MS. IRIS JANSEN (Orcid ID: 0000-0003-4542-6155)

DR. RENÉE E. STALMEIJER (Orcid ID: 0000-0001-8690-5326)

MS. MILOU SILKENS (Orcid ID: 0000-0001-8279-1341)

Article type : Original Research

An act of performance: Exploring residents' decision-making processes to seek help

Iris Jansen*1, Renée E. Stalmeijer², Milou E.W.M. Silkens³, Kiki M.J.M.H. Lombarts¹

¹Professional Performance and Compassionate Care Research group, Department of Medical Psychology, Amsterdam UMC/ University of Amsterdam, Amsterdam, the Netherlands

²School of Health Professions Education, Faculty of Health, Medicine, and Life Sciences, Maastricht University, Maastricht, the Netherlands

³Research Department of Medical Education, UCL Medical School, University College London, London, the United Kingdom

*Corresponding author:

Iris Jansen, PhD-candidate

Amsterdam UMC

University of Amsterdam

Professional Performance and Compassionate Care Research group

Department of Medical Psychology

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the <u>Version of Record</u>. Please cite this article as <u>doi:</u> 10.1111/MEDU.14465

This article is protected by copyright. All rights reserved

iris.jansen@amsterdamumc.nl

Meibergdreef 9
1105 AZ Amsterdam
The Netherlands
Telephone: +31(0)20 5661274

Notes on contributors

IRIS JANSEN, MSc, is a PhD-candidate at the Professional Performance and Compassionate Care Research Group, University of Amsterdam, Amsterdam UMC, the Netherlands

RENÉE STALMEIJER, MSc, PhD, is an Assistant Professor in de Department of Educational Development and Research and the School of Health Professions Education at Maastricht University, the Netherlands

MILOU SILKENS, MSc, PhD, is a Research Fellow in the Research Department of Medical Education at University College London, the United Kingdom.

KIKI LOMBARTS, MSc, PhD, is a Professor and head of the Professional Performance and Compassionate Care Research Group, Amsterdam UMC, University of Amsterdam, the Netherlands

Abstract

CONTEXT Residents are expected to ask for help when feeling insufficiently confident or competent to act in patients' best interests. While previous studies focused on the perspective of supervisor-resident relationships in residents' help-seeking decisions, attention for how the workplace environment and, more specifically, other health care team members influence these decisions is limited. Using a sociocultural lens, this study aimed to explore how residents' decision-making processes to seek help are shaped by their workplace environment.

METHODS Through a constructivist grounded theory methodology, we purposively and theoretically sampled 18 residents; 9 juniors (postgraduate year 1/2) and 9 seniors (postgraduate year 5/6) at Amsterdam University Medical Centers. Using semi-structured interviews, participating residents' decision-making processes to seek help during patient care delivery were explored. Data collection and analysis were iterative; themes were identified using constant comparative analysis.

RESULTS Residents described their help-seeking decision-making processes as an 'act of performance': they considered how asking for help could potentially impact their assessments. They described this act of performance as the product of an internal 'balancing act' with at its core the non-negotiable priority for providing safe and high-quality patient care. With this in mind, residents weighed up demonstrating the ability to work independently, maintaining credibility, and becoming an accepted member of the health care team when deciding to seek help. This 'balancing-act' was influenced by sociocultural characteristics of the learning environment, residents' relationships with supervisors, and the perceived approachability of other health care team members.

CONCLUSIONS This study suggests that sociocultural forces influence residents to experience help-seeking as an act of performance. Especially a safe learning environment resulting from constructive relationships with supervisors and the approachability of other health care team members, lowered the barriers to seek help. Supervisors could address these barriers by having regular conversations with residents about when to seek help.

Introduction

Complex, critical and challenging situations during the delivery of patient care are an everyday reality for residents. In such situations, residents are expected to seek help when they feel insufficiently able, confident, or competent to act in patients' best interest¹⁻⁵. However, several studies suggest that residents may be hesitant to seek help, which could jeopardize the quality of patient care^{1,2,5,6} and result in a loss of learning opportunities^{3,6}. Research highlights the complexities involved in residents' decisions to seek help,

especially in relation to their supervisors, due to the existing hierarchy¹⁻⁸. Approachability and availability of supervisors determine the experienced threshold for residents to seek help^{2,5,8} but do not eliminate worries residents have about how they might come across when asking for help from their supervisors^{5,6}. Even when supervisors are approachable and available, residents still fear losing their autonomy⁸ and professional credibility² or being seen as incompetent^{1,4}. As a consequence, residents might refrain from asking for help or employ strategies to maintain their image of being a 'credible' or 'believable' physician⁶.

Although, thus far, studies foregrounded the perspective of supervisor-resident relationships in residents' asking for help, only considering this perspective may not be sufficient to understand residents' help-seeking decisions. As patient care requires the joint effort of health care teams, residents interact with many different health care professionals on a day-to-day basis. From the perspective of sociocultural learning theories, our eye is drawn to how learning arises from these interactions that residents engage in and how interactions are influenced by the cultural practices within the workplace environment⁹⁻¹². Bleakley¹³ argues that the sociocultural perspective is especially helpful in understanding how learning and social practices occur in complex systems such as health care teams. Similarly, organizational psychologist Bamberger¹⁴ advocates for considering not only help-seeking as an individual trait but also to examine the interplay between the help-seeker and provider within the workplace.

