Journal of Interprofessional Education & Practice 32 (2023) 100652

Contents lists available at ScienceDirect

Journal of Interprofessional Education & Practice

journal homepage: www.elsevier.com/locate/jiep

What keeps the flame burning? A qualitative study on tutor motivation to guide students in interprofessional education

Saskia C.M. Oosterbaan-Lodder [a,*], Laura S. Kortekaas [a,b], Fedde Scheele [a,c,d], Rashmi A. Kusurkar [d,e]

[a] Teaching Hospital OLVG, Jan Tooropstraat 164, Amsterdam, the Netherlands
[b] Faculteit der Geneeskunde Vrije Universiteit, De Boelelaan 1117, Amsterdam, the Netherlands
[c] Athena Institute, Vrije Universiteit, De Boelelaan 1085, Amsterdam, the Netherlands
[d] Amsterdam UMC Location Vrije Universiteit, Research in Education, De Boelelaan 1118, Amsterdam, the Netherlands
[e] LEARN! Research Institute for Learning and Education, Faculty of Psychology and Education, VU University, Van der Boechorststraat 7, Amsterdam, the Netherlands

ARTICLE INFO

Keywords:
Interprofessional education
Tutor
Motivation
Interprofessional training unit

ABSTRACT

Background and purpose: It remains challenging to implement and sustain Interprofessional Training Units (ITUs) for equipping health professional students with competencies that are essential for providing collaborative patient-centered care. In this qualitative study, we aimed to identify types of motivation of IPE tutors, the factors that influence their motivation and how these factors can be used to facilitate implementation and sustenance of ITUs.

Methods: We interviewed twelve midwifery and nursing tutors of an ITU on a maternity ward regarding their motivation for their role as tutors. Content analysis was performed on the data.

Results: IPE tutors had various types of motivation for guiding interprofessional groups of healthcare students. Key factors influencing their motivation included appreciation for their role, perceived effectiveness of their guidance, learning from others, and a balance between their roles as health care professional (HCP) and tutor.

Discussion and conclusion: HCPs serving as IPE tutors can be moved from controlled to autonomous motivation through enhancement of their feelings of autonomy, competence and relatedness, by providing tutors with operational support and professional development opportunities. Being a tutor also seems to foster the HCPs' professional identity. Further research is required to determine how tutors' professional, interprofessional and tutor identities influence IPE outcomes for all stakeholders.

Introduction

In an increasingly complex healthcare system, healthcare professionals (HCPs) need to collaborate to accomplish optimal health outcomes for patients. Interprofessional education (IPE) is seen as a key mechanism to foster the knowledge, skills and attitudes needed for effective delivery of collaborative care. IPE occurs when two or more professionals learn about, from and with each other to enable effective collaboration and to improve health outcomes.[1] The overall goal of IPE for collaborative person-centered practice is to modify behaviors and ways of working together to improve healthcare outcomes, service efficiency, cost-effectiveness, and staff satisfaction.[2,3] IPE at pre-qualifying level can develop positive attitudes towards each other's professions[4] and improve students' collaborative knowledge and skills,[5–7] which will lead to better patient care.[8–10] One of the ways planned IPE can take place in a clinical setting is through students learning and working together in Interprofessional Training Units (ITUs) in hospital departments,[11–13] where they are guided by trained IPE facilitators. In this paper IPE facilitators are indicated as IPE tutors, since they guided small groups of HCPs students on the ITU. As more and more healthcare institutions are making efforts to implement and sustain IPE in their healthcare curricula, it is necessary to know how to keep faculty, more specifically IPE tutors, motivated to effectively facilitate IPE.

IPE facilitators, ranging from clinicians to administrators, are regarded as central to the delivery of IPE.[14–16] The literature so far seems to emphasize their need for faculty support with regards to developing a shared purpose in guiding IPE through faculty development programmes[17,18] and organizational support in terms of dedicated structure

* Corresponding author. Teaching Hospital OLVG, P.O. Box 9243, 1006, AE, Amsterdam, the Netherlands.
E-mail address: s.oosterbaan@olvg.nl (S.C.M. Oosterbaan-Lodder).

https://doi.org/10.1016/j.xjep.2023.100652
Received 3 May 2022; Received in revised form 4 April 2023; Accepted 15 May 2023
Available online 16 May 2023

for IPE.[19] There is, however, a paucity of literature focusing on opinions and attitudes of IPE tutors regarding their role in ITUs. More specifically, insight into the motivation of these IPE tutors for their role could guide implementation and development of ITU initiatives. Furthermore it could help prevent unnecessary use of resources, such as ongoing investment to train and schedule HCPs as IPE tutors who, over time, may become less motivated and decide to withdraw from this role. Insight into the motivation of IPE tutors also has the potential to improve HCP satisfaction, which is the fourth aim of IPE,[20] and to prevent health professional burnout.[3] This is important in the current scenario of scarcity of nurses and midwives in our national as well as the international healthcare,[21–24] and of the increasing demands to educate more future healthcare professional students interprofessionally.[1]

