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E-learning communication skills training for Physiotherapy students; a two phased sequential mixed methods study

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Abstract

Objective

Test whether a single e-learning session can improve empathy and communication across pre-registration and postgraduate physiotherapy students.

Methods

Design: Two-phase sequential mixed methods study. Phase 1: Pilot randomised control trial. Phase 2: Qualitative study using interpretive phenomenological analysis. Sampling: A purposive sample for both phases. Outcome measures: Phase 1: At baseline, post and 6-week follow up. Demographics. Primary outcome: Inter-personal Reactivity Index (IRI). Phase 2: Demographics and interview schedule. Intervention: An e-learning (E) narrative intervention group or active control condition. Analysis: Phase 1: Descriptive statistics and confidence intervals. Mann-Whitney U test to compare across group change. Phase 2: Thematic analysis.

Results

Thirty-nine participants took part in the mixed methods study (Phase 1 n=25; Phase 2 n=14). Phase 1: No significant differences between groups were identified. Potentially importance changes across time were found for the intervention group and control group. Phase 2 results identified 5 themes and 12 sub-themes.

Conclusion

The e-learning groups identified an increase in the perceived ability to handle distressing communication. Other important findings from the e-learning are discussed. Further research is warranted. Practical Implications Novel e-learning intervention may have an important role in curriculum development and clinical practice to promote therapeutic communication.

Practical Implications

Novel e-learning intervention may have an important role in curriculum development and clinical practice to promote therapeutic communication.

1. Introduction

Health care professionals (HCPs), including physiotherapists value the importance of psychosocial strategies as a part of patient care that can enable them to manage a myriad of presentations in clinical practice. HCPs recognise that having psychological skills can improve adherence, patient confidence and other psychosocial patient outcomes [1]. Listening [2,3] and empathy [4] are core components of communication. Past research has identified that physiotherapy students can become less empathic during training [5] and findings from a previous review suggested that HCP students feel underprepared in their basic communication skills [6]. At the time of writing (May 2020), there is no standardised approach for how psychological support for patients is taught during physiotherapy undergraduate training [7]. Research suggests that there is limited evidence of any training within United Kingdom universities [8,9]. More broadly, there is also a lack of high-quality studies looking at communication interventions [10]. Research is needed to identify what psychological and communication skills training physiotherapy students require [2].

Physiotherapists appear to be more comfortable applying the psychological strategies of positive reinforcement such as self-talk and goal setting, and less knowledgeable about other approaches which are non-directive, such as motivational interviewing [8,6,11]. This may indicate a preference or comfort with more directive versus non-directive communication styles. There is a significant lack of knowledge about active listening skills amongst qualified physiotherapists and students which impacts on the presence of empathy within interactions [12]. There is also a lack of awareness of communication strategies to support people who have a mental illness. Further to this, stigma related attitudes can negatively influence such communication [13]. Thus, there is a need for further research investigating the relative value of non-directive communication strategies to manage more overtly complex interactions with

patients. One non-directive area that could enhance student listening and communication skills are narrative based approaches.

Research has called for more theory-based training when educating HCP students with psychological communication techniques [14]. Where this is achieved more effectively, HCP performance and improved patient outcomes can be achieved [15]. Narrative based educational interventions have been shown to enhance HCP-patient communication and narrative competency of students [16]. Narrative competent HCPs have a greater ability to recognise and interpret patient's problems and accompany them through the illness journey [5], which develops trust and improved outcomes [17]. Educating HCPs to understand and use patient stories as a part of enhancing patient-centred care requires further examination.

The model of emotions, adaptation and hope (MEAH) was designed to capture a relative difficulty or experience named by a patient, then assess that difficulty by rating it according to three domains including; (a) hope, rating how hopeful of change they are when looking forward from complete hope to hopelessness, (b) psychological adaptation, rating if they can accept what has happened from an inability to accept what has happened to complete embracement of what has happened and (c) a full range of emotional expressions. This combined representation of an experience prevents HCPs from giving a single label to an expression of illness e.g., like saying 'that person is in denial' or associated with hope like saying 'that person is being unrealistic'. The MEAH is able to map the experience identified by a patient because the assessment accurately represents and explains the psychology of the plot of illness stories [18]. The MEAH provides scientific evidence of success found in past interventions and highlights the importance of listening to and understanding patients'

stories, illustrating that if stories can change then so too can psychological adaptation and hope [18].