While studies within medical education have more and more adopted the sociocultural lens to advance our understanding of workplace learning¹⁵⁻¹⁹, it has not yet been used to study residents' decision-making processes to seek help. Hence, attention for the extent to which residents decide to seek help from other team members is still warranted. Some empirical examples do already touch upon the role of the other health care team members and the workplace environment^{2,20,21}. For instance, Kennedy and colleagues², described how residents turned their questions to "less powerful" team members (e.g., nurses, and peers), to maintain their credibility towards supervisors or when supervisors were not available. Olmos-Vega and colleagues⁸ highlighted that if residents perceived an unsafe workplace environment, they requested help from peers as it felt safer to ask from an equal team member.

Using a sociocultural lens, this study sets out to understand residents' decision-making processes to seek help regarding patient care. Such an understanding could provide useful starting points for safeguarding patient care and enhance learning opportunities during residency training. The current study aims to explore how residents' decision-making processes to seek help are shaped by their workplace environment, including their experiences of the social and cultural practices in the workplace.

Method

We used a constructivist grounded theory (CGT) methodology as we sought to explain how residents' decisions to seek help are shaped as a social process embedded in the workplace²². Following this methodology, our data collection and analysis were iterative, meaning that each informed and influenced the other^{22,23}. To inform our data collection and analysis, we used sensitizing concepts from sociocultural learning theories, in line with the constructivist approach²². These theories are based upon the idea that residents' learning results from the interplay between individual agency and the social and cultural context⁹⁻¹². We specifically used ideas from theories on workplace learning^{10,24}, Communities of Practice^{11,12} and, Landscape of Practice^{25,26}. Using these ideas allowed us to study residents' perceptions about their decision-making processes to seek help, while also being aware how these processes are shaped by their social context with the specific focus on interactions between health care members and the underlying workplace culture. This research was conducted by a sociologist pursuing a PhD in medical education (IJ), an educationalist with expertise in qualitative methodology (RS) and, two health care scientists (MS and KL). RS, MS, and KL are experienced researchers with respectively significant expertise in workplace learning, learning environments, and the medical profession.

Setting

This study was conducted among residents at Amsterdam University Medical Centers (Amsterdam UMC) in the Netherlands. In the Netherlands, the duration of residency training varies per specialty and lasts between three to six years. As in other Western health care systems, obtaining a position within residency training is very competitive²⁷. During their training, residents follow various rotations in both academic and (several) non-academic teaching hospitals, where they are part of the health care team and work alongside multiple health care professionals (e.g., nurses, fellow residents, and supervisors). As residents progress through their training, they will gradually and, with guidance from their supervisors, work towards independent practice. Lastly, competency based medical education (CBME) and systematic quality assessments and improvements have been implemented in Dutch residency training programs over the past decade. Measuring residents' learning climate, the use of Entrustable Professional Activities (EPA's), and residents providing feedback on their supervisors' teaching qualities, can be considered a routine practice in most Dutch training programs^{28,29}.

Sampling and data collection

We purposively sampled residents from internal medicine, pediatrics, and obstetrics and gynecology training to encompass different work settings, regarding the nature and urgency of care, the type of health care team members, how team members collaborate, as well as the culture within the workplace providing rich information aiding to understand residents' decision-making processes. We purposively included junior residents (postgraduate training year 1/2) and senior residents (postgraduate training year 5/6). It is

suggested that residents' decisions to seek help might be expressed differently depending on their level of training². In a later stage, we used theoretical sampling²², seeking residents from surgery training programs and higher postgraduate years to deepen the findings and capture the comprehensiveness of the preliminary defined results (see Table 1). Invitation e-mails, including a brief study description and an information letter, were sent to residents. Participation in the study was voluntary at all times.

The initial semi-structured interview guide was developed by the research team and piloted with one resident. The guide was refined by reformulating questions that were not well understood by the participant (see Appendix 1). During the interviews, residents were asked to describe the process by which they seek help, using probes based on residents' responses and previous findings to further explore residents' decisions to seek help²³. Following CGT methodology, after examining the transcripts, recurring themes were deepened during subsequent interviews using a refined interview guide²². Notably, as residents were hesitant to use the word 'help-seeking' or said never to ask for help, we used similar but less pejorative terms for help-seeking, i.e. 'checking' or 'consulting' at the start of the interview. After establishing rapport between the interviewer (IJ) and participants, we explicitly referred to 'help-seeking' and the phenomenon's sensitivity.

Theoretical sufficiency was met after interviewing eighteen residents, meaning that we had collected sufficient data to understand and explain residents' help-seeking decisions for this study³⁰. All interviews were conducted between January 2019 and December 2019 by the first author IJ and lasted between 40 and 65 minutes. Interviews were audiotaped, transcribed verbatim, and anonymized before data analysis.

