


# How can interventions more directly address drivers of unprofessional behaviour between healthcare staff?

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## ABSTRACT

Unprofessional behaviours (UBs) between healthcare staff are widespread and have negative impacts on patient safety, staff well-being and organisational efficiency. However, knowledge of how to address UBs is lacking. Our recent realist review analysed 148 sources including 42 reports of interventions drawing on different behaviour change strategies and found that interventions insufficiently explain their rationale for using particular strategies. We also explored the drivers of UBs and how these may interact. In our analysis, we elucidated both common mechanisms underlying both how drivers increase UB and how strategies address UB, enabling the mapping of strategies against drivers they address. For example, social norm-setting strategies work by fostering a more professional social norm, which can help tackle the driver 'reduced social cohesion'. Our novel programme theory, presented here, provides an increased understanding of what strategies might be effective to address specific drivers of UB. This can inform logic model design for those seeking to develop interventions addressing UB in healthcare settings.

## INTRODUCTION

Unprofessional behaviours (UBs) between staff can include, but are not limited to, microaggressions, incivility, bullying and harassment.<sup>1</sup> These behaviours have negative impacts on staff well-being, patient safety, organisational reputation and organisational costs<sup>2</sup> and are unfortunately prevalent in healthcare systems worldwide.<sup>1 3 4</sup> We recently published two papers from our recent realist review. One reported a programme theory (PT) explaining five types of key driver of UBs in acute care settings and how these work<sup>5</sup>. The other reported a PT drawing on 42 reports of interventions using 13 types of behaviour change strategies to reduce UB.<sup>6</sup> To improve the effectiveness of interventions to reduce UB, we found that it is essential to directly target drivers of UB with strategies that address them.<sup>6</sup> However, which strategies best address particular drivers of UB have not yet been articulated.<sup>7 8</sup> This report sets out

which behaviour change strategies address specific drivers of UB based on common underlying mechanisms of action.

## METHODS

Realist reviews seek to understand why an intervention may work (or not), for whom, in which contexts and why, through the generation of PTs using retroductive logic.<sup>9</sup> These are generally depicted as context-mechanism-outcome (CMO) configurations.<sup>10</sup> These mechanisms, in realist terms, can be defined as 'changes in recipient reasoning that occur in response to resources introduced by an intervention'.<sup>11</sup>

In line with RAMESES guidelines,<sup>9 10</sup> our first step was to build initial PTs by analysing 38 reports from organisations such as National Health Service (NHS) England, the King's Fund and NHS Employers using NVivo V.12 for data organisation.<sup>12 13</sup> We then tested and refined these theories against 110 additional studies (to December 2022) identified with systematic searches of Embase, CINAHL and MEDLINE databases, and grey literature repositories. Article selection involved screening records for inclusion, rigour and relevance. Full methodology including inclusion/exclusion criteria is reported elsewhere.<sup>5 6 12</sup>

This resulted in theories to explain how and why 13 types of behaviour change techniques or 'strategies' work to reduce or mitigate UB and what drives UB and how—reported separately elsewhere.<sup>5 6</sup> Uniquely, this short report combines these two aspects of our analysis, whereby we mapped mechanisms underpinning drivers of UB<sup>5</sup> against strategies which address these drivers<sup>6</sup> to develop this overall explanatory PT.

## RESULTS

Our review encompassed 42 reports of interventions to address UB,<sup>14–55</sup> 29 of which have