Several benefits have been proposed with e-learning over face-to-face learning, these include; standardisation of instruction and assessment, and enhanced cost-effectiveness [19]. Further to this, e-learning (web-based, digital or online education material that uses information and communications technology for the purpose of learning) methods provide HCPs with a way to reflect and self-correct their actions [20]. Existing research of single session e-learning interventions for student HCPs have reported significant improvements in empathy [21,22] and improvement in understanding the perspective of the patient, and increased confidence in providing clinical care [23]. Research is required to investigate whether e-learning education can improve empathy and communication skills in student HCPs, and indeed if any improvements can be maintained over time [21]. If this is possible resources for HCPs can be made available that are time and resource friendly.

1.1 Aim

To understand the impact of a single e-learning session on physiotherapy student perceived communication skills using a MEAH informed narrative intervention.

1.2 Objectives

1. To consider the change in empathy and communication across three time points (pre-intervention, post intervention, at 6-weeks) and between groups for all students.
2. To consider changes across secondary outcome measures such as empathy and stigma attitudes.

3. To understand reasons for any perceived change relating to outcome measures using qualitative interviews.

2. Methods

2.1 Design: Two phase sequential explanatory mixed methods study [24]. Phase 1 involved a randomised pilot control trial [25] with parallel groups. Following the CONSORT recommendations and flow diagram [26]. Trial ID: ISRCTN13368968. Phase 2 involved a qualitative study using Interpretive Phenomenological Analysis (IPA) [27], reported according to the standards for reporting qualitative research [28].

2.2 Eligibility; For both phases any pre- or post-registration (undergraduate or post graduate) student physiotherapist based at the University of Birmingham were eligible for inclusion. Students were excluded if they were currently part of other communication or psychology-based research.

2.3 Study setting: Both e-learning single seminars were pre-recorded using PANOPTO© and Microsoft PowerPoint and delivered by Dr A Soundy. They were accessible through an unidentifiable link based on the University of Birmingham servers. At the start of the study COVID-19 occurred and the study protocol was changed to include an e-learning asynchronous delivery format. The intervention was recorded without students. The control group lecture was selected from a past recorded lecture on motivational interviewing. The lecture was identified as it was; (a) considered a good example and (b) not a part of current teaching for any of the year cohorts. The lecture included physiotherapy students who were able to ask questions during the recording. Both lectures were delivered by Dr Soundy.

2.5 Sampling and Sample size: Phase 1: A simple random sample [29] of 10-15 per group was identified because the expected treatment size was estimated to be a medium to large

effect [30]. Phase 2: Following phase 1 the entire cohort were given the opportunity to view the intervention (n approximately 400). From those that viewed the intervention, a purposive sample were selected [29] and IPA methods were used. IPA studies are designed for use with lower numbers [31]. Data saturation [32] was sought and responses compared and contrasted to Phase 1 process evaluation open questions.

2.6 Phase 1 randomisation processes: (a) Sequence generation: random number calculator with randomly selected block sizes [33]. (b) Allocation concealment; undertaken by unidentifiable e-links not known to the researcher. (c) Assessment taken at participant's home not in the presence of the researcher (blind assessment).

2.7 Intervention: Phase 1: Participants from entire Bachelor of Science (BSc) and Master of Science (MSc) cohorts were emailed. 48 hours after receiving information and agreeing to take part students were randomly allocated to a single one-hour lecture of a novel narrative-based intervention, supported by the MEAH or allocated to a control group (a standard pre-recorded motivational interviewing session delivered by Dr A Soundy). The MEAH training had 45 slides directed by 5 core elements; (1) a specific focus on non-judgemental and non-directive aspects of communication, (2) the light bulb analogy of LED (Listen, Explore, Direct) is introduced to enhance communication. Continuous examples are given that use LED within highly challenging interactions. (3) An introduction of illness narrative master plots (common stories of illness) and the hidden psychological meaning within the plots are given. (4) Traditional understanding of psychological adaptation and goal setting is problematised and compared against the MEAH. (5) The MEAH is identified as a psychological map of illness narrative master plots. The implications of this for assessment and support of patients is provided.

Phase 2: participants from the entire BSc and MSc cohorts were emailed to ask if they would view the intervention and be happy to talk about it using a single interview. All students were interviewed by Dr A Soundy who has extensive experience with qualitative research. Summary of the intervention components can be obtained from the first author.

2.8 Phase 1 outcome measures;

Outcome assessments were taken at baseline, post intervention or control and at 6-week follow up. Two reminder emails were sent if a student didn't respond to the follow up request.

2.8.1 Demographics; Age, gender, year of study and program.

2.8.2 Primary outcome measure:

The Interpersonal Reactivity Index [34]. A 28-item scale that uses a 5-point Likert scale that measures empathy. Empathy is considered a multi-dimensional construct and regarded the most comprehensive measure of empathic disposition [35]. Participants read a statement and rate how well the statement described their own feelings. Ratings are from "does not describe me well" to "describes me very well". The four sub-scales include two cognitive dimensions; (a) fantasy items that considers the ability to imagine the feelings and actions of characters in books. (b) Perspective taking that considers the ability to adopt the psychological point of view of others. As well as two affective dimensions (a) Empathic concern dimension the ability to consider feelings of symptom for unfortunate others and (b) Personal distress self–orientated feelings relating to tense and challenging interpersonal situations (only sub-scale where improvement is indicated by a decrease in the scale).

2.8.3 Secondary outcomes measures:

Four secondary outcome measures were selected.

(a) Mental Illness Clinicians' Attitudes Scale (MICA) [36]. A 16-item scale. Each item can be scored by a 6-point likert scale. Scores are summed representing a minimum score of 16 and maximum of 96. A higher score represents more stigmatising attitudes.

(b) The 15-item Open Minds Scale for health care providers [37, 38]. This score uses a five-point Likert scale and a total score is calculated which exists between 15-75. Five items are reverse coded. Higher scores signify more stigmatising attitudes and intentions of behaviour.

(c) General Self Efficacy Scale (GSE) [39]. Has 10 items each with a 4-likert scale response about the association one feels in regard to the item from not true at all (1) to exactly true (4). A score between 10-40 is possible with higher scores showing higher levels of SE. Confidence in student physiotherapists can be significantly influenced by communication training [23].

(d) Froehlich Communication Survey [40] has 25 items relating to agreement with statements regarding communication which are scored using a 10-point scale (1 representing much improvement needed, 10 representing no improvement needed). A total score of between 25-250 is possible and a higher score represents better communication.

Qualitative process evaluation; a process evaluation [24] using open ended question was given out following the intervention. A supplementary file contains the process evaluation guide.

2.9 Phase 2 outcome measure

Demographic details of age and gender, year of study and program were documented. A single semi-structured interview schedule was performed by Dr Soundy who has undertaken

over 14 years of post-doctoral qualitative research. The interview guide was checked and developed using a cognitive interview (think aloud interview) of two participants. The final schedule had 4 sections (general questions, perception and experiences of the intervention, past training, and future application) and 18 questions. Quality for IPA studies was adhered to [27]. A supplementary file contains the interview schedule and information on quality assurance.

2.10 Analysis;

2.10.1 Phase 1. Descriptive statistics were reported. Across time differences were presented using confidence intervals for change between pre-and post-groups and pre-and 6 weeks follow up. Across group changes were compared using a Mann-Whitney U. A Bonferroni adjustment (0.05/8) gave a *p* value of p=0.006.

2.10.2 Phase 2: Open questions from phase 1 were integrated with interview findings using thematic analysis [41].

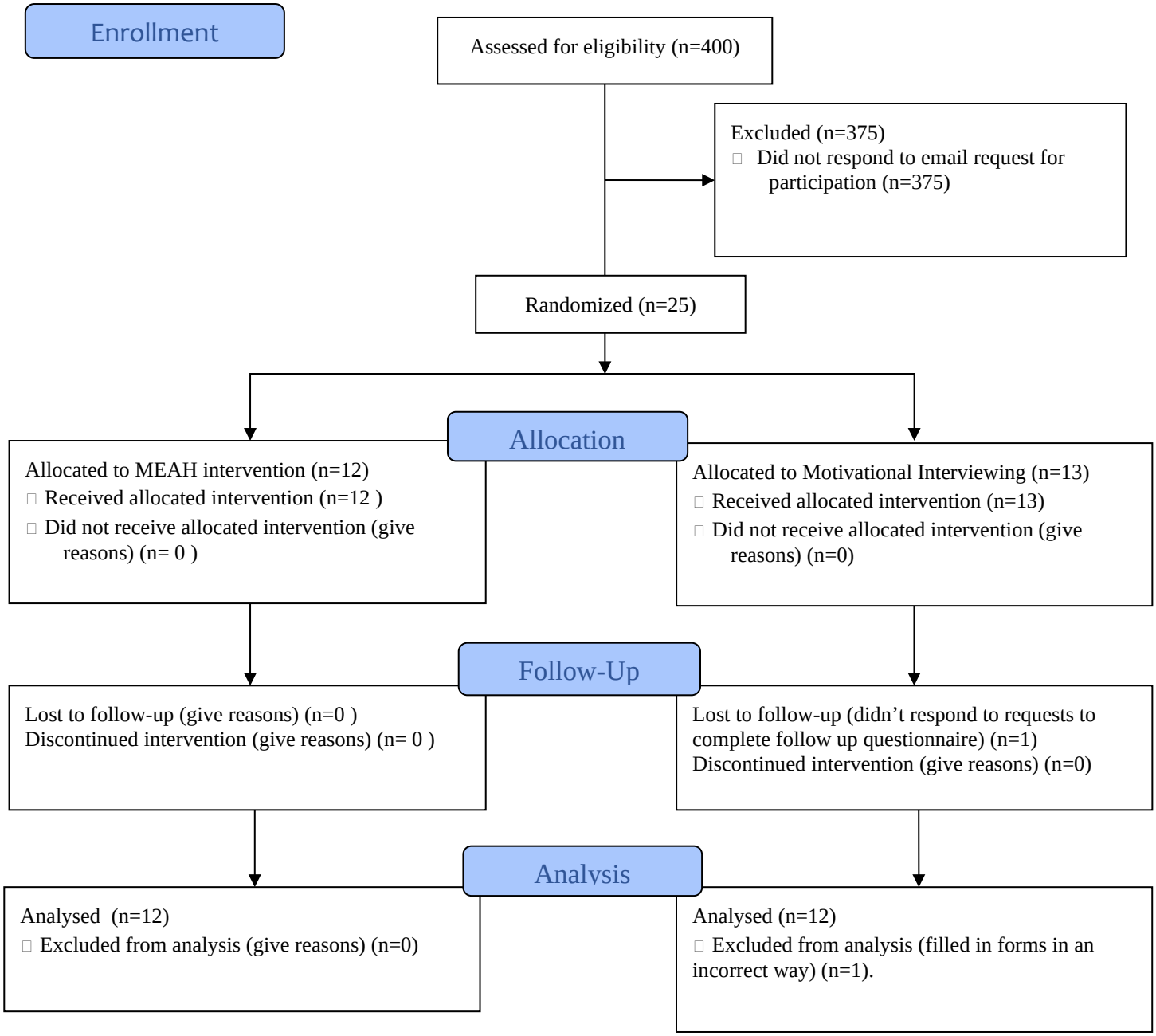
2.11 Ethics

Ethical approval was gained from Univeristy of Birmingham ethics committee reference: ERN_18-1970B and ERN_18-1970C.

3. Results

Phase 1: Twenty-five participants took part. Twenty-five students responded to 3 recruitment emails across a two-week period. All who were recruited completed the intervention. See Figure 1 for the participant flow. Twelve (11 female, 1 male student) were included in the intervention group and thirteen (10 female, 3 male) included in the motivational interviewing group. The average age was 22.7±7.4 years in the intervention group and 24.7±4.1 years in the motivational interviewing group. The intervention group included mostly final year student participants (year 1 = 2, year 2 = 3, year 3 = 6) and all in the BSc program. The motivational interviewing group had included mostly first and second year students (year 1 = 5, year 2 = 5, year 3 = 3) with 10 undertaking the BSc program and 2 undertaking the MSc post registration program and 1 undertaking the pre-registration program. Phase 2: Fourteen students (11 female and 3 male; average age 23.9±5.3 years) undertook one semi-structured interview (10 undertaking the BSc program, 2 undertaking the MSc post registration program and 2 undertaking the MSc Pre registration program).

Figure 1. The CONSORT 2010 Flow Diagram



3.1 Primary outcome measure

Change across group

There were no significant between group differences for the IRI outcome measure.

Change across time

Confidence interval estimates for the change from baseline identified the following important changes that did not cross zero. The IRI subscales of *personal distress* was identified from baseline to 6-week follow up for the intervention group. See Table 1, Table 2, Figure 2, and Figure 3 for details.

3.2 Secondary outcome measure

Across group differences

No significant differences were identified.

Across Time differences

Confidence interval estimates for the change from baseline identified the following important changes that did not cross zero. This included the Froehlich Scale at baseline to post intervention for the intervention group and the Froehlich Scale and the GSE for the control group from baseline to 6-week follow up.

Table 1 The mean and standard deviation of scores across groups and time points

Group	Time point	IRI: Fantasy Scale	IRI: Perspective Taking Scale	IRI: Empathetic concern	IRI: Personal distress scale	Froehlich	MICA	OMSHC	GSE
Con	baseline	17.3±3.3	19.8±4.6	19.2±4.3	12.9±5.0	167.5±36.8	39.1±9.8	32.3±9.1	30.8±3.6
	post	16.9±3.7	20.3±3.7	19.9±4.5	12.3±4.0	170.8±40.4	38.8±9.9	30.7±9.0	30.2±4.1
	follow up	18.8±4.1	21.0±3.8	19.0±4.9	12.5±4.7	180.3±40.8	38.5±10.1	32.3±8.5	32.0±3.4
Int	baseline	17.3±4.4	21.3±2.8	21.5±3.8	12.8±4.2	191.6±13.8	34.0±5.5	32.2±7.6	29.7±2.8
	post	18.7±6.0	22.1±3.6	22.8±3.6	11.0±3.6	207.8±17.3	31.7±5.6	31.6±7.6	30.4±2.9
	follow up	16.8±5.0	20.8±2.8	21.7±3.4	11.2±3.6	198.7±12.1	33.7±9.6	28.9±7.6	30.5±1.8

Note: Int = Intervention group; Con = motivational interviewing control group; IRI = Interpersonal reactivity index; MICA = Mental Illness Clinicians Attitude Scale; OMSHC = Open Minds Stigma Scale for Health Care Professionals; ± = standard deviation.

Table 2 Showing the mean and 95% CI for change across groups

Group	Change score across time periods		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference	
						Lower	Upper
Intervention	Baseline to post	IRI Fantasy	1.4	4.5	1.3	-1.4	4.3
		IRI Perspective Taking	0.8	1.9	0.6	-0.4	2.1
		IRI Empathetic Scale	1.3	3.4	1.0	-0.9	3.4
		IRI Personal Distress	-1.8	3.8	1.1	-4.2	0.6
		Froehlich Communication Scale	16.3	17.1	4.9	5.4*	27.1*
		MICA	-2.3	4.8	1.4	-5.4	0.7
		OMSHC	-0.6	3.7	1.1	-2.9	1.8
		GSE	0.8	2.0	0.6	-0.5	2.0
	Baseline to 6-week follow up	IRI Fantasy	-0.4	2.4	0.7	-1.9	1.1
		IRI Perspective Taking	-0.4	2.5	0.7	-2.0	1.2
		IRI Empathetic Scale	0.2	1.9	0.5	-1.0	1.3
		IRI Personal Distress	-1.7	2.6	0.8	-3.3*	0.0*
		Froehlich Communication Scale	7.1	13.0	3.8	-1.2	15.4
		MICA	-0.3	9.3	2.7	-6.2	5.6
		OMSHC	-3.3	6.4	1.9	-7.3	0.8
		GSE	0.8	2.4	0.7	-0.7	2.3
Control	Baseline to post	IRI Fantasy	-0.3	2.8	0.8	-2.1	1.4
		IRI Perspective Taking	0.4	2.4	0.7	-1.1	2.0
		IRI Empathetic Scale	0.8	1.4	0.4	-0.2	1.7
		IRI Personal Distress	-0.7	3.1	0.9	-2.7	1.3

		Froehlich Communication Scale	3.3	8.4	2.4	-2.1	8.6
		MICA	-0.3	3.3	1.0	-2.4	1.9
		OMSHC	-1.7	3.1	0.9	-3.6	0.3
		GSE	-0.6	3.6	1.0	-2.9	1.7
	Baseline to 6-week follow up	IRI Fantasy	1.6	3.0	0.9	-0.3	3.5
		IRI Perspective Taking	1.2	2.2	0.6	-0.2	2.5
		IRI Empathetic Scale	-0.2	2.9	0.8	-2.0	1.7
		IRI Personal Distress	-0.4	3.8	1.1	-2.8	2.0
		Froehlich Communication Scale	12.8	13.1	3.8	4.4*	21.1*
		MICA	-0.6	2.1	0.6	-1.9	0.7
		OMSHC	-0.1	3.7	1.1	-2.4	2.2
		GSE	1.3	2.0	0.6	0.0*	2.5*

Note: Int = Intervention group; Con = motivational interviewing control group; IRI = Interpersonal reactivity index; MICA = Mental Illness Clinicians Attitude Scale; OMSHC = Open Minds Stigma Scale for Health Care Professionals; * = 95% confidence interval that do not cross zero.

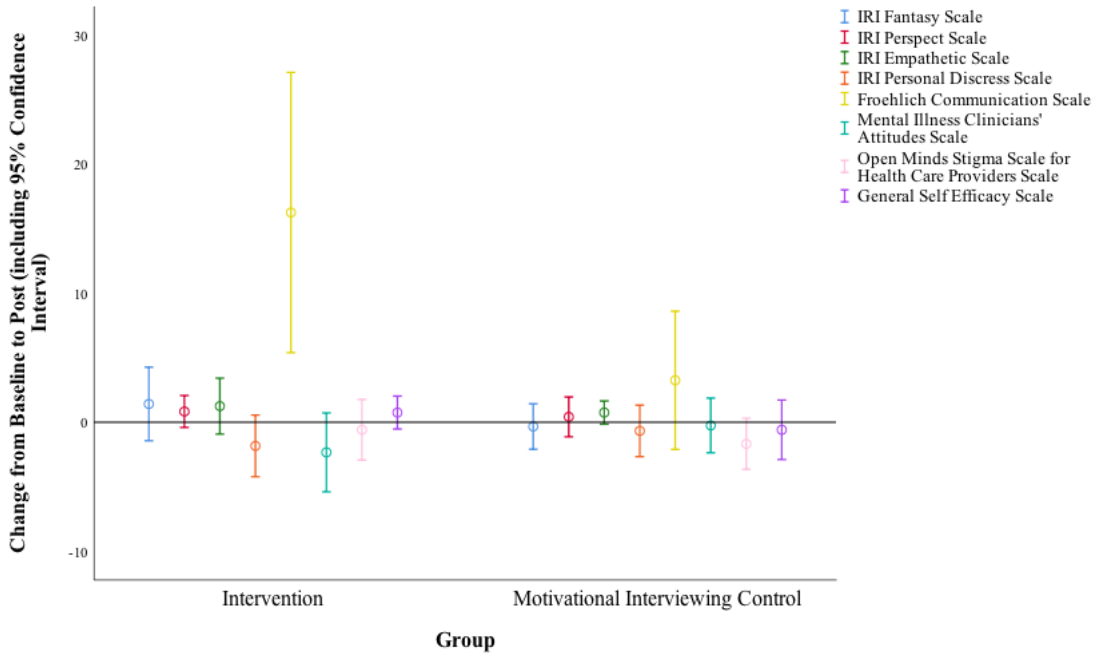


Figure 2 Phase 1 baseline to post change scores across all outcome measures

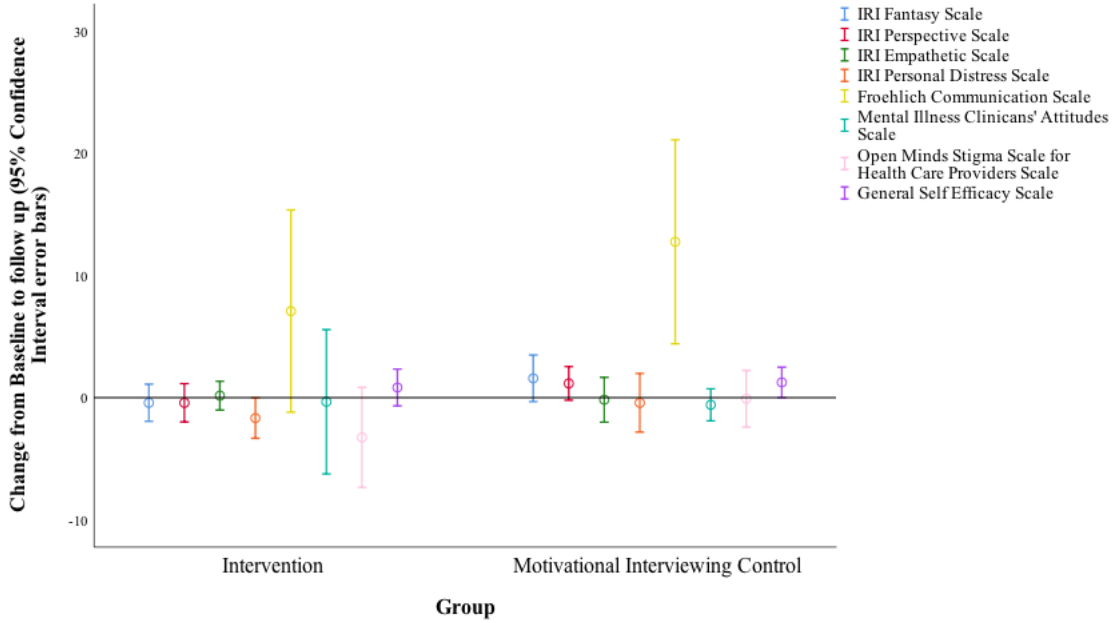


Figure 3 Phase 1 baseline to 6-week follow up change scores across all outcome measures

3.3 Qualitative findings process evaluation

All participants said the e-learning intervention had impacted on them as a therapist and personally and 11 (11/12, 91%) said that future courses should include the course. The most frequently identified impact as a therapist was the perceived ability now to manage, handle and respond to people who are facing challenging situations associated with their diagnosis and symptoms (n=8/12, 67%). At an individual level, the most common response was a greater understanding of the different ways people may cope with problems or difficult situations (n=7/12, 57%). Eight students (8/12, 67%) wanted more content related to the intervention.

3.4 Phase 2 Qualitative findings

Thematic analysis

Five themes were identified; (a) confidence (b) factors which influenced confidence (c) empowerment of the patient (d) factors which influenced empowerment of patients and (e) considerations around implementation of the approach. The full thematic analysis with verbatim example quotes is provided as a supplementary file.

Theme 1 and 2: Confidence and the factors which influence confidence

The intervention seemed to benefit the participant's confidence of communication in particular ways. This was illustrated by two-sub-themes: (1) realisation that helping in a difficult interaction is possible with an accessible approach (2) having confidence to apply the narrative based intervention, with students being able to detail examples of using the training.

Two principle factors appeared to influence students' confidence and perceived ability to apply the intervention. These were described in two sub-themes: (1) being overwhelmed by the content of the interaction. Worry about getting communication wrong and having a lack