[insert Table 1 around here]

Table 1. Characteristics of residents interviewed (N = 18)

Data analysis

The first four transcripts were read and open coded independently by IJ and a research assistant with expertise in qualitative methods. During this process, RS and MS additionally double coded parts of the transcripts to compare the interpretation of initially developed codes. After approximately ten transcripts, we iteratively refined initial codes during regular team meetings until we agreed upon a preliminary code scheme with major categories, capturing relationships between codes (axial coding process). The preliminary code scheme was an iterative and ongoing process applied to the next five transcripts and further refined through group review and discussion. After the team agreed on the refinement, the scheme was applied to the subsequent transcripts. We then constructed the relationships among categories,

facilitating a deeper conceptual understanding of residents' decision-making processes to seek help. To check whether the constructed conceptual framework captured residents' decision-making processes to seek help, we discussed the framework during two final interviews with residents^{30,31}, who had the same characteristics as described in the sampling section. Our discussions with these residents suggested that the framework resonated with their experiences and, they provided further details supporting the framework we had constructed. As such, no major changes were made to the framework. MAXQDA (version MAXQDA Plus 2020) supported data analysis.

Ethical approval

The institutional ethical review board of the Amsterdam UMC of the University of Amsterdam provided a waiver declaring the Medical Research Involving Human Subjects Act (WMO) did not apply to the current study (reference number W18 374 # 18.428).

Results

Residents described their decision-making processes to seek help as an *act of performance* in which they considered how their asking for help could be taken into account in their assessment as a learner and future medical specialist by all members of the health care team. This act of performance was described as the product of an internal 'balancing act' and how residents' perceived certain sociocultural forces within the workplace. During this balancing act of whether or not to seek help, residents considered four aspects: 1) providing safe and high-quality patient care, 2) demonstrating the ability to work independently, 3) maintaining credibility as a (junior) physician, and 4) becoming an accepted member of the health care team. Three sociocultural forces of the workplace strongly influenced the weighing of these aspects: a safe learning environment that was conveyed through a constructive relationship with supervisors and the approachability of other health care team members (Fig. 1).

[insert figure 1 around here]

Figure 1. Conceptual model of how residents' help-seeking decisions are shaped. Residents' internal dialogue and the four aspects they balance are portrayed in the middle. The outer ring displays the forces within the workplace influencing which aspects were given more weight in residents' decisions to seek help or not.

Residents' internal dialogue: the balancing act and act of performance

Residents likened asking for help as an act of performance: they felt that asking for help could positively or negatively impact their assessments. As such, asking for help was experienced as high-stakes or low-stakes,

depending on the patient case and who they wanted to ask help from within the health care team. Residents described that the decision to ask for help was each time preceded by an internal dialogue in which four aspects were considered. Although individual differences were apparent, the same four aspects were consistently present within residents' help-seeking considerations regardless of residents' gender or training program. Residents' desire to provide safe and high-quality patient care was the core around which their internal dialogue revolved. When residents considered asking for help from supervisors, maintaining their credibility, and their drive to demonstrate the ability to work independently were most pertinent. Becoming an accepted member of the health care team was mostly considered when seeking help from members of the health care team in general and physicians from other departments.

The balance between providing *safe and high-quality patient care* and *maintaining credibility* could raise tensions and cause conflicting feelings for residents towards seeking help. Residents, for example, explained this tension as preferring more information or details about a clinical case. However, asking for such details could be at odds with maintaining their credibility in the eyes of their supervisors. By asking questions that might be perceived as "dumb" (P2) or "inappropriate" (P7) by supervisors, residents worried about performing in a wrong way, harming their credibility, which could negatively impact their assessment:

And then I notice that asking help from people who also have to assess you immediately creates a risk (...) Because if they [supervisors] interpret a question as, oh, she doesn't know (...) I think that it just affects the assessment you get as a resident. (P12)

Furthermore, residents described that seeking help in non-urgent or less complex clinical situations (e.g., small laboratory abnormalities) was challenging: seeking help in such situations was recognized as generally preferred for *safe and high-quality patient care*, while at the same time residents wanted to *demonstrate the ability to work independently*, strengthened by the feeling that this was expected from them as a physician in training. This challenge seemed to affect junior and senior residents differently. Juniors felt not yet fully able to work independently and talked about the desire for a final "confirmation" (P10) or "reassurance" (P6) from supervisors, indicating that they were making the right clinical decisions for their patients. Seniors, on the other hand, reflected that the ability to work independently without seeking help became more important and that both asking too many questions and being "indecisive" (P18) was not a desirable performance as "it [reputation of indecisiveness] will stick to you" (P18). Interestingly, to perform well, one resident talked about being a "chameleon" (P15): adapting the way of working and asking questions to what is perceived as expected to do. As a consequence, this resident said "sometimes you're acting a little bit." (P15).

While residents perceived that seeking help to provide safe and high-quality patient care could run counter to maintaining their credibility and demonstrating the ability to work independently, residents experienced that becoming an accepted member of the health care team went hand in hand with providing safe and high-quality patient care. Residents described how, by deliberately asking questions, they learned how "things are done" (P4) within this particular workplace, and simultaneously could establish collegial and reciprocal relationships needed to become an accepted member within the health care team. In turn, being accepted and included as a full team member afforded residents in current and future clinical cases to get the daily patient care done: "that people enjoy working with you and are willing to work half an hour overtime so that we can finish surgery (...)" (P15).

Forces within the workplace influencing the balancing act

Residents' described how forces within the workplace inherently influenced their help-seeking balancing act. Within the workplace, a safe learning environment was repeatedly described as a force influencing the balancing act. It created a sense of safety that was conveyed through a constructive relationship with supervisors and the approachability of other health care team members. These forces, including whom they were seeking help from, influenced which aspects were given more weight in residents' decisions to ask for help.