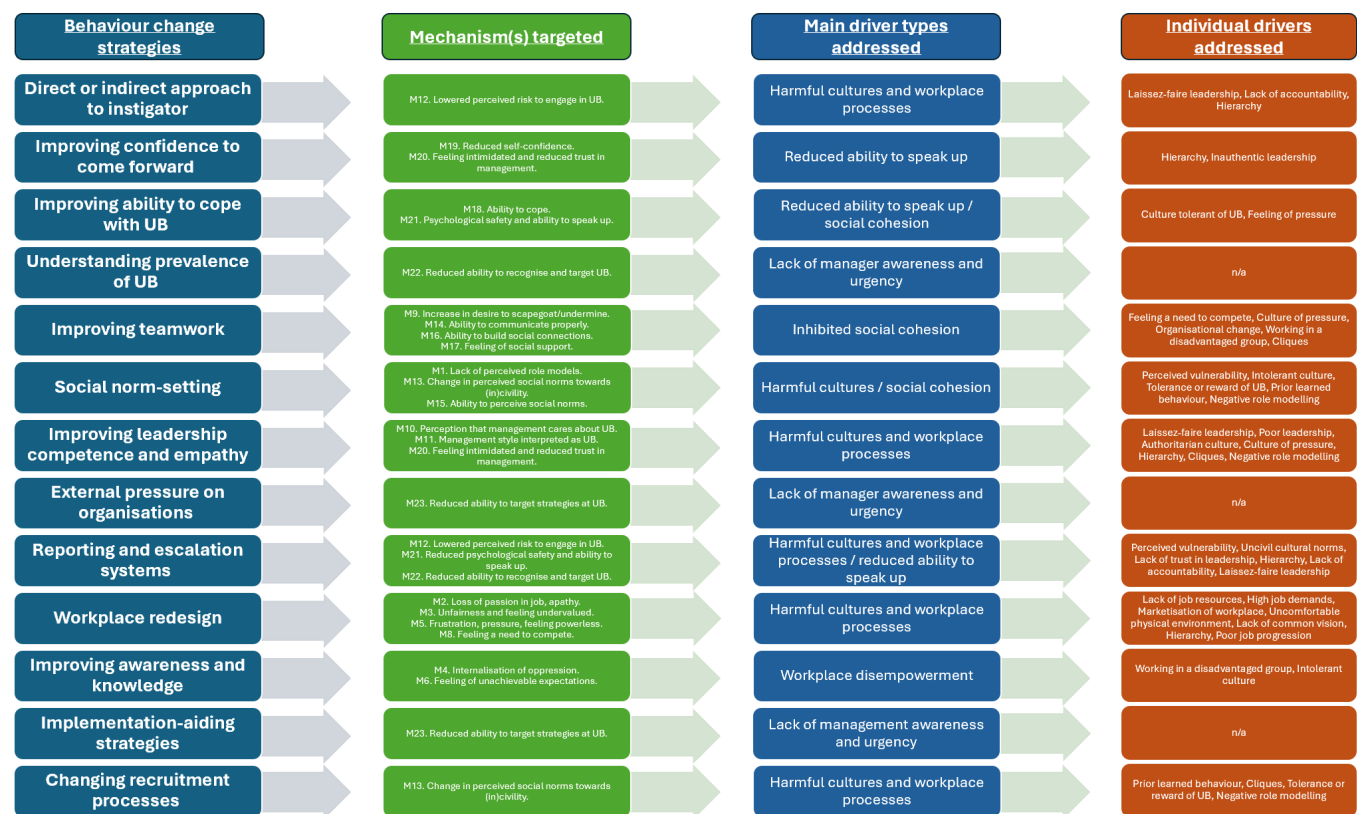


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**Figure 1** Diagram to depict which different behaviour change strategies target particular drivers of unprofessional behaviour (UB).

been evaluated through various study designs. **Figure 1** presents a PT diagram depicting which behaviour strategies target various mechanisms underlying drivers of UB, which driver categories are impacted by these strategies, and which individual drivers within these categories are targeted. This PT includes five major drivers of UB: (1) workplace disempowerment; (2) harmful workplace processes and cultures; (3) inhibited social cohesion; (4) a reduced ability to speak up and (5) lack of manager awareness and urgency.<sup>5</sup> In **table 1**, we provide more details of these behaviour change strategies and how they target specific drivers of UB as well as how frequently each strategy type was used by the 29 included evaluated interventions. Online supplemental file 1 presents an alternative version of **figure 1** designed specifically to map onto our PT published elsewhere and provides a further detailed version of **table 1**.<sup>5</sup>

**Figure 1** highlights that many drivers of workplace disempowerment and harmful workplace processes are only addressed by workplace redesign strategies. Such workplace redesign strategies seek to facilitate staff autonomy, control and ownership of work; however, workplace redesign must occur at an organisational level and has only been used once in an evaluated intervention.<sup>16</sup> Our work also shows that the most frequently used (often individual-focused) strategies, such as improving awareness and knowledge of UB, address few actual

drivers of UB and therefore may not be as effective as other strategies.

## DISCUSSION AND CONCLUSIONS

Existing interventions have made little use of logic models and behavioural science principles in their design, meaning that the rationale behind choice of behaviour change strategies has been poorly articulated and not evidence-based.<sup>6</sup> Our PT, presented in **figure 1**, is a starting point to inform logic model design for those seeking to design evidence-based interventions that address particular drivers of UB.<sup>56</sup> To improve reporting, future research should align and operationalise these strategies against existing Behaviour Change Technique (BCT) frameworks.<sup>57</sup>

Our PT has also highlighted that many systemic drivers remain under-addressed. Predominantly, existing interventions have focused on individual or team strategies to address UB with less focus on more systemic, potentially difficult-to-implement strategies such as redesigning the workplace to reduce frustrations and increase staff ownership over work.<sup>6</sup>

We have produced a free evidence-based guide for addressing UB in healthcare, available at <https://workforce-research.surrey.health/projects-resources/addressing-unprofessional-behaviours-between-healthcare-staff/>.<sup>58</sup>

**Table 1** Matching the 13 types of strategy (and individual strategies within these) against types of drivers of UB

Primary driver addressed	Behaviour change strategies
Single incidents of UB (individual-level/does not address drivers)	Direct or indirect approach to instigator (target, bystander or managers)—used in 14 out of 29 evaluated interventions Informal resolution Disciplinary action Peer messengers Mediation Speaking up
Workplace disempowerment and staff ability to speak up	Improving confidence to come forward (target, bystander)—used in 22 out of 29 evaluated interventions Assertiveness training Role playing Cognitive rehearsal Keeping records Improving awareness and knowledge (all)—used in 12 out of 29 evaluated interventions Education, awareness and general group discussions
Improving social cohesion	Improving ability to cope with UB (target, bystander)—used in 0 out of 29 evaluated interventions Seeking help externally Journaling Moving targets Individual coping strategies Reflection Improving teamwork (all)—used in 16 out of 29 evaluated interventions Teambuilding exercises Conflict management training Communication training Journal club/group writing Problem-based learning Staff networks
Addressing harmful cultures and workplace processes	Social norm-setting (all)—used in 16 out of 29 evaluated interventions Championing Code of conduct Role modelling Environmental modification

Continued

**Table 1** Continued

Primary driver addressed	Behaviour change strategies
	Allyship Improving leadership competence and empathy (managers/leaders)—used in 2 out of 29 evaluated interventions Leadership training Reverse mentoring Reporting and escalation systems (all)—used in 7 out of 29 evaluated interventions Reporting system Changing recruitment processes (all)—used in 0 out of 29 evaluated interventions Changing recruitment criteria Dismissal Workplace redesign (all)—used in 1 out of 29 evaluated interventions Democratisation of workplace
Improving manager awareness and urgency to address UB	External accreditation or pressure on organisations (managers/leaders)—used in 2 out of 29 evaluated interventions Seeking hospital Magnet status Regulator action Laws and regulations Understanding prevalence of UB (managers/leaders)—used in 3 out of 29 evaluated interventions Survey Multisource feedback Implementation-aiding strategies (managers/leaders)—used in 11 out of 29 evaluated interventions Action planning or goal setting Building a repertoire of strategies
UB, unprofessional behaviour.	

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## REFERENCES

- Westbrook J, Sunderland N, Li L, *et al.* The prevalence and impact of unprofessional behaviour among hospital workers: a survey in seven Australian hospitals. *Med J Aust* 2021;214:31–7.
- Westbrook J, Sunderland N, Atkinson V, *et al.* Endemic unprofessional behaviour in health care: the mandate for a change in approach. *Med J Aust* 2018;209:380–1.
- Layne DM, Nemeth LS, Mueller M, *et al.* Negative behaviours in health care: prevalence and strategies. *J Nurs Manag* 2019;27:154–60.
- Carter M, Thompson N, Crampton P, *et al.* Workplace bullying in the UK NHS: a questionnaire and interview study on prevalence, impact and barriers to reporting. *BMJ Open* 2013;3.
- Auger JA, Maben J, Abrams R, *et al.* Drivers of unprofessional behaviour between staff in acute care hospitals: a realist review. *BMC Health Serv Res* 2023;23:1326.
- Maben J, Auger JA, Abrams R, *et al.* Interventions to address unprofessional behaviours between staff in acute care: what works for whom and why? A realist review. *BMC Med* 2023;21:403.
- Illing J, Carter M, Thompson NJ, *et al.* Evidence synthesis on the occurrence, causes, management of bullying and harassing behaviours to inform decision making in the NHS. 2013;44:54–168.
- Maben J, Auger JA, Abrams R, *et al.* Why do acute healthcare staff behave unprofessionally towards each other and how can these behaviours be reduced? A realist review. *BMJ Open* 2022;12:e061771.
- Wong G, Greenhalgh T, Westhorp G, *et al.* RAMESES publication standards: realist syntheses. *BMC Med* 2013;11:1–14.
- Pawson R, Matutes E, Brito-Babapulle V, *et al.* Sezary cell leukaemia: a distinct T cell disorder or a variant form of T Prolymphocytic leukaemia? *Leukemia* 1997;11:1009–13.
- Wong G, Westhorp G, Pawson R, *et al.* Realist synthesis: RAMESES training materials. In: *RAMESES Proj.* 2013: 55.
- Maben J, Auger JA, Abrams R, *et al.* Why do acute healthcare staff engage in unprofessional behaviours towards each other and how can these behaviours be reduced? A realist review protocol. *BMJ Open* 2022;12:e061771.
- Auger JA, Millar R, Greenhalgh J, *et al.* Building an initial realist theory of partnering across national health service providers. *JICA* 2020;29:111–25.
- Spence Laschinger HK, Leiter MP, Day A, *et al.* Building empowering work environments that foster civility and organizational trust: testing an intervention. *Nurs Res* 2012;61:316–25.
- Osatuke K, Moore SC, Ward C, *et al.* Civility, respect, engagement in the workforce (CREW). *J Appl Behav Sci* 2009;45:384–410.
- Stevens S. Nursing workforce retention: challenging a bullying culture. *Health Aff (Millwood)* 2002;21:189–93.
- Kang J, Kim JI, Yun S. Effects of a cognitive rehearsal program on interpersonal relationships, workplace bullying, symptom experience, and turnover intention among nurses: a randomized controlled trial. *J Korean Acad Nurs* 2017;47:689–99.
- Warrner J, Sommers K, Zappa M, *et al.* Decreasing work place incivility. *Nurs Manage* 2016;47:22–30.
- Dahlby MA, Herrick LM. Evaluating an educational intervention on lateral violence. *J Contin Educ Nurs* 2014;45:344–50.
- Speck RM, Foster JJ, Mulhern VA, *et al.* Development of a professionalism committee approach to address unprofessional medical staff behavior at an academic medical center. *Jt Comm J Qual Patient Saf* 2014;40:161–7.
- Asi Karakas S, Okanli A e. The effect of assertiveness training on the mobbing that nurses experience. *Workplace Health Saf* 2015;63:446–51.
- Chippes EM, McRury M. The development of an educational intervention to address workplace bullying: a pilot study. *J Nurses Staff Dev* 2012;28:94–8.
- Kang J, Jeong YJ. Effects of a smartphone application for cognitive rehearsal intervention on workplace bullying and turnover intention among nurses. *Int J Nurs Pract* 2019;25:e12786.
- Parker KM, Harrington A, Smith CM, *et al.* Creating a nurse-led culture to minimize horizontal violence in the acute care setting: a multi-interventional approach. *J Nurses Prof Dev* 2016;32:56–63.
- Dimarino TJ. Eliminating lateral violence in the ambulatory setting: one center's strategies. *AORN J* 2011;93:583–8.
- Griffith M, Clery MJ, Humbert B, *et al.* Exploring action items to address resident mistreatment through an educational workshop. *West J Emerg Med* 2019;21:42–6.
- O'Connell KM, Garbark RL, Nader KC. Cognitive rehearsal training to prevent lateral violence in a military medical facility. *J Perianesth Nurs* 2019;34:645–53.
- Lasater K, Mood L, Buchwach D, *et al.* Reducing incivility in the workplace: results of a three-part educational intervention. *J Contin Educ Nurs* 2015;46:15–24.
- Armstrong NE. A quality improvement project measuring the effect of an evidence-based civility training program on nursing workplace incivility in a rural hospital using quantitative methods. *OJRNHC* 2017;17:100–37.
- Dixon-Woods M, Campbell A, Martin G, *et al.* Improving employee voice about transgressive or disruptive behavior: a case study. *Acad Med* 2019;94:579–85.
- Baldwin CA, Hanrahan K, Edmonds SW, *et al.* Implementation of peer messengers to deliver feedback: an observational study to promote professionalism in nursing. *Jt Comm J Qual Patient Saf* 2023;49:14–25.
- Stagg SJ, Sheridan DJ, Jones RA, *et al.* Workplace bullying: the effectiveness of a workplace program. *Aust Nurs Midwifery J* 2017;24:34–6.
- Banerjee D, Nassikas NJ, Singh P, *et al.* Feasibility of an antiracism curriculum in an academic pulmonary, critical care, and sleep medicine division. *ATS Sch* 2022;3:433–48.
- Stagg SJ, Sheridan D, Jones RA, *et al.* Evaluation of a workplace bullying cognitive rehearsal program in a hospital setting. *J Contin Educ Nurs* 2011;42:395–401.
- Nicotera AM, Mahon MM, Wright KB. Communication that builds teams: assessing a nursing conflict intervention. *Nurs Adm Q* 2014;38:248–60.
- Nikstaitis T, Simko LC. Incivility among intensive care nurses: the effects of an educational intervention. *Dimens Crit Care Nurs* 2014;33:293–301.
- Webb LE, Dmochowski RR, Moore IN, *et al.* Using coworker observations to promote accountability for disrespectful and unsafe behaviors by physicians and advanced practice professionals. *Jt Comm J Qual Patient Saf* 2016;42:149–64.
- Thorsness R, Sayers B. Systems approach to resolving conduct issues among staff members. *AORN J* 1995;61:197–202.
- O'Keeffe DA, Brennan SR, Doherty EM. Resident training for successful professional interactions. *J Surg Educ* 2022;79:107–11.
- Westbrook JI, Urwin R, McMullan R, *et al.* Changes in the prevalence of unprofessional behaviours by co-workers following a professional

- accountability culture change program across five Australian hospitals. *Int J Qual Health Care* 2023.
- 41 Barrett A, Piatek C, Korber S, *et al.* Lessons learned from a lateral violence and team-building intervention. *Nurs Adm Q* 2009;33:342–51.
- 42 Kousha S, Shahrami A, Forouzanfar MM, *et al.* Effectiveness of educational intervention and cognitive rehearsal on perceived incivility among emergency nurses: a randomized controlled trial. *BMC Nurs* 2022;21:153.
- 43 Churrua K, Pavithra A, McMullan R, *et al.* Creating a culture of safety and respect through professional accountability: case study of the ethos program across eight Australian hospitals. *Aust Health Rev* 2022;46:319–24.
- 44 Hickson GB, Pichert JW, Webb LE, *et al.* A complementary approach to promoting professionalism: identifying, measuring, and addressing unprofessional behaviors. *Acad Med* 2007;82:1040–8.
- 45 Griffin M. Teaching cognitive rehearsal as a shield for lateral violence: an intervention for newly licensed nurses. *J Contin Educ Nurs* 2004;35:257–63.
- 46 Leiter MP, Laschinger HKS, Day A, *et al.* The impact of civility interventions on employee social behavior, distress, and attitudes. *J Appl Psychol* 2011;96:1258–74.
- 47 Kile D, Eaton M, deValpine M, *et al.* The effectiveness of education and cognitive rehearsal in managing nurse-to-nurse incivility: a pilot study. *J Nurs Manag* 2019;27:543–52.
- 48 Saxton R. Communication skills training to address disruptive physician behavior. *AORN J* 2012;95:602–11.
- 49 McKenzie L, Shaw L, Jordan JE, *et al.* Factors influencing the implementation of a hospitalwide intervention to promote professionalism and build a safety culture: a qualitative study. *Jt Comm J Qual Patient Saf* 2019;45:694–705.
- 50 Jenkins S, Woith W, Kerber C, *et al.* Why can't we all just get along? A civility Journal club intervention. *Nurse Educ* 2011;36:140–1.
- 51 DeMarco RF, Roberts SJ, Chandler GE. The use of a writing group to enhance voice and connection among staff nurses. *J Nurs Staff Dev* 2005;21:85–90.
- 52 Embree JL, Bruner DA, White A. Raising the level of awareness of nurse-to-nurse lateral violence in a critical access hospital. *Nurs Res Pract* 2013;2013:207306.
- 53 Ceravolo DJ, Schwartz DG, Foltz-Ramos KM, *et al.* Strengthening communication to overcome lateral violence. *J Nurs Manag* 2012;20:599–606.
- 54 Hawkins N, Jeong SY-S, Smith T, *et al.* Creating respectful workplaces for nurses in regional acute care settings: a quasi-experimental design. *Nurs Open* 2023;10:78–89.
- 55 Clark CM, Ahten SM, Macy R. Using problem-based learning scenarios to prepare nursing students to address incivility. *Clin Simul Nurs* 2013;9:e75–83.
- 56 Funnell SC, Rogers PJ. *Purposeful Program Theory: Effective Use of Theories of Change and Logic Models*. John Wiley & Sons, 2011.
- 57 Marques MM, Wright AJ, Corker E, *et al.* The behaviour change technique ontology: transforming the behaviour change technique Taxonomy V1 [version 1; peer review: 4 approved]. *Wellcome Open Res* 2023;8:308.
- 58 Maben J, Aunger J, Abrams R, *et al.* Addressing unprofessional behaviours between healthcare staff: a guide. 2023:1–38. Available: <https://workforceresearchsurvey.health/>