of training previously around the practical application of skills appeared to contribute to this. (2) Participants identified a need for further practice. Specifically, they requested further engagement within the training material and being able to practice implementing the techniques within clinical practice further.

Theme 3 and 4: Patient empowerment and the factors that influenced empowerment

Participants identified that the e-learning intervention helped them understand how their communication could be used to empower patients. Participants were able to identify the value of the training in supporting patients to make their own decisions. There were distinct factors which were perceived to affect patient empowerment. Two themes were identified as sub-themes for this: (1) understanding the value of a non-directive approach and that they could recognise the need to allow more time for the patient to speak, to be able to explore more and not 'finish off sentences'. Participants identified that being able to 'unpick' difficulties that a patient presents was an important outcome (2) being able to connect with the patient and the approach was able to help them become more empathic.

Theme 5: Implementation of the approach and further considerations

Participants identified particular ways the approach could be implemented. This was described in four sub-themes: (1) value for particular conditions (2) when the training would be most effective (3) the importance of live teaching (4) requiring more content.

4. Discussion

This is the first study that has used a single e-learning session supported by the MEAH to help the communication of HCP students. Research studies e.g., [4] and organisations e.g., [42, 43] have identified that psychological care as a concept has been missing from the education of physiotherapists as well as other health care providers. Results from Phase 1 provides data of the impact of a single 45-minute course on undergraduate physiotherapists perceptions for the value and possibility of training using e-learning for improved and sustained communication skills. Interestingly, past evidence has failed to identify significant changes at a 3-week follow up [21].

The need for confidence in communication

Physiotherapists have a lack of understanding of the depth of psychological support that should be provided to patients [14] and lack of understanding of how or when to use of scales or, in knowledge of the order or focus of questions when assessing the psychological well-being of patients [7]. One of the most interesting findings from the current research was that the intervention group appeared to perceive challenging interactions less stressful at 6 weeks compared to baseline. This requires further investigation and could illustrate one solution to the identified gap in communication knowledge skills identified from past research [12,13]. Given the current need of intervention that support patients who express distressing situations [44] this work could be particularly important.

Evidence has identified that physiotherapists notice psychological needs of individuals by using specific terms that may categorise individuals considering them in a binary way. For instance, research [45,46] identified that practising physiotherapists identified specific words relating to psychological adaptation which describe people who coped well with

rehabilitation (people with a positive attitude towards life and injury, determination, realistic expectations) verses those who did not (words identified as; depression, unrealistic goals, pessimism, anxiety, anger). Similar findings were illustrated by Soundy et al [47] for final year student physiotherapists. These words use a ‘medical voice’ and can demonstrate a lack of empathy towards patients and highlight the potential for difficult communication to be handled poorly [48]. The current intervention was able to illustrate the importance of understanding psychological adaptation differently using the MEAH and its ability to reveal major illness story plots and the subsequent importance of listening to stories to change psychological well-being.

Further to this, understanding the ability to apply effective skills that work are important. It is also important to note the need for different communication skills for different patients. For instance, physiotherapy students have previously identified motivational interviewing may not be effective for all patient groups. The reasons for this were that some individuals may have a difficult or uncertain future and the individuals who would not change or didn’t perceive the need for help by the physiotherapist [48]. In this example the current intervention could be more effective, but it may be that motivational interviewing is more effective in other settings. Further research is needed to establish effectiveness across setting.

Our findings support past knowledge that physiotherapy students are more comfortable working with strategies around self-talk, goal setting and positive reinforcement rather than other approaches like motivational interviewing [1,8,11]. This study also identifies that such strategies used to achieve rehabilitation goals may not support the skills needed when a patient expresses and reveals distressing information, difficulties, threats or challenges.

Student physiotherapists need to be more aware of how to support and empower individuals using approaches such as the current intervention.

The interactional component of teaching for instance role play, video clips of interactions and exercises may be attributed to improvements in empathy within the single session [21]. Further to this, self-efficacy would likely be advanced more with access to actors and simulated practice environments [49]. The current study has demonstrated improvements are possible without the need for such enhancements and associated costs. This current approach is not only cost effective but can be integrated within clinical placement to enable direct application and reflection to take place.

4.1 Limitations

Dr A Soundy delivered the intervention and control group sessions. This may have influenced student responses. The control group was a previously recorded session delivered to a BSc physiotherapy cohort, with student physiotherapist allowed to ask questions. **This session was an extracurricular activity. It is known that some underrepresented groups such as those from lower socio-economic or ethnic minority groups are less likely to participate in such activities [50], potentially influencing our findings'.** The intervention group had no student interaction within the recorded lecture. The female/male ratio was higher in the study (84%) than within the United Kingdom (76%) [51]. The level of the students may be different to courses in other countries. Only self-report measures were used in Phase 1.

4.2 Conclusions

The current results illustrate the importance and impact of a single e-learning narrative based intervention for enhancing physiotherapy students' communication immediately. **Changes from baseline to 6-weeks for the intervention group (perceived personal distress during challenging interactions) and control group (general communication and self-confidence) require further investigation.** Given the global impact of COVID-19 this could be an important way of enhancing HCP-patient interactions. Further to this this research demonstrates the specialist skills training can be offered on a wide scale with limited costs or time requirements from clinicians.

4.2 Practical Implications

The current intervention may be more effective for settings where distressing experiences and information are provided during a student-patient interaction. It may be a useful approach that should be tested to see if it meet the needs of professionals including dealing with patient concerns, panic and anxiety [44].

The current research suggested that these e-learning communication training could be provided before placement to enhance the impact of the findings. This has shown to be effective for physiotherapy students using motivational interviewing [48] and simulated practice [52]. Alternatively, role play as part of the training would provide practical application of communication skills and may have greater benefits on the student. This may be enhanced by considering the use of students with more experience to support the process [53].

Under-skilled supervisors in clinical practice may not be able to support training in practice [45]. This will need further understanding and consideration.

Use of e-learning, recordings and telehealth to enable social distancing by students being able to think about specific stories/narratives and the impact these might have is important for further research.

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