Self-determination theory (SDT)

A major motivation theory that is widely used and validated in many contexts, including healthcare, is the self-determination theory (SDT).[25] SDT has been applied before in research on student outcomes after their placement on an ITU,[26] as well as in research on the motivation of medical specialists,[27] but to our knowledge, SDT has not been applied so far to explore the motivation of HCPs for their role in guiding students within an ITU. SDT classifies two types of motivation: controlled motivation and autonomous motivation. Controlled motivation implies that the behavior is driven by expected rewards or threat of punishment (external regulation), or by internal pressure, such as feelings of guilt or shame (introjected regulation). Autonomous motivation concerns intrinsic motivation (doing something out of interest or enjoyment), identified regulation (appreciation of certain behavior as personally valuable) and integrated regulation (personally endorsed values as part of oneself). Autonomous motivation is considered to be the optimal type of motivation, as it leads to better performance, greater wellbeing and increased resilience.[25,28] For a person to be autonomously motivated, three basic psychological needs need to be fulfilled: autonomy (experiencing a sense of volition), perceived competence (feeling capable of mastery at a task) and relatedness (feeling connected with peers or significant others).

The purpose of this research was to identify types of motivation of nurses and midwives for their role as IPE tutors, the factors that influence their motivation and to determine how these factors can be used to facilitate the implementation and sustenance of ITUs.

Methods

In this exploratory qualitative study, we interviewed nursing and midwifery tutors about their motivation for their role within the ITU on the maternity ward. We used a realist approach [49] because our interest was in their perceptions of their reality. Subsequently, we used the lens of the SDT to identify factors that influenced the tutors' motivation.

Study setting

In September and October 2021 interviews were conducted with tutors of an ITU on the maternity ward of a teaching hospital in Amsterdam, the Netherlands. The ITU unit, that was instituted in October 2016, comprised 4 rooms of a total of 16 single hospital rooms on the maternity ward. In this unit, a team of undergraduate healthcare students were responsible for planning, delivering and evaluating the treatments of a maximum of 4 mothers and their newborns during the daytime shift, from Monday morning or from the time of their admission until discharge from the hospital. The team consisted of 4 students: two undergraduate medical students during their clinical placement in gynecology or pediatrics, one 3rd year midwifery student and one nursing student. The team members were working and learning together in pairs under supervision of a nursing and a midwifery tutor. All midwives and nurses working on the maternity ward had received a 3-h staff development training before starting as tutors. As tutors, the nurses provided students with hands-on guidance in taking care of patients during their entire shift. Midwifery tutors attended the patient care meetings, were responsible for approving patient care plans, and could be consulted by the students when needed. The students could also consult other HCPs, such as gynecologists and pediatricians, when necessary.

Sampling

Respondents were selected through purposeful sampling. All tutors were invited by mail to volunteer to be interviewed. We asked participating tutors to provide the names of colleagues they perceived feeling most and least willing to be scheduled as tutors in order to gain richness in perspective and to gain a broad range of answers to our research questions. After providing informed consent, the participants were interviewed in an office close to their workplace. The recruitment of participants continued until no new information on motivation and on motivating and demotivating factors emerged in the interviews, i.e. until data sufficiency was achieved.

Data collection

An interview guide was designed based on existing literature on IPE and on the SDT (Topic list: Appendix). Individual face-to-face semi-structured interviews were conducted by two researchers (SO and LK). The tutors were interviewed during a week that they operated as IPE tutor. After an opening question on their thoughts about the ITU, respondents were encouraged to give in-depth information on factors that motivated or demotivated them for their role as tutors on the ITU, using the predetermined categories of the SDT. All interviews were audio-recorded, transcribed verbatim and anonymized. A summary was sent to the participants for respondent verification.

Data analysis

Directed content analysis was performed on the data with the goal to validate or conceptually extend a theoretical framework or theory.[29] This kind of analysis was considered appropriate because the Self Determination theory (SDT)[25] was used to inform the interview guide and to guide the coding and analysis of the interview data. At the start of each interview, demographic data were collected, such as age, gender, educational level and the amount of time the nurse or midwife had been functioning in their role as tutor. The transcripts were read to obtain a first impression of factors motivating or demotivating the IPE tutors, followed by deductive coding, while being open to new codes. Interviews and coding were performed iteratively. Data were analyzed using Atlas. ti 9, a qualitative data analyzing software program. During analysis, the authors (SO, LK, RK and FS) discussed codes, code groups and finally themes until consensus was reached.

Reflexivity

The research team was composed in such a way as to ensure multiple perspectives. SOL, a senior medical educator, is the project coordinator of the ITU on the maternity ward and a geriatric ward, and currently explores further opportunities for ITUs in OLVG and other hospitals in the Netherlands. LK, a 6th-year medical student, was involved as one of the medical students in the ITU on the maternity ward 18 months before the interviews took place. FS is a practicing gynecologist and obstetrician as well as a professor in health care innovation, with long experience in medical education and qualitative research. RAK is a medical doctor by background, currently works as a research programme leader and is an expert on SDT. She has long experience in qualitative research. As a research team we acknowledge our perspective that we find IPE important and useful for training HPE students.

Ethical considerations

Approval for the study was obtained from the Scientific Research Committee in OLVG (research no WO 21.097). Researchers had no hierarchal relationship with the tutors. No incentives were offered for participation.

Results

We interviewed 12 IPE tutors, out of a total of 36 tutors. The interviews lasted between 40 and 65 min each. All interviewees were female since there were no male HCPs on the maternity ward at the moment of the interviews. Six participants were nurses, either general nurses or nurses specialized in obstetrics. Six participants were midwives, and three of them also were physician assistant (PA). Table 1 depicts the demographics of the participants. After 12 interviews, no new codes emerged in the data.

What motivated nurses and midwives for their role as tutor?

We identified various types of motivation for serving as an IPE tutor, ranging from controlled to autonomous motivation.[25]

Controlled motivation

Some interviewees revealed controlled motivation for their role, since they regarded serving as a tutor as just a part of their job as an HCP in a teaching hospital. Others indicated that they felt obligated to teach future professionals about the different roles and responsibilities within the healthcare team, fearing that the pressure of guiding students would otherwise be on the colleagues that remained in the role of tutor. The only participant who had resigned as a tutor stated that in her case, this kind of motivation had not been sustainable.

Autonomous motivation

Some tutors stated that they genuinely loved guiding an interprofessional group of students. They gained energy and satisfaction from seeing students suddenly understand something while they were learning. Furthermore, by sharing their own knowledge and skills with the students, these tutors felt enabled to show the students, especially the medical students, the importance of protecting physiological processes instead of focusing only on medical diagnoses.

Nursing tutors stressed that they were keen to demonstrate the importance of the nurses' role on the maternity ward to the students, especially to the medical and midwifery students, besides helping them to grow in empathic communication and in understanding new parents and their newborns. Others believed in the value of IPE for students, stressing the importance of guiding the students to become HCPs who would know about and understand each other's roles and responsibilities, which would eventually lead to improved patient care. The quotes from the interviewees belonging to the different kinds of motivation are depicted in Table 2.

Table 1
Demographics of the participants.

Discipline	Age (in years)	Experience as HCP (in years)	Experience as IPE tutor (in years)	Still in function as IPE tutor
General nurse	35	9	5	Yes
General nurse	31	10	5	Yes
Obstetric nurse	26	2.5	0.5	Yes
Obstetric nurse	33	11	0.5	No
Obstetric nurse	26	4	2	Yes
Obstetric nurse	58	27	5	Yes
Midwife	43	10	3	Yes
Midwife & PA	50	26	5	Yes
Midwife & PA	61	36	5	Yes
Midwife & PA	47	18	4	Yes
Midwife	56	32	4.5	Yes
Midwife	28	4	3	Yes

What were factors that influenced tutors' motivation?

After identifying the different types of motivation, we found different factors that influenced the motivation for their role as tutors. These factors were classified into four themes, which were connected to the aforementioned three basic psychological needs of autonomy, perceived competence and relatedness: (1) feeling appreciated for their role, (2) learning from others, (3) perceived effectiveness of guidance, and (4) conflict of interest between guiding students and patient care. Within each of these themes, the tutors mentioned several barriers and enablers.

(1) Feeling appreciated for your role

Participants, especially nurses, stressed that their motivation to serve as a tutor was stimulated when they felt valued by the students for their knowledge and skills in patient care, enhancing their feelings of competence as HCP and tutor. This was important to the tutors since supervising students in patient care, instead of interacting directly with the patients, resulted in decreased feelings of appreciation for their care from the patients, which negatively influenced the tutors' sense of competence and relatedness. Feelings of being appreciated by students decreased when tutors came across unmotivated students, even more so when they perceived that students, especially medical students, looked down on the nurses' role or made them insecure about their knowledge and skills.

> *'When the students would constantly look down on me as a nurse that would be a reason to quit as a tutor' (N5)*

Participants also stated that their motivation decreased when they did not have the opportunity to guide the students several days in a row. Being a tutor for just one day created no opportunities for appreciation and feedback from the students, since tutors needed to spend a lot of time and effort on guiding and helping the students, especially at the beginning of the week.

> *'Because I only have one day, I don't get enough appreciation on that one day, I find it rather frustrating … but I like IPE so much, I like the whole project so much, and I would like to contribute to that, so it feels like a difficult balancing act' (N6)*

Guiding students several days in a row enabled the tutors to be inspired by the openness, freshness, knowledge and motivation of the students who wanted to learn about and with each other as well as from the tutors. The tutors also mentioned the desire for more involvement and appreciation from the hospital's management and from the other HCPs, such as gynecologists and pediatricians, especially since nurses and midwives also trained medical students within the ITU.

(2) Perceived effectiveness of guidance

Participants experienced the staff development training before commencing as tutors as indispensable in preparing for their role. This training provided a clear overview of what was expected from them as tutors, as well as from the students. Tutors expressed the wish for annual or biannual follow-up peer feedback sessions to discuss their experiences as tutors with each other, to be able to suggest changes to each other and the coordinator, thereby increasing their autonomy and competence as

Table 2
Nurses' and midwives' motivation for their role as IPE tutors along the Self-Determination Continuum (adapted from Ryan and Deci's article[25]) (N = nurse, M = midwife, MP = midwife and PA).

Behavior	Type of motivation		Type of regulation	Motivations of tutors	Quotes from interviewees
Not Self-determined	Amotivation		No regulation		
	Extrinsic motivation	Controlled motivation	External regulation	Serving as a tutor is part of my job so I do it	'When you work in a teaching hospital, being a tutor is part of your job description' (N4)
			Introjected regulation	Serving as a tutor due to a sense of obligation, fearing to put pressure on the remaining tutors	'If no one wants to do it, the pressure will be on the few remaining tutors' (N6) 'there are shortages in people teaching students and that is a bad thing …. we work with young people … so I felt obliged' (N4)
		Autonomous motivation	Identified regulation	Believing in the value of IPE for students and patients	'So I think, yeah, those small things, the social aspects, as a clinical midwife, I think that is it very important … and I believe that that is our added value … keeping an eye on physiology ….contact with patients …. good communication … yes, and that we can contribute in that way a very great deal ….so I think it is very important to show that to the medical students' (M6) 'because I see how [in IPE] the students are on top of the patient case, that they know every detail … and if there are things we or they didn't think about, that questions are asked. and in that way patients get more time and attention' (M1) 'the patients see the same faces [of the student team] four days in a row … and there is continuity for the patient' (MP1)
			Integrated regulation	Representing their role as HCP in patient care	' … not just transferring knowledge, but that they know wat a nurse actually does in the workplace' (N1)
Fully self-determined	Intrinsic motivation		Intrinsic regulation	Enjoyment in helping students learn and work interprofessionally	'I really love explaining things and sharing knowledge with each other'' (M1)

tutors as well as their relatedness to each other in guiding the students in this unit.

Being able to perceive the effects of their guidance on the students enhanced the tutors' motivation for their role as tutors. When they were scheduled for only one day at a time, they experienced the burden of spending a lot of energy on getting to know the students and their specific learning goals, besides getting acquainted with the patients who were placed in the students' care. This burden resulted in feeling unable to effectively guide the students in the way they desired, while also not providing optimal patientcare. For a higher return on the investment of their efforts, they preferred to be scheduled in the ITU for more days in a row.

> *'And then you're expected to guide them in one day ….although I don't know the patients yet and I don't know the students. And on top of that I need to give them feedback … that's very difficult … you put in a lot of energy, but you don't know what they do with it … ' (N6)*

The tutors' sense of perceived effectiveness also increased if students provided tutors with feedback after their week on the ITU. Both midwives and nurses suggested that it would help them to receive some sort of summary of what the students had learned, since most of them did not interact with the students at the end of their week in the ITU. Although they were knowledgeable about the overall effects of IPE on patients, they stated that it would motivate them to know more about the patient experience on this specific ITU, as this would also enhance their feelings of competence as tutors, as well as their relatedness to the patients.

(3) Learning from others

Guiding students with peer tutors enlarged tutors' sense of competence in guiding students from other professions as well as from their own. Furthermore, both midwives and nurses said that their motivation to serve as tutors was fostered when they themselves could also obtain new knowledge and insights, especially during the patient care meetings. During these meetings, students present the patients and propose patient care plans, with room for interprofessional clinical reasoning between students and tutors. Furthermore, there would be another opportunity for shared learning between students and tutors when the students hand the patients over to the evening shift. This shared learning would enable tutors to stay abreast of the newest medical insights, which would possibly also improve their own skills in family-centered care.

> *'Because you advance in the theory, which makes you look differently at a patient … because of more depth of insight. And of course, that's different on the regular ward, because then you're just a nurse ….although you have your colleagues, it's different. Here you are forced to go deep when you're involved in IPE' (N2)*

Since midwifery tutors are also responsible for other patients on the ward, besides guiding the students in the ITU, they indicated that other patient care obligations sometimes distracted them during clinical reasoning with the students, thus preventing them from utilizing this dedicated time. They especially expressed the need for support in the beginning of the week, with a lot of administrative tasks remaining from the weekend, tutors not yet being acquainted with the students, and students having logistical questions. A coordinator helping the students with these logistical issues would facilitate tutors to focus on guiding students and free up their own minds for gaining new knowledge.

(4) Balance between patient care and role as tutor

Both midwives and nurses expressed that serving as a tutor provided them with a welcome variation between work as an HCP and teaching. However, serving as a tutor too frequently caused them to experience less work satisfaction because of a lack of opportunities to interact with the patients themselves while the tutors guide the students in patient care. Furthermore, especially midwives indicated that, on days with staff shortage, they experienced a constant conflict between these two roles, because they also had other patient care obligations. In those instances, some tutors felt that guiding students prevented them from

providing patient care in the most efficient way. This resulted in feelings of guilt towards their colleagues and the patients in the labour department, who needed their help, which in turn influenced their sense of competence as an HCP, their relatedness with their colleagues and their sense of autonomy in their work.

> *'When the whole time you are being pulled at from downstairs [delivery rooms] because it's too busy … We are continuously understaffed … and then it's not pleasant, and I cannot release myself [from the maternity ward] because it's scheduled so unpractically ….but because of the chronic staff shortage, I get phone calls from downstairs [delivery ward], 'you have to come help now, we have four women fully dilated' and then I say 'I can't, I cannot leave [the students]. That's a real issue' (MP3)*

Help from a coordinator, who would organize practicalities for the students in the beginning of the week, felt indispensable. Since many of the IPE students were completely new to the maternity ward, tutors also stressed the importance of starting the week with the students taking care of only a few patients, besides the patients not being too complicated, to help the tutors in maintaining a good balance between their roles as an HCP and a tutor. Table 3 presents an overview of the factors that influenced tutor motivation, including barriers and enablers mentioned by the tutors.

To facilitate the implementation and sustenance of ITUs, the barriers mentioned in Table 3 need to be overcome and the enablers mentioned need to be incorporated in the ITU design.

Discussion

The purpose of this exploratory qualitative interview study was to identify the factors that influence the motivation of nursing and midwifery IPE tutors for their role and to determine how these factors can be used to facilitate the implementation and sustenance of interprofessional training units (ITUs). We found different types of motivation among nursing and midwifery tutors who guide students in an ITU, ranging from controlled to autonomous motivation. We found that their motivation was influenced by four factors: feeling appreciated for their role, perceiving effectiveness of their guidance, being able to learn from others and keeping a balance between their work as an HCP and a tutor. These four factors supported their autonomy, competence and relatedness needs. Since motivated tutors are central to guiding students within an ITU, it is important to know these factors in order to move these tutors from controlled to more autonomous motivation for their role. Enabling autonomous motivation of these tutors as change agents of interprofessional learning and collaboration can also impact their job satisfaction and wellbeing, besides HCPs students' motivation to learn interprofessionally.[30,31] According to our research, operational support and tutor development opportunities are not only indispensable for implementing ITUs, as was presented in a recent study on IPE implementation,[32] but also for sustaining them.

Table 3
Overview of factors influencing tutor motivation, and their barriers and enablers.

Barriers	Factors influencing motivation	Enablers
• Lack of appreciation from management and other HCPs for tutor role • Guiding students for a single day • Unmotivated students	Feeling appreciated for one's role	• Appreciation from management and other HCPs for tutor role • Guiding students several days in a row • Appreciation from students
• Guiding students for a single day • Lack of feedback from students • Lack of feedback from patients under students' care	Perceived effectiveness of guidance	• Guiding students several days in a row • Initial and continuous staff development and peer feedback • Timely feedback from students and from patients under students' care
• Being called away from a patient care meeting because of patient needs elsewhere	Learning from others	• Initial and continuous staff development and peer feedback • Dedicated clinical reasoning sessions with students and peer-tutors
• No choice in frequency of being a tutor • Patients in ITU being too complicated for students	Balance between roles as HCP and tutor	• operational support, especially at the beginning and the end of the week

The participating tutors indicated the need for operational support to schedule the different students for their placement. Besides, our research also indicates that tutors are more motivated for their role when they are enabled to guide students for several days in a row. Furthermore, their motivation is fostered when they are provided with an overview of students' professional and interprofessional learning objectives at the beginning of the placement. These findings are in line with the findings of earlier studies on university teachers' perceptions of interprofessional learning and the role of teachers in achieving the desired outcomes.[10,19,33,34] Additional support to guarantee timely feedback on the tutors' guidance at the end of the placement also fosters motivation for their role, as does information on student and patient outcomes, which is in line with the outcomes of research on motivation among academic teaching faculty.[35]

Our research also points out the importance of initial and continuous tutor development and training to keep tutors motivated for their role. Formally, they require preparation for their guiding skills and repertoires, since the focus is on their ability to scaffold students' interprofessional clinical reasoning and learning,[36] besides coaching students to work as a team in delivering patient-centered care. This finding is in line with the outcomes of research on how to prepare educators involved in IPE.[37–39] Informally, dedicated clinical reasoning with students and peer tutors provided tutors with opportunities to gain knowledge and skills, besides reflexivity on their new role, with the potential to positively influence tutor motivation and sustainability of ITUs. These professional development opportunities were also mentioned in previous studies as an important prerequisite for job satisfaction for nursing educators teaching interprofessional collaboration to students,[40,41] and in HCPs teaching classroom-based IPE.[42,43] Assuming that formal and informal tutor development is important for enhancing their motivation, it could be helpful to create communities of IPE tutors from different professions, which might convene annually or bi-annually. Such communities of tutors can be used for sharing overall student and patient outcomes within the ITU, for reflecting on and empowering each other for their tutor role, and for supporting beginning tutors in their role. This could create a sense of autonomy, competence and relatedness with each other as well as a sense of ownership in sustaining and improving the quality of these dedicated interprofessional placements, as was also mentioned in a study that used change management principles for sustaining interprofessional simulation.[44] Further research could provide more insight into which of the development opportunities, formal or informal, are most effective in enhancing tutor motivation.

Finally, in the present study, serving as tutors did not seem to provide HCPs with clarification of their professional responsibilities nor with improvement of interprofessional communication, which is in contrast with the findings in previous research.[45,46] This difference could be explained by the fact that the midwives and nurses in the present study already collaborated interprofessionally during their work on maternity and labour wards. Nevertheless, guiding students in an ITU did seem to be fostering the tutors' professional identity, more than their interprofessional identity, which is defined as a 'robust cognitive, psychological and emotional sense of belonging to an interprofessional community, necessary to achieve shared context-dependent goals'.[47] Since HCPs

serving as IPE tutors also have a teaching role or identity, which is defined as 'a teacher's understanding of him- or herself as a teacher',[48] further research might explore how these different identities are influenced by guiding students within an ITU, and which identity is likely to lead to the best IPE outcomes for all stakeholders.

Limitations

Using the lens of the SDT, this study revealed important factors that influence the motivation of IPE tutors. Since our research focused on the motivation of midwives, physician assistants and nurses on a maternity ward, the transferability of our findings is limited. Further research could help comprehend what motivates medical specialists and other HCPs to contribute to IPE in different contexts.

Conclusion

The present study provides a basis for enhancing nursing and midwifery HPCs' autonomous motivation to serve as IPE tutors. Using the lens of the SDT, this study revealed that HCPs' motivation for their role as tutors on ITUs can be enhanced by providing organizational support and development opportunities. Serving as tutors also seemed to foster their professional identity. When implementing and sustaining IPE wards, it is important to support the IPE tutors' autonomy, competence and relatedness in order to maintain and enhance their motivation to guide students and to foster the knowledge, skills and attitudes needed for effective delivery of collaborative care.

Approval

Obtained from the Scientific research Committee of OLVG (research no. WO 21.097)

Source of funding

This research study was funded by the OLVG Scientific Research foundation (number 598208), Amsterdam, the Netherlands.

CRediT authorship contribution statement

Saskia C.M. Oosterbaan-Lodder: Conceptualization, Methodology, Validation, Investigation, Formal analysis, Data curation, Writing – original draft, Writing – review & editing, Funding acquisition. **Laura S. Kortekaas:** Methodology, Investigation, Formal analysis, Writing – original draft. **Fedde Scheele:** Conceptualization, Formal analysis, Data curation, Writing – review & editing. **Rashmi A. Kusurkar:** Conceptualization, Validation, Formal analysis, Writing – review & editing, Supervision.

Declaration of competing interest

The authors have no conflict of interest to report. The authors alone are responsible for the content and writing of this article.

Acknowledgements

We thank all the midwives and nurses working as IPE tutors on the maternity ward of OLVG hospital, in particular the ones that provided us the opportunity to interview them, and Lisette van Hulst for editing assistance.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.xjep.2023.100652.

References

1. WHO. *Framework for Action on Interprofessional Education and Collaborative Practice*. World Health Organization; 2010.
2. D'Amour D, Oandasan I. Interprofessionality as the field of interprofessional practice and interprofessional education: an emerging concept. *J Interprof Care*. 2005;19 (Suppl 1):8–20.
3. Bachynsky N. Implications for policy: the triple aim, quadruple aim, and interprofessional collaboration. *Nurs Forum*. 2020;55(1):54–64.
4. Hawkes G, Nunney I, Lindqvist S. Caring for attitudes as a means of caring for patients–improving medical, pharmacy and nursing students' attitudes to each other's professions by engaging them in interprofessional learning. *Med Teach*. 2013; 35(7):e1302–e1308.
5. Brewer ML, Flavell HL. Teamwork, collaboration and networking: self-reported behavioural change following pre-licensure interprofessional clinical learning. *J Interprof Care*. 2020;34(2):184–192.
6. Pollard KC, Miers ME, Rickaby C. "Oh why didn't I take more notice?" Professionals' views and perceptions of pre-qualifying preparation for interprofessional working in practice. *J Interprof Care*. 2012;26(5):355–361.
7. Guraya SY, Barr H. The effectiveness of interprofessional education in healthcare: a systematic review and meta-analysis. *Kaohsiung J Med Sci*. 2018;34(3):160–165.
8. Hammick M, Freeth D, Koppel I, Reeves S, Barr H. A best evidence systematic review of interprofessional education: BEME Guide no. 9. *Med Teach*. 2007;29(8):735–751.
9. Reeves S, Fletcher S, Barr H, et al. A BEME systematic review of the effects of interprofessional education: BEME Guide No. 39. *Med Teach*. 2016;38(7):656–668.
10. Oosterom N, Floren LC, Ten Cate O, Westerveld HE. A review of interprofessional training wards: enhancing student learning and patient outcomes. *Med Teach*. 2019; 41(5):547–554.
11. Jakobsen F, Hansen J. Spreading the concept: an attempt to translate an interprofessional clinical placement across a Danish hospital. *J Interprof Care*. 2014; 28(5):407–412.
12. Jakobsen F. An overview of pedagogy and organisation in clinical interprofessional training units in Sweden and Denmark. *J Interprof Care*. 2016;30(2):156–164.
13. Khan NS, Shahnaz SI, Gomathi KG. Currently available tools and teaching strategies for the interprofessional education of students in health professions: literature review. *Sultan Qaboos University medical journal*. 2016;16(3):e277–e285.
14. Lawlis TR, Anson J, Greenfield D. Barriers and enablers that influence sustainable interprofessional education: a literature review. *J Interprof Care*. 2014;28(4): 305–310.
15. Reeves S, Pelone F, Hendry J, et al. Using a meta-ethnographic approach to explore the nature of facilitation and teaching approaches employed in interprofessional education. *Med Teach*. 2016;38(12):1221–1228.
16. de Vries-Erich J, Reuchlin K, de Maaijer P, van de Ridder JM. Identifying facilitators and barriers for implementation of interprofessional education: perspectives from medical educators in The Netherlands. *J Interprof Care*. 2017;31(2):170–174.
17. Croker A, Wakely L, Leys J. Educators working together for interprofessional education: from "fragmented beginnings" to being "intentionally interprofessional". *J Interprof Care*. 2016;30(5):671–674.
18. Watkins KD. Faculty development to support interprofessional education in healthcare professions: a realist synthesis. *J Interprof Care*. 2016;30(6):695–701.
19. El-Awaisi A, Sheikh Ali S, Abu Nada A, Rainkie D, Awaisu A. Insights from healthcare academics on facilitating interprofessional education activities. *J Interprof Care*. 2021;35(5):760–770.
20. Bodenheimer T, Sinsky C. From triple to quadruple aim: care of the patient requires care of the provider. *Ann Fam Med*. 2014;12(6):573–576.
21. Kox J, Groenewoud JH, Bakker EJM, et al. Reasons why Dutch novice nurses leave nursing: a qualitative approach. *Nurse Educ Pract*. 2020;47, 102848.
22. Lancet T. *The Status of Nursing and Midwifery in the World*. vol. 395. 2020:1167.
23. Nove A, ten Hoope-Bender P, Boyce M, et al. The State of the World's Midwifery 2021 report: findings to drive global policy and practice. *Hum Resour Health*. 2021; 19(1):1–7.
24. Both-Nwabuwe JM, Dijkstra MT, Klink A, Beersma B. Maldistribution or scarcity of nurses? The devil is in the detail. *J Nurs Manag*. 2018;26(2):86–93.
25. Ryan RM, Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Am Psychol*. 2000;55(1):68–78.
26. Visser CLF, Kusurkar RA, Croiset G, Ten Cate O, Westerveld HE. Students' motivation for interprofessional collaboration after their experience on an IPE ward: a qualitative analysis framed by self-determination theory. *Med Teach*. 2019;41(1): 44–52.
27. van der Burgt SME, Kusurkar RA, Croiset G, Peerdeman SM. Exploring the situational motivation of medical specialists: a qualitative study. *Int J Med Educ*. 2018;9:57–63.
28. Ten Cate TJ, Kusurkar RA, Williams GC. How self-determination theory can assist our understanding of the teaching and learning processes in medical education. AMEE guide No. 59. *Med Teach*. 2011;33(12):961–973.
29. Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. *Qual Health Res*. 2005;15(9):1277–1288.
30. Goldie J, Dowie A, Goldie A, Cotton P, Morrison J. What makes a good clinical student and teacher? An exploratory study. *BMC Med Educ*. 2015;15:40.
31. Ryan RM, Deci EL. Intrinsic and extrinsic motivation from a self-determination theory perspective: definitions, theory, practices, and future directions. *Contemp Educ Psychol*. 2020;61, 101860.
32. Wong PS, Chen YS, Saw PS. Influencing factors and processes of interprofessional professional education (IPE) implementation. *Med Teach*. 2021;43(sup1):S39–s45.

33. Grymonpre RE, Ateah CA, Dean HJ, et al. Sustainable implementation of interprofessional education using an adoption model framework. *Can J High Educ*. 2016;46(4):76–93.
34. Lindqvist S, Vasset F, Iversen HP, Hofseth Almås S, Willumsen E, Ødegård A. University teachers' views of interprofessional learning and their role in achieving outcomes - a qualitative study. *J Interprof Care*. 2019;33(2):190–199.
35. van den Berg BA, Bakker AB, Ten Cate TJ. Key factors in work engagement and job motivation of teaching faculty at a university medical centre. *Perspect Med Educ*. 2013;2(5-6):264–275.
36. Visser CL, Wouters A, Croiset G, Kusurkar RA. Scaffolding clinical reasoning of health care students: a qualitative exploration of clinicians' perceptions on an interprofessional obstetric ward. *J Med Educ Curricular Dev*. 2020;7, 2382120520907915.
37. Anderson ES, Cox D, Thorpe LN. Preparation of educators involved in interprofessional education. *J Interprof Care*. 2009;23(1):81–94.
38. Anderson ES, Thorpe LN, Hammick M. Interprofessional staff development: changing attitudes and winning hearts and minds. *J Interprof Care*. 2011;25(1):11–17.
39. Egan-Lee E, Baker L, Tobin S, Hollenberg E, Dematteo D, Reeves S. Neophyte facilitator experiences of interprofessional education: implications for faculty development. *J Interprof Care*. 2011;25(5):333–338.
40. Berghout T. How are nurse educators prepared to teach interprofessional practice? *Nurse Educ Today*. 2021;98, 104745.
41. Doja A, Lavin Venegas C, Clarkin C, et al. Varying perceptions of the role of "nurse as teacher" for medical trainees: a qualitative study. *Perspect Med Educ*. 2021;10(2):88–94.
42. Derbyshire JA, Machin AI, Crozier S. Facilitating classroom based interprofessional learning: a grounded theory study of university educators' perceptions of their role adequacy as facilitators. *Nurse Educ Today*. 2015;35(1):50–56.
43. Darlow B, McKinlay E, Gallagher P, et al. Building and expanding interprofessional teaching teams. *J Prim Health Care*. 2017;9(1):29–33.
44. Kumar A, Kent F, Wallace EM, et al. Interprofessional education and practice guide No. 9: sustaining interprofessional simulation using change management principles. *J Interprof Care*. 2018;32(6):771–778.
45. Anderson ES, Thorpe L. Learning together in practice: an interprofessional education programme to appreciate teamwork. *Clin Teach*. 2010;7(1):19–25.
46. Evans S, Shaw N, Ward C, Hayley A. "Refreshed…reinforced…reflective": a qualitative exploration of interprofessional education facilitators' own interprofessional learning and collaborative practice. *J Interprof Care*. 2016;30(6):702–709.
47. Tong R, Brewer M, Flavell H, Roberts LD. Professional and interprofessional identities: a scoping review. *J Interprof Care*. 2020:1–9.
48. van Lankveld T, Thampy H, Cantillon P, Horsburgh J, Kluijtmans M. Supporting a teacher identity in health professions education: AMEE Guide No. 132. *Med Teach*. 2021;43(2):124–136.
49. Wong G, et al. Realist methods in medical education research: what are they and what can they contribute? *Med Educ*. 2012;46(1):89–96.

Saskia C M Oosterbaan, MD, is a certified senior medical educator and IPE program coordinator at Teaching Hospital OLVG, Amsterdam, the Netherlands. She has a background in pediatrics and youth healthcare

Laura S Kortekaas, MD, is a junior physician and was a sixth-year medical student during the time of this research,

Fedde Scheele, PhD, MD, is a Professor of Health Systems Innovation and Education at the Amsterdam UMC and at the Athena Institute of the Vrije Universiteit Amsterdam, the Netherlands. He practices as a gynecologist and is a certified trainer for pre- and post-graduate clinical education.

Rashmi A Kusurkar, PhD, MD, FAMEE, is a Professor and Research programme leader at Amsterdam UMC, location Vrije Universiteit, Research in Education, Amsterdam, the Netherlands. She also is an acknowledged international scholar of Self-Determination Theory.