Safe learning environment

Residents recognized how the experienced learning environment within the workplace shaped their decisions to seek help, especially their sense of a safe and constructive atmosphere was imperative. Residents described such an atmosphere as "open" (P9), "welcoming" (P4), and "equal" (P3) in which they were being recognized as a person as well as a learner by team members. In such departments, residents felt more included within the team and were more comfortable to share clinical uncertainties:

And if you ask or say something, it is listened to and addressed. So, the feeling that you are a team (...) Not that all decisions are made for you from above, but that you are also heard. (...) then you just feel like a full member of the team. And that has the effect (...) on me that you feel happy, you feel comfortable, and you feel safe. I think it promotes safe patient care because you feel free to ask and to share your doubts. (P3)

In contrast, in more punitive atmospheres, residents experienced the feeling of being "punished" (P17) for asking questions or being "constantly assessed" (P11). In such atmospheres, residents felt this burden always lurking, which affected their asking for help in current and future help-seeking situations throughout

their training: "that you choose to make a plan [for the patient] yourself instead of discussing your doubts [with supervisors]" (P3).

A constructive relationship with supervisors

Residents considered supervisors who shared their expectations about when and how they should seek help as contributing to a constructive relationship. Such conversations positively influenced residents' help-seeking decisions, mitigating the odds of losing credibility and the need to perform questions. However, these conversations were very rare, causing residents to turn to fellow residents and nurses who helped them to understand their "supervisors' manual" (P15) (e.g., supervisors' expectations and preferences regarding help-seeking). Especially junior residents pre-consulted nurses or fellow residents about "whether they also find it [ECG] normal or abnormal, or whether you should consult a supervisor" (P11). As this other resident explained:

I often ask the nurses, what do you think? Just for back-channeling, that you are more certain about what you want to discuss [with supervisors], or whether your treatment policy is the right one. (P15)

Residents also described how a nonconstructive relationship with and strong reactions from supervisors to requests for help had them "trying to find a work-around not having to ask the supervisor in question" (P3), because – as one resident put it – "you do not want to be the pain-in-the-ass resident" (P17). Residents then preferred "thinking about that [question] later [by myself]" (P10). A typical example was supervisors who acted too hurried or rushed to answer questions:

My supervisor came into [the room] in a hurry holding a sandwich: 'I have 25 minutes, 8 patients, just quickly'. And then you look through the [lab] results together. [supervisor says] 'Do you have any questions? No okay, and continue'. It is just: you report and they dictate. (...) While you do not even know yet why a CT, why not an MRI? (P10)

Approachability of other health care team members

Residents spoke about fellow residents and allied health professionals' approachability as they often worked physically close together by sharing offices. Such proximity lowered the threshold to ask quick and "practical things [to fellow residents] about (...) how do you make a discharge letter or how do I go through medication changes?" (P10). Whereas calling supervisors from other departments was "difficult because you sometimes don't know who you are calling" (P1). Working physically close to each other thus facilitated a relationship based on trust, support and, reciprocity by which help-seeking "went more

smoothly" (P2). Residents recognized that their own attitude towards nurses contributed to such a reciprocal relationship:

I also invest very actively in it [relationship with nurses] and approach them with a lot of respect and I explicitly thank them if they do things that - as a result - I do not have to do. (...) I think if you are kind to each other that way, it helps in on all sides. It also helps me in the end, because next time they are willing to call a patient again. (P17).

Moreover, residents indicated how they experienced a lower threshold when seeking help from "equal colleagues" (P15), i.e., fellow residents and allied health professionals, as compared to supervisors. This was partly due to their non-involvement in formal assessments (i.e., less high-stakes). Similarly, residents preferred seeking help from fellow residents and allied health professionals, especially regarding specific clinical practices and "how the things are done around here" (P9). Other team members sometimes had more useful expertise in clinical practices than supervisors "if I have any doubts about ultrasounds, I know she [fellow resident] can do better than my supervisor. So then I consult her (...)" (P2). Also, residents talked about asking fellow residents about areas they wanted to improve their knowledge and skills in:

I invited [fellow resident] once for a physical examination, as I would like to see the joints [the expertise of the fellow resident]. Then we just did it [physical examination] together and then he taught me how to really do it. So I learned a lot from it and it is also just a lot of fun. (P1)

Discussion

In this study using a sociocultural lens, we explored how residents' help-seeking decision-making processes are being shaped by their workplace environment, including their experiences of the social and cultural practices in the workplace. We found that residents experience asking for help as an act of performance: they perceive the 'how' and 'when' of asking questions, as well as the content of these questions, as a measure of their competence. Moreover, this act of performance was preceded by an internal dialogue in which the need for and potential ramifications of help-seeking were balanced. Residents' sense of responsibility for providing safe and high-quality patient care was the core around which their internal dialogue revolved With this in mind, residents weigh up demonstrating the ability to work independently, maintaining their credibility as a physician, and becoming an accepted member of the health care team when seeking help. Residents' internal dialogue was strongly influenced by sociocultural forces of the workplace, including a safe learning environment that was conveyed through a constructive relationship with their supervisors and the approachability of other health care team members. In identifying the complex interplay between the internal balancing act and workplace forces, our study joins a growing body

of literature, raising attention for the sociocultural perspective in aiding to unravel the interplay between the social and cultural aspects of residents' learning and clinical practice^{15-19,32}.

Framing help-seeking as an act of performance resonates with the literature on how residents perceive the pressure to come across as certain, decisive, and independent^{1-3,6,7,19}. Residents feel that such attributes are rewarded in performance assessments and, thus, are expected from them during their training towards becoming future medical specialists^{1,19}. These pressures are partially embodied by the wide implementation of competency frameworks within medical education with a strong focus on outcomes, competencies, and achieving milestones³³⁻³⁷. Our study demonstrated how such pressures and expectations influenced residents' internal dialogue, resulting in the unintended consequence of hampering help-seeking. Notably, not posing the less relevant or less clearly worked out questions is potentially problematic as such questions contribute to residents' professional development by providing feedback on knowledge gaps or how to structure their case when presenting a patient¹⁵. Although residents proclaimed that not seeking help never interfered with providing safe and high-quality patient care, it does raise the question of whether the most optimal patient care can always be guaranteed. A previous study reported that patients' treatment could be delayed when residents were uncertain about clinical decisions and did not seek help or input from supervisors³⁸. Ultimately, perceiving help-seeking as an act of performance could run counter to residents' learning and potentially the provision of optimal patient care⁶. Hence, our study suggests that to mitigate pressures on residents' internal dialogue, a safe learning environment nurturing the sharing of uncertainty and vulnerability while paying attention to the individual resident and their personal learning needs is imperative^{39,40}. In such environments, residents are more likely to speak up and disclose errors partly due to less hierarchy, which may be instrumental for providing safe and high quality patient care^{41,42}

The fact that residents framed help-seeking as a measure of their competence altered their way of asking questions: they tailored the 'right' way of help-seeking, to the 'right' supervisor or to the 'right' health care team member. By performing questions in that way, residents could more easily access opportunities to demonstrate their ability to work independently (e.g., being granted to perform a surgical procedure), safeguard their credibility as a physician, and secure a position as an accepted team member. Various studies described how supervisors greatly vary in their supervisory preferences^{43,44} and how through tailoring processes (e.g., altering questions), a shared interaction pattern could be created between residents and supervisors^{44,45}. While our results point to similar processes, we also highlighted how residents actively develop their understanding of supervisors' preferences, partially through 'checking' the validity and legitimacy of their questions with other health care team members before asking supervisors. This resonates with Goffman's theory of impression management. He describes how we try to understand what is expected from us during social interactions and then use these insights to influence the perceptions others

may hold about us⁴⁶. He described that performance arises in two contexts: in the frontstage where 'some aspects of the activity are expressively accentuated and other aspects, which might discredit the fostered impression, are suppressed'⁴⁶, whereas in the backstage 'the suppressed facts make an appearance'⁴⁶. Previous research on feedback conversations suggested how residents wanted to create a front stage performance to display confidence to supervisors⁴⁷. While our results underline this finding, we also provide insights into the interplay between the frontstage and backstage. Residents 'rehearse' their performance of asking questions in the backstage on professionals within the perceived same scope of practice (e.g., allied health professionals or fellow residents), before asking their questions to supervisors in the frontstage. In that way, residents could manage their impression as they had more certainty that their question aligned with the expected level of independence, and they could portray themselves as a competent (future) colleague, promoting a positive assessment³⁶.

Moreover, we also shed light on how help-seeking as performance does not only occur in the presence of supervisors but also how allied health professionals and fellow residents played a key role in residents' decision-making processes to seek help. Our study suggests that while supervisors seemed to be the gatekeepers of the medical community, other members within the health care team might serve as guides providing practical knowledge and enculturating them into the clinical workplace 11,12,17,20,26,48,49. Compared to supervisors, other co-workers afforded the 'know-how' of and guided them through the local norms and practices of the particular workplace^{17,20,50}. This knowledge is an essential part of socialization into the health care team⁵¹ as it helped residents to understand and secure their position as an accepted, legitimate team member. The metaphor of asking questions as 'exchanging currency' 52,53 is useful to understand how by asking for help as performance - residents secure their position within the team. Residents pay by asking for the 'right' help and by forging relationships through actively involving members of the health care team in the delivery of patient care. Residents realized that these communication skills are highly valued by team members⁵⁴. In return, residents are 'paid' by being seen as a credible physician and legitimate team member by health care team members. Studies identified the importance of residents actively engaging and building relationships with all health care team members as more learning opportunities were afforded them¹⁷ and to better ensure patient safety⁵⁵.

Implications for practice and research

As our results indicate, it is imperative to create a learning environment in which help-seeking is normalized and seen as intrinsically linked with providing safe patient care and the development as a learner. Addressing potential barriers related to help-seeking decisions should, therefore, be addressed on different levels. Supervisors could address residents' credibility concerns^{40,56} by having regular conversations with them about expectations regarding residents' level of training and when they should

seek help^{43,44}. Furthermore, given the important role of other (non-physician) health care team members in lowering the threshold for residents to ask for help, both formal and informal feedback conversations with fellow residents and allied health professionals could be actively stimulated in training programs. Such conversations could aid in clarifying role expectations among team members¹⁷ and foreground the shared purpose of patient care⁵⁷, which might help to create a constructive learning environment. This might also support the view that help-seeking is not seen as a potential threat for residents' credibility, but as confirming the team's shared purpose of providing safe patient care. Future research should address how to foster learning environments in which the health care team's shared purpose of safe patient care trumps residents' concerns of negative assessments. We encourage other researchers to consider adopting a perspective that views all health care team members to influence workplace learning interactions^{17,20,21,26,50}. Hereto, sociocultural theories can offer guidance⁹⁻¹². We agree with colleagues that such an inclusive perspective may result in a more in-depth understanding of residents' help-seeking decisions and workplace learning in general^{18,32}. Finally, although not the aim of our study, we came across some differences in how junior and senior residents weigh up their decisions to seek help. For instance, in how they dealt with demonstrating the ability to work independently. We feel this could be further explored in future research.

Strengths and limitations

In unraveling the process by which residents decide to seek help and what shaped this process, our study's strength was adopting the lens of sociocultural learning theories using constructivist grounded theory methodology. It enabled us to construct a model reflecting residents' perceptions of their decisions to seek help and how it played out in the workplace. Simultaneously we acknowledge that the results of this study are constructed based on a combination of the answers of the participants as well as the backgrounds of members of the research team and our use of sociocultural learning theories to understand the results. Our results should be considered within certain limitations⁵⁸. Since not asking for help may have negative consequences for the quality of patient care and patient safety, residents may have responded in a socially desirable way to the interview questions. In this research, we tried to minimize this bias by using similar but less pejorative terms for help-seeking (e.g., 'checking'). Moreover, as the interview proceeded, we acknowledged the sensitivity around help-seeking and invited residents explicitly to reflect on this. Data collection took place in only one Academic Medical Center in the Netherlands, which could limit our findings' transferability. However, like in other countries, residency training in the Netherlands is built upon a competency-based framework with generally the same characteristics among countries. Therefore, how residents framed help-seeking as performance, their considerations and, the workplace' influences might be relevant to other training programs grounded on CBME. Furthermore, the majority of our participants was female. Although this is an accurate representation of the male-female balance within Dutch postgraduate medical education, and our participants did not discuss gender aspects, future research might focus on the gender dimension within the balancing act and how the workplace environment might react differently to requests of help by female residents as compared to male residents.

Conclusion

This study suggests that sociocultural forces of the workplace highly influence how residents balance their considerations of whether or not to seek help and the extent to which they frame help-seeking as an act of performance. To lower the barriers for residents to seek help, a safe learning environment resulting from constructive relationships with supervisors and the perceived approachability of fellow residents and allied health professionals seems crucial. We recommend addressing the potential barriers in dialogue with all members of the health care team as they are all tied into residents' help-seeking decisions. Future research could examine how to foster learning environments in which the health care team's shared purpose of safe patient care, trumps residents' concerns of negative assessments.

References

- 1. Kennedy TJT, Regehr G, Baker G, Lingard L. 'It's a cultural expectation...' The pressure on medical trainees to work independently in clinical practice. *Med Educ.* 2009;43(7):645-653.
- 2. Kennedy TJT, Regehr G, Baker GR, Lingard L. Preserving professional credibility: grounded theory study of medical trainees' requests for clinical support. *Bmj.* 2009;338:b128.
- 3. Novick RJ, Lingard L, Cristancho SM. The Call, the Save, and the Threat: Understanding Expert Help-Seeking Behavior During Nonroutine Operative Scenarios. *J Surg Educ.* 2015;72(2):302-309.
- 4. Ott M, Schwartz A, Goldszmidt M, Bordage G, Lingard L. Resident hesitation in the operating room: does uncertainty equal incompetence? *Med Educ.* 2018;52(8):851-860.
- 5. Wiese A, Kilty C, Bennett D. Supervised workplace learning in postgraduate training: a realist synthesis. *Med Educ.* 2018;52(9):951-969.
- 6. Patel P, Martimianakis MA, Zilbert NR, et al. Fake It 'Til You Make It: Pressures to Measure Up in Surgical Training. *Acad Med.* 2018;93(5):769-774.
- 7. Stewart J. To call or not to call: a judgement of risk by pre-registration house officers. *Med Educ*. 2008;42(9):938-944.
- 8. Olmos-Vega FM, Dolmans DHJM, Vargas-Castro N, Stalmeijer RE. Dealing with the tension: how residents seek autonomy and participation in the workplace. *Med Educ*. 2017;51(7):699-707.
- 9. Sfard A. On Two Metaphors for Learning and the Dangers of Choosing Just One. *Educ Res.* 1998;27(2):4-13.
- 10. Billett S. Workplace pedagogic practices: Co–participation and learning. *Br J Educ*. 2002;50(4):457-481.

This article is protected by copyright. All rights reserved

11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26.

- 11. Lave J, Wenger E. *Situated learning: Legitimate peripheral participation*. Cambridge University Press; 1991.
- Wenger E. *Communities of Practice: Learning, Meaning, and Identity.* New York: Cambridge University Press; 1999.
- 13. Bleakley A. Broadening conceptions of learning in medical education: the message from teamworking. *Med Educ.* 2006;40(2):150-157.
 - Bamberger P. Employee help-seeking: antecedents, consequences and new insights for future research. In: Martocchio J, Liao H, eds. *Research in Personnel and Human Resources Management*. Bradford, UK: Emerald Group Publishing Limited; 2009:49-98.
- Eppich WJ, Dornan T, Rethans J-J, Teunissen PW. "Learning the Lingo": A Grounded Theory Study of Telephone Talk in Clinical Education. *Acad Med.* 2019;94(7):1033-1039.
- 16. LaDonna KA, Hatala R, Lingard L, Voyer S, Watling C. Staging a performance: learners' perceptions about direct observation during residency. *Med Educ.* 2017;51(5):498-510.
- 17. Olmos-Vega FM, Dolmans DHJM, Guzmán-Quintero C, Echeverri-Rodriguez C, Teunnissen PW, Stalmeijer RE. Disentangling residents' engagement with communities of clinical practice in the workplace. *Adv Health Sci Educ.* 2019;24(3):459-475.
- 18. Stalmeijer RE. Teaching in the clinical workplace: looking beyond the power of 'the one'. *Perspect Med Educ.* 2015;4(3):103-104.
- 9. Watling C, LaDonna KA, Lingard L, Voyer S, Hatala R. 'Sometimes the work just needs to be done': socio-cultural influences on direct observation in medical training. *Med Educ*. 2016;50(10):1054-1064.
- 20. Polansky MN, Govaerts MJB, Stalmeijer RE, Eid A, Bodurka DC, Dolmans DHJM. Exploring the effect of PAs on physician trainee learning: An interview study. *JAAPA*. 2019;32(5):47-53.
 - 1. Bannister SL, Dolson MS, Lingard L, Keegan DA. Not just trust: factors influencing learners' attempts to perform technical skills on real patients. *Med Educ.* 2018;52(6):605-619.
- 22. Charmaz K. Constructing grounded theory. 2nd ed. Los Angeles: SAGE; 2014.
- Watling C, Lingard L. Grounded theory in medical education research: AMEE Guide No. 70. *Med Teach*. 2012;34(10):850-861.
- 24. Billett S. Learning through health care work: premises, contributions and practices. *Med Educ*. 2016;50(1):124-131.
- 25. Wenger-Trayner E, Fenton-O'Creevy M, Hutchinson S, Kubiak C, Wenger-Trayner B, eds.

 Learning in Landscapes of Practice: Boundaries, Identity, and Knowledgeability in Practice-Based Learning. London, UK: Routledge; 2015.
- 26. Hodson N. Landscapes of practice in medical education. *Med Educ*. 2020;54(6):504-509.

30. 31. 32. 33. 34. 36. 37. 38.

- 27. Teunissen PW. *Unravelling learning by doing. A study of workplace learning in postgraduate medical education [dissertation]*. Amsterdam, Netherlands: VU University Amsterdam; 2008.
 - [KNMG] Royal Dutch Medical Association. Stimulans voor interne kwaliteitsverbetering van de geneeskundige vervolgopleidingen (Scherpbier 2.0). https://www.knmg.nl/opleiding-herregistratie-carriere/cgs/themas-projecten/scherpbier-2.0.htm. Published 2015. Accessed 8 June, 2020.
 - [KNMG] Royal Dutch Medical Association. Kaderbesluit Centraal College Medische Specialismen. https://www.knmg.nl/web/file?uuid=87422693-5bd4-4571-8559-ec31b0d8082f&owner=5c945405-d6ca-4deb-aa16-
 - 7af2088aa173&contentid=80654&elementid=2387559. Published 2019. Accessed 8 June, 2020.
- Varpio L, Ajjawi R, Monrouxe LV, O'Brien BC, Rees CE. Shedding the cobra effect: problematising thematic emergence, triangulation, saturation and member checking. *Med Educ*. 2017;51(1):40-50.
- Tracy SJ. Qualitative Quality: Eight "Big-Tent" Criteria for Excellent Qualitative Research. *Qual Inq.* 2010;16(10):837-851.
- 32. Olmos-Vega FM, Dolmans DHJM, Teunissen PW, Stalmeijer RE. Expanding our understanding regarding residents' participation in the workplace. *Med Educ.* 2018;52(6):582-584.
- 33. Carraccio C, Wolfsthal SD, Englander R, Ferentz K, Martin C. Shifting paradigms: from Flexner to competencies. *Acad Med.* 2002;77(5):361-367.
- Hawkins RE, Welcher CM, Holmboe ES, et al. Implementation of competency-based medical education: are we addressing the concerns and challenges? *Med Educ*. 2015;49(11):1086-1102.
- 35. Malone K, Supri S. A critical time for medical education: the perils of competence-based reform of the curriculum. *Adv Health Sci Educ Theory Pract*. 2012;17(2):241-246.
- 36. Sawatsky AP, Huffman BM, Hafferty FW. Coaching Versus Competency to Facilitate Professional Identity Formation [published online ahead of print]. *Acad Med.* 2019.
- Jarvis-Selinger S, Pratt DD, Regehr G. Competency Is Not Enough: Integrating Identity Formation Into the Medical Education Discourse. *Acad Med.* 2012;87(9).
- Farnan JM, Johnson JK, Meltzer DO, Humphrey HJ, Arora VM. Resident uncertainty in clinical decision making and impact on patient care: a qualitative study. *Qual Saf Health Care*. 2008;17(2):122.
- 39. Atherley A, Meeuwissen SNE. Time for change: Overcoming perpetual feelings of inadequacy and silenced struggles in medicine. *Med Educ.* 2020;54(2):92-94.
- 40. Molloy E, Bearman M. Embracing the tension between vulnerability and credibility: 'intellectual candour' in health professions education. *Med Educ.* 2019;53(1):32-41.

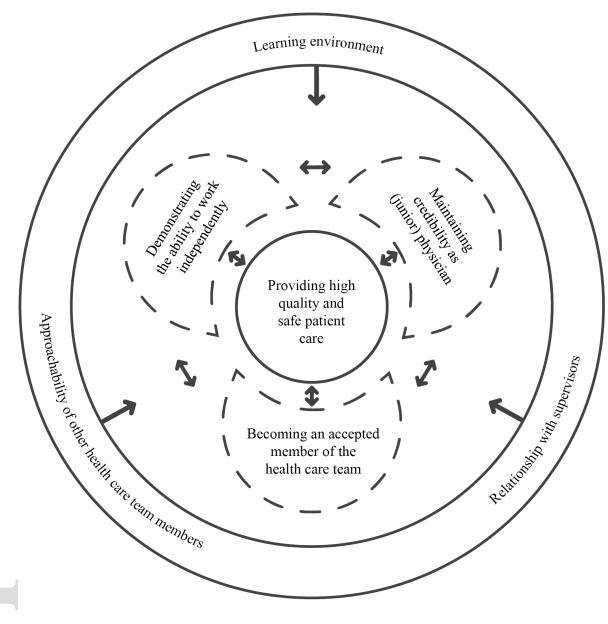
41. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52.

- 41. Silkens MEWM, Arah OA, Wagner C, Scherpbier AJJA, Heineman MJ, Lombarts KMJMH. The Relationship Between the Learning and Patient Safety Climates of Clinical Departments and Residents' Patient Safety Behaviors. *Acad Med.* 2018;93(9):1374-1380.
- Voogt JJ, Taris TW, van Rensen ELJ, Schneider MME, Noordegraaf M, van der Schaaf MF. Speaking up, support, control and work engagement of medical residents. A structural equation modelling analysis. *Med Educ*. 2019;53(11):1111-1120.
- 43. Goldszmidt M, Faden L, Dornan T, van Merriënboer J, Bordage G, Lingard L. Attending physician variability: a model of four supervisory styles. *Acad Med.* 2015;90(11):1541-1546.
- Sheu L, Kogan JR, Hauer KE. How Supervisor Experience Influences Trust, Supervision, and Trainee Learning: A Qualitative Study. *Acad Med.* 2017;92(9):1320-1327.
- Olmos-Vega FM, Dolmans DHJM, Guzmán-Quintero C, Stalmeijer RE, Teunissen PW.
 Unravelling residents' and supervisors' workplace interactions: an intersubjectivity study. *Med Educ.* 2018;52(7):725-735.
- 46. Goffman E. *The Presentation of Self in Everyday Life*. New York: Anchor Books; 1959.
- Huffman BM, Hafferty FW, Bhagra A, Leasure EL, Santivasi WL, AP. S. Resident impression management within feedback conversations: A qualitative study. *Med Educ.* 2020;00:1–9.
- 48. Burford B, Morrow G, Morrison J, et al. Newly qualified doctors' perceptions of informal learning from nurses: implications for interprofessional education and practice. *J Interprof Care*. 2013;27(5):394-400.
- 49. Varpio L, Bidlake E, Casimiro L, et al. Resident experiences of informal education: how often, from whom, about what and how. *Med Educ*. 2014;48(12):1220-1234.
- Huda N, Faden L, Wilson C, et al. The Ebb and Flow of Identity Formation and Competence Development in Sub-specialty Residents: Study of a Continuity Training Setting [published online ahead of print]. 2020.
 - Vanstone M, Grierson L. Medical student strategies for actively negotiating hierarchy in the clinical environment. *Med Educ.* 2019;53(10):1013-1024.
- Kennedy E, Lingard L, Watling C, Hernandez Alejandro R, Parsons Leigh J, Cristancho SM. Understanding helping behaviors in an interprofessional surgical team: How do members engage? *Am J Surg.* 2019;219(2):372-378.
- 53. Zwet J, Croix A, Jonge LPJWM, Stalmeijer RE, Scherpbier AJJA, Teunissen PW. The power of questions: a discourse analysis about doctor–student interaction. *Med Educ.* 2014;48(8):806-819.
- 54. Burm S, Chahine S, Goldszmidt M. "Doing it Right" Overnight: a Multi-perspective Qualitative Study Exploring Senior Medical Resident Overnight Call [published online ahead of print]. *J Gen Intern Med.* 2020.

57.

- 55. Reader TW, Flin R, Cuthbertson BH. Communication skills and error in the intensive care unit. *Curr Opin Crit Care*. 2007;13(6).
 - Sawatsky AP, Santivasi WL, Nordhues HC, et al. Autonomy and professional identity formation in residency training: A qualitative study. *Med Educ.* 2020;54(7):616-627.
 - Sims S, Hewitt G, Harris R. Evidence of a shared purpose, critical reflection, innovation and leadership in interprofessional healthcare teams: a realist synthesis. *J Interprof Care*. 2015;29(3):209-215.
 - Frambach JM, van der Vleuten CPM, Durning SJ. AM Last Page: Quality Criteria in Qualitative and Quantitative Research. *Acad Med.* 2013;88(4):552.

| Characteristic | No. |
|---------------------------|-----|
| Gender | |
| Male | 5 |
| Female | 13 |
| Training level | |
| