in students as an inability to learn. Just as team members need to be aware of the changing moods of their colleagues and recognise more intense emotions leading to poor performance, supervisors need to monitor learners' affect and stress levels in the practice setting and be prepared to step in if necessary.

Of course, not all emotions are displayed and some people are indeed very skilled at hiding a negative mood. The longer team members work together, the more likely it is that they

will notice changes in each other's moods. If they are unable to ameliorate their colleague's mood, this is likely to affect the social cohesion of the team, with negativity leading to lack of trust and on to dysfunction (Jordan *et al.* 2006). While members may wish to be supportive, a poorly functioning team member can cause increased workloads for others, resulting in conflict and diminishing empathy.

Inter-professional conflicts

Here we use 'inter-professional' with a hyphen to discuss interactions between health professionals rather than 'interprofessional', a term that has come to have more positive connotations in relation to collaborative practice. The history of the development of the health professions includes many examples of conflicts between professional groups. As professions consolidated their social positions and new professions arose to challenge these, disputes occurred due to boundary infringements. One profession was seen to be encroaching on another's turf. We have seen this recently, for example, in the debates about diagnosis and prescribing, tasks traditionally undertaken solely by medical doctors.

Abbott (1988) considers that such jurisdictional conflicts are key factors in the defining of a profession's scope and role. Historically professions have jostled for power and been jealous of their professional knowledge and position. While nurses and doctors, for example, work closely together in most healthcare settings, literature and the media often portray the two professions as being in opposition to each other. A recent review of the historical social positioning of nursing and medicine suggests that the relationship has been, and still is, perceived as hierarchical, with nurses being inferior to doctors (Price *et al.* 2014). The authors recommend that health professional curricula include collaboration and conflict management to overcome such historical barriers (Price *et al.* 2014). In the contemporary healthcare setting differences in power and status still cause difficulties for optimal collaborative practice (Bainbridge & Purkis 2011), further complicated if team members have to report to different managers along professional lines.

Preventing and resolving conflict through collaborative practice and negotiation

While modern health care in the 21st century is predominantly a team-based activity, the majority of healthcare professionals interact with colleagues who are not part of their defined and co-located team. Professionals refer patients and clients to other individuals, teams and institutions. They work in looser collaborations and networks (Reeves *et al.* 2010) across the health service as well as social care and other agencies. Boon *et al.* (2004) recognised seven models of team-based healthcare delivery: consultative, collaborative, coordinated, multidisciplinary, interdisciplinary and integrative. Within a team with a fairly fixed membership, over time individuals learn to understand and trust one another. When conflicts arise, as they always do, their history of working together, sharing goals and values, building trust, is a foundation on which to negotiate a resolution. Indeed, studies have shown that successful conflict management enhances team cohesion and thus has a positive effect (Tekleab *et al.* 2009). The process needs to be handled carefully with all members having the right to contribute their ideas and concerns so that a consensus is reached on a plan of action.

For the pseudo team (Dawson & West 2007), with its fluctuating membership, its lack of regular meetings and its geographic spread, trust is more difficult to achieve and thus conflict is more difficult to prevent and resolve. A professional may be a member of several teams and collaborations at the same time, causing personal conflicts as she/he tries to resolve competing demands.

Coyle *et al.* (2011) compared research studies into team behaviour and concluded that core teams are problem-solving teams, which meet regularly and have a flat leadership structure and shared decision-making approach. Such core teams have a very small membership of perhaps only three professionals and may be formal or informal. They often form in response to a complex practice setting and members are able to support each other to control the environment, reducing the frequency of conflict (Jones 2005, cited in Coyle *et al.* 2011).

One dictionary definition of collaboration is: 'working with the enemy'. Occasionally, while listening to health professionals discuss their colleagues, one might suppose that there was indeed some enmity between the different professions. Some of this discourse may stem from frequently inappropriate black humour that some health professions employ to de-stress. However, it may also be symptomatic of the conflicts occurring in practice environments. The sociologist, Allport (1979) hypothesised that interactions between members of conflicting groups may reduce prejudice and hostility. However, he suggested that this is only likely to occur if the groups have similar status and there is no differential power gradient. In practice, there is, of course, a professional hierarchy, which manifests in different ways. It is often ignored but may engender subtle behaviour patterns which students assimilate from their role models and learn to accept as the norm.

A healthy practice environment should encourage constructive conflict management, recognising that conflict will always arise. One way of classifying interpersonal conflict-handling behaviour is the basis of the Thomas-Kilmann conflict mode instrument (TKI), developed in the 1970s and based on a theoretical model of management. Thomas & Kilmann (1974) identified five conflict-handling modes: competing, collaborating, compromising, accommodating and avoiding. The modes are further described along two dimensions: assertiveness (the extent to which an individual tries to satisfy their own concerns) and cooperativeness (the extent to which an individual tries to satisfy the concerns of others):

- competing: assertive and not cooperative
- collaborating: assertive and cooperative
- compromising: between both the above dimensions
- accommodating: cooperative and not assertive
- avoiding: neither assertive nor cooperative.

While rarely used as a complete instrument, the modes may constitute a useful basis for discussion in training sessions focusing on conflict, negotiation and resolution.

Values and their relation to conflict

Disparities in values may lead to conflict. Values are 'the unique preferences, concerns and expectations each patient brings to a clinical encounter and which must be integrated into clinical decisions if they are to serve the patient' (Thornton 2006, p2). When working collaboratively it is important to understand one's colleagues' values. Yet there may be a mismatch between what one health profession defines as its own values and what other professions perceive are its values in practice. For example, a study of Australian physiotherapists (PT) and occupational therapists (OT) showed that each profession could only identify a small proportion of the professional values defined by the other. The authors found that a core goal of physiotherapy, 'improving patients' quality of life', was deemed essential by the PTs involved in their Delphi study but was not mentioned by OT participants. For OTs, enabling patients to achieve 'occupational performance' is a key value, but was not recognised by the PTs (Aguilar *et al.* 2014). To illustrate how value blindness may affect teamwork, Aguilar and colleagues give an example of a patient

waiting to be discharged home from hospital. The PT feels the patient is ready once she has achieved an optimal level of motor function of the injured limb. The OT, however, feels the patient should be able to live independently and perform her usual occupation. This clash of values may lead to conflict between the two professionals (Aguilar *et al.* 2014).

Personal and professional values and beliefs may cut across professional groupings. For example, not all midwives are comfortable with home births: within a particular clinical setting there may be a number of midwives and family doctors who support home births and a number who do not. The value is not related to the profession itself but to the individual professional's experience and other, perhaps personal, factors.

How often do professionals working together share their values? Mostly values are left unspoken until conflicts arise. Teams need to find time to discuss their own values as well those of the members within it (Thistlethwaite 2012). New team members need to be able to share in this collective knowledge and be oriented into team processes.

Practice-based education in relation to conflict and negotiation

Contemporary health professional curricula include multiple activities and interventions to enhance the development of communication skills. While such training primarily focuses on patients/client-professional interaction, teamwork skills are now also becoming expected core competencies. However, there is usually less curricular time devoted to skill development for interprofessional communication. 'Communication phenomena are surface manifestations of complex configurations of deeply felt beliefs, values and attitudes' (Brown & Starkey 1994, p808). Therefore, students do need to be given time and guidance to discuss their beliefs, values and attitudes and to consider how these may affect practice or change as they develop their professional identities.

Developing professional identities is key to 'belonging' (Burford 2012), and may be a higher priority for students as they struggle to become part of the 'in group' in their chosen profession. As students look for role models to help in this process, inadvertently (or, in some cases, intentionally) existing hierarchies, stereotypes or even anxieties about role erosion within and between professional groups can be reinforced. Once established, changing negative student attitudes may be difficult (Horsburgh *et al.* 2001).

Early exposure to working and learning together creates important learning opportunities for students that enable the development and practice of teamwork skills, as well as helping students recognise and understand different values, perspectives, roles and responsibilities of team members. Learning to work collaboratively within health and social care settings requires expert facilitation, a safe working environment to encourage trust between participants (Cowie & Rudduck 1990, Harney *et al.* 2012), adequate and appropriate preparation of students in terms of knowledge and skills and/or access to support and expertise from their own professional group (Jackson & Bluteau 2009).

With changing demographics, and as calls for collaborative team working increase, there is an increasing urgency to ensure that students are exposed to and prepared for collaborative team working. Helping students to recognise that no single profession has all the answers is crucial to improving the quality of patient care and safety. Learning to trust and respect other colleagues' contributions is essential for effective collaboration. To achieve this, students need to participate and work in interprofessional groups. Reeves *et al.* (2002) identified that medical students were less likely to participate in team activities than any of the other health and social care professionals. This may be a reflection of the need for medical students to be able to make a differential diagnosis, to take responsibility for their patient's care even when referring them to other professionals (GMC 2013). Providing opportunities whereby students grasp the importance of considering different points of view, understanding

different roles, valuing and trusting the expertise of different professionals is fundamental to collaborative working. Developing trust in colleagues can be both daunting and frightening but, once such trust has been established, teams appear to experience higher levels of consensus as well as increased levels of knowledge sharing and understanding, which are frequently translated into practice (Mayer *et al.* 1995). Key elements of enabling collaborative learning in groups involve the creation of activities that ensure individual accountability and necessitate positive interdependences among group participants (Johnson & Johnson 1994, Slavin 1995).

Most health professional students rarely stay in one clinical setting for long. Practice placements range from a few days to several weeks, though most are less than eight weeks. Lack of continuity in relation to facilitation and mentoring means that learners are at risk of taking their emotional baggage unrecognised with them, until their behaviour becomes such that it creates conflict around them. The move in some universities and settings to longitudinal integrated placements, in which learners spend up to one year in one location, allows better continuity and, indeed, such placements enable students to be integrated into teams (Thistlethwaite *et al.* 2013).

Inter- and intra-personal conflicts during practice-based education

The nature of the professions and relationships between professionals has been studied extensively across a number of disciplines such as sociology, psychology and philosophy. From a sociological perspective, a profession guards its knowledge, position and autonomy jealously (Freidson 1970). Reeves (2011) argues that the nature of the nurse–doctor relationship is more complicated than it may appear in practice. For example, students may observe that nurses are dominated by physicians, who are more senior in the clinical hierarchy. However, in practice, nurses may be guiding the doctors' decisions through covert processes. The subtleties of these relationships are difficult for students to unravel without the opportunity to discuss their impressions and concerns about clinical practice with members of different professions.

Professional socialisation is the process whereby an individual becomes familiar with and adopts the culture of their chosen profession (Page 2005). The individual is recognised as a doctor, nurse, physiotherapist and so on by virtue of their training, values, competencies and role. Extrapolating from this, social identity theory (SIT), as introduced by Tajfel & Turner (1979), hypothesises that many people define themselves through their membership of groups, where a group may be a profession. There is pressure 'to evaluate one's own group positively through in-group/out-group comparisons', which 'lead[s] social groups to attempt to differentiate themselves from each other (Tajfel & Turner 1979, p41). Turner (1982) used the terms in-group and out-group to distinguish between the social groups we most identify with or potentially have suspicions and bias against respectively. Stereotyping of out-group members and unfavourable comparisons of their attributes with our in-group help us establish our sense of self. Obviously, we develop our stereotyping and attitudes through learning from others: from role models, parents, teachers, peers, the media etc. As teachers and practice-based supervisors we influence our students through our behaviour and how we interact with other professionals. In order for learners to feel part of the same in-group as their tutors, to feel wanted and safe, they realise they have to demonstrate similar believes and values to their tutors, even if such beliefs and values are at variance with their personal beliefs and values. This may lead to intrapersonal conflict.

If students then move groups to another clinical attachment, their beliefs and values may not resonate with their new community, even if its members are from the same professional group. Students then have to choose whether to change their beliefs and values to fit in, to mimic those of the group while retaining their own, resulting in confusion and unease, or to leave the group.

Learning theories as applied to educating about conflict

According to structuralist theories of development, cognitive conflicts experienced in social interaction may trigger social cognitive development (Mischo 2005). Such conflicts appear to be especially effective in encouraging reflection and learning when they occur between 'peers or among heterogeneous social cognitive levels' (Mischo 2005, p3). Skilful facilitation is a key aspect of managing conflict, allowing students to debate and resolve potential triggers of conflict within the practice setting or between professional groups. However, it may be that the tasks or instructions given to students by facilitators inadvertently encourage students to avoid conflict. Clouder *et al.* (2011), exploring 'agreement' in the context of online interprofessional discussion among undergraduate health and social care professionals, found that students may avoid disagreement in part through the construction of group ground rules and by learning outcomes of valuing other professional roles and 'fostering mutual respect' through discussion. Thus, asking a student to 'post a considered response' to another colleague's contribution might direct them away from disagreement. Inadvertently, then, students are not being given the opportunity to explore and develop skills in managing conflict, although these are necessary for effective collaborative working.

Ideally group activities need to be perceived by students as challenging but students also need to feel that they have the necessary skills and knowledge to partake in such activities. When students are presented with a challenge for which they do not possess appropriate skills or factual knowledge, they become anxious; students presented with a low challenge, i.e. below their current skill level, become bored, whilst low challenge and low skill result in apathy. Frenck et al. (2010) suggest that there are three stages of learning: the acquisition of knowledge and skills, often via the memorising of facts (informative); the focus on professional values through searching, analysis and synthesis of information for decision making (formative); and, finally, the development of leadership attributes and competence in effective teamwork (transformative). Factual knowledge (formative) that underpins practice is an essential prerequisite to conceptual thinking; students without such knowledge will find it difficult to 'synthesise relationships, extrapolate from the known into the unknown, to hypothesize, and to discover further knowledge on their own' (Sutherland 1969, np). In order for students to engage in collaborative learning, tasks or activities need to offer student satisfaction (DeBacker et al. 2002), self-regulation and positive effect (Kempler et al. 2002) plus fulfilment of expectations (Dobos 1996). Cohen (1994, p8) notes that the 'importance of frequency and adequacy of questions, meta communication, lack of personal verbal attacks and frequency and quality of explanations' have been highlighted as important aspects of learning outcomes.

Whilst social interaction has long been viewed as an important facet of collaborative working (Terenzini & Pascarella 1994), more recently the need for emotional intelligence among team members has been identified (McCallin 2006). Goleman (1998) suggests that there are four fundamental capabilities necessary for emotional intelligence: self-awareness, self-management, social awareness and social skills. Emotional security within teams has been shown to improve team effectiveness (Bogo *et al.* 2011). Mischo (2005, p41) suggests that students need to be socially competent, i.e. '[have] the ability to reach . . .[their] own goals and satisfy . . .[their] own needs in social interaction while simultaneously considering goals and needs of others and social norms in general'.

Learning activities

Learning opportunities based on real-life scenarios and patient experiences provide a focus common to all professional groups, allowing students the opportunity to explore their

differences and similarities. Whilst diversity is an important aspect of team makeup (Xyrichis & Lowton 2008), for student teams to be effective and work collaboratively, members need to trust each other; for this to happen each team member needs to show that they possess specialist knowledge and/or skills which are of value to the whole team. McCallin & Bamford (2007) reported that, when this happens, team dynamics change with members being able to challenge assumptions and try out new ideas. However, hand in hand with this is the reality of trying to learn and work in an environment which is continual changing, target driven and resource limited, which instead of encouraging collaborative working is more likely to result in professionals and students retreating into personal comfort zones of uniprofessional working.

Learning activities need to include discussion about the nature of conflict, its prevention and the role of negotiation and compromise in dealing with conflict. Students, novice health professionals and more experienced team members should be able to describe and work through the following steps:

- Early recognition of potential for conflict
- Identification of situations that commonly lead to conflict within practice-based settings
- Learning about others' roles and responsibilities
- Recognising and discussing professional identities and how they impact collaborative practice
- Training in conflict recognition, resolution and negotiation
- Training in exploring and understanding each other's values
- · Agreeing guidelines and team etiquette for addressing conflict
- Adopting a shared problem-solving approach
- Exploring the nature of and precipitating factors leading to the conflict
- Working collaboratively to address and resolve the conflict
- Establishing a safe environment for addressing concerns
- Ensuring psychological safety of teams and team members and then practise these through simulation and case-based discussion.

Conclusion

Practice-based conflict is a fact of health professional life and needs to be included as part of health professional curricula at pre- and post-qualification levels. Both the positive and negative repercussions of conflict need to be emphasised, while health professionals need to be equipped with the skills to recognise conflict and to negotiate to enable safe collaborative working practices. Learning should be mainly situated and experiential, i.e. predominantly practice-based. Such learning is enhanced if students have the opportunity to remain within one location and with one healthcare team for some time.

References

Abbott, A. (1988) The System of Professions. Chicago: University of Chicago Press.

Aguilar, A., Stupans, I., Scutter, S. and King, S. (2014) Exploring how Australian occupational therapists and physiotherapists understand each other's professional values: implications for interprofessional education and practice. *Journal of Interprofessional Care* **28**, 15–22.

Allport, G.W. (1979) *The nature of prejudice. 25th anniversary edition*. Reading, Mass.: Addison-Wesley Publishing Company.

Bainbridge, L. and Purkis, M.E. (2011) The history and sociology of the health professions. Do they provide the key for new models of interprofessional collaboration? In *Sociology of interprofessional healthcare practice* (eds. S. Kitto, J. Chesters, J. Thistlethwaite and S. Reeves). New York: Nova, pp. 23–38.

Bogo, M., Paterson, J., Tufford, L. and King, R. (2011) Supporting front-line practitioners' professional development and job satisfaction in mental health and addiction. *Journal of Interprofessional Care* **25**, 209–214.

Boon, H., Verhoef, M., O'Hara, D. and Findlay, B. (2004) From parallel practice to integrative health care: a conceptual framework. *BMC Health Services Research* **4**, 15. doi:10.1186/1472-6963-4-15.

Brown, A. and Starkey, K. (1994) The effect of organisational culture on communication and information. *Journal of Management Studies* **31**, 807–828.

Burford, B. (2012) Group Processes in Medical Education: learning from social identity theory. *Medical Education* **46**, 143–152.

Canadian Interprofessional Health Collaborative (CIHC) (2010) Available at http://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210r.pdf.

Clouder, D.L., Goodman, S., Bluteau, P., Jackson, A., Davies, B. and Merriman, L.M. (2011) An investigation of "agreement" in the context of interprofessional discussion online: a "netiquette" of interprofessional learning? *Journal of Interprofessional Care* **25**, 112–118.

Cohen, E.G. (1994) Restructuring the classroom: conditions for productive small groups. *Review of educational Research* **64**, 1–35.

Cowie, H. and Rudduck, J. (1990) *Co-operative group work in the multi-ethnic classroom*. London: BP Educational Service.

Coyle, J., Higgs, J., Mcallister, L. and Whiteford, G. (2011) What is an interprofessional healthcare team anyway? In: *Sociology of interprofessional healthcare practice* (eds. S. Kitto, J. Chesters, J. Thistlethwaite and S. Reeves). New York: Nova, pp. 39–53.

Dawson, J.F. and West, M.A. (2007) *Positive and negative effects of team working in healthcare: Real and pseudo-teams and their impact on safety.* Birmingham: Aston University.

DeBacker, T.K., Nelson, R.M., Duke, B. and Waters, E. (2002) Relationships among achievement goals, social goals, and peer nominations of behavior during small group work in junior and senior high students. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.

Dobos, J.A. (1996) Collaborative learning: effects of student expectations and communication apprehension on student motivation. *Communication Education* **45**, 118–134.

Freidson, E. (1970) *Professional dominance*. New York: Atherton.

Frenck, J., Chen, L., Bhutta, Z.A., Cohen, J., Crisp, N., Evans, T., Fineberg, H., Garcia, P., Ke, Y., Kelley, P., Kistnasamy, B., Meleis, A., Naylor, B., Pablos-Medex, A., Reddy, S., Scrimshaw, S., Sepulveda, J., Serwadda, D. and Zurayk, H. (2010) Health professionals for a new century :transforming education to strengthen health systems in an interdependent world. *The Lancet* **376**, 1923–1958. doi:10.1016/S0140-6736(10)61854-5.

Fridja, N.H. (1986) The emotions. Cambridge: Cambridge University Press.

General Medical Council (GMC) (2013) *Good Medical Practice: delegation and referral.* Available at http://www.gmc-uk.org/guidance/ethical_guidance/21187.asp (accessed 13 March 2014).

Goleman, D. (1998) Working with Emotional Intelligence. London: Bloomsbury Publishing.

Harney, O., Hogan, M.J. and Broome, B.B. (2012) Collaborative learning: the effects of trust and open and closed dynamics on consensus and efficacy. *Soc Psychol Educ* **15**, 517–532.

Horsburgh, M., Lamdin, R. and Williamson, E. (2001) Multiprofessional learning: the attitudes of medical, nursing and pharmacy students to shared learning. *Medical Education* **35**, 876–883.

Interprofessional Education Collaborative Expert Panel (2011) *Core competencies for interprofessional collaborative practice: Report of an expert panel.* Washington, D.C.: Interprofessional Education Collaborative. Available at www.aacn.nche.edu/education-resources/ipecreport.pdf.

Jackson, J.A. and Bluteau, P. (2009) A practice model of interprofessional education. In: *Interprofessional Education: Making it Happen*. (eds. P. Bluteau and A. Jackson) London: Palgrave. pp.83–106.

Jehn, K. (1995) A multimethod examination of the benefits and determinants of intragroup conflict. *Administrative Science Quarterly* **40**, 256–282.

Johnson, D.W. and Johnson, R.T. (1994) *Learning together and alone: cooperative, competitive and individualistic learning* (4th Ed). Boston: Allyn & Bacon.

Jordan, P.J., Lawrence, S.A. and Troth, A.C. (2006) The impact of negative mood on team performance. *Journal of Management & Organization* **12**, 131–145.

Kempler, T.M., Linnenbrink, E.A., Zusho, A. and Maehr, M.L. (2002) Encouraging adaptive patterns of learning in collaborative groups: the role of social and motivational processes. Paper presented at the Annual General Meeting of the American Educational Research Association, New Orleans, L.A.

Mayer, R.C., Davies, J.H. and Schoorman, F.D. (1995) An integration model of organisational trust. *The Academy of Management Review* **20** (3), 709–734.

McCallin, A.M. (2006) Interdisciplinary Working- researching together: exploring some issues. *Nursing and Health Science* **8**, 88–94.

McCallin, A. and Bamford, A. (2007) Interdisciplinary teamwork: is the influence of emotional intelligence fully appreciated? *Journal of Nursing Management* **15**, 386–391.

Mischo, C. (2005) Promoting perspective coordination by dilemma discussion. The effectiveness of classroom group discussion on interpersonal negotiation strategies of 12-year-old students. *Social Psychology of Education* **8**, 41–63.

NHS Institution for Innovation and Improvement (2008) Available at http://www.institute. nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/human_dimensions_-_managing_conflict.html (accessed 10 March 2014).

Page, G. (2005) Professional socialisation of valuers: What the literature and professional bodies offer. *International Education Journal, ERC2004 Special Issue* **5** (5), 105–116.

Price, S., Doucet, S. and Hall, L.M. (2014) The historical social positioning of nursing and medicine: implications for career choice, early socialization and interprofessional collaboration. *Journal of Interprofessional Care* **28** (2), 103–109.

Reeves, S. (2011) Using the sociological imagination to explore the nature of interprofessional interactions and relations. In: *Sociology of interprofessional healthcare*

practice (eds. S. Kitto, J. Chesters, J. Thistlethwaite and S. Reeves). New York: Nova, pp 9–22.

Reeves, S., Freeth, D., McCrorie, P. and Perry, D. (2002) "It teaches you what to expect in the future..." Interprofessional learning on a training ward for medical, nursing, occupational therapy and physiotherapy students. *Medical Education* **36**, 337–344.

Reeves, S., Lewin, S., Espin, S. and Zwarenstein, M. (2010) *Interprofessional Teamwork for Health and Social Care.* London: Blackwells.

Slavin, R.E. (1995) *Cooperative learning: theory, research and practice*. (2nd Ed). Boston: Allyn & Bacon.

Sutherland, R.D. (1969) Some thoughts on conceptual learning and information retrieval. March 1969 Published as a broadside on the Illinois State University campus. http://www.robertdsutherland.com/writings/conceptual_learning.html (accessed 13 March 2014).

Tajfel, H. (1979) Individuals and groups in social psychology. *British Journal of Social and Clinical Psychology* **18**, 183–190.

Tajfel, H. Turner, J. (1979) An integrative theory of inter-group conflict. In (eds. W.G. Austin and S. Worchel). *The social psychology of intergroup relations* Monterey, Ca: Brooks/Cole Publishing Company, pp 33–47.

Tekleab, A.G., Quigley, N.R. and Tesluk, P.E. (2009) A longitudinal study of team conflict, conflict management, cohesion and team effectiveness. *Group and Organization Management* **34**, 170–205.

Terenzini, P.T. and Pascarella, E.T. (1994) Living with myths: undergraduate education in America. *Change* **26** (1), 28-32.

Thistlethwaite, J.E. (2012) *Values-based interprofessional collaborative practice*. Cambridge: Cambridge University Press, 2012.

Thistlethwaite, J.E., Bartle, E., Chong, A.L. *et al.* (2013) A review of longitudinal community and hospital placements in medical education: BEME Guide No. 26. *Medical Teacher* **35** (8), e1340–e1364.

Thomas, K.W. and Kilmann, R.H. (1974) *Thomas-Kilmann Conflict Mode Instrument*. Mountain View, Ca: Xicom.

Thornton, T. (2006) Tacit knowledge as the unifying factor in evidence-based medicine and clinical judgment. *Philosophy, Ethics and Humanities in Medicine* **1**, E2.

Turner, J.C. (1982) Towards a cognitive redefinition of the social group. In: *Social identity and intergroup relations* (ed. H. Tajfel). Cambridge: Cambridge University Press. pp 15–40.

Van Dijk, P.A. and Brown, A.K. (2006) Emotional labour and negative job outcomes: An evaluation of the mediating role of emotional dissonance. *Journal of Management & Organization* **12**, 101–115.

Xyrichis, A. and Lowton, K. (2008) What fosters or prevents interprofessional teamworking in primary and community care? A literature review. *International Journal of Nursing Studies* **45**, 140–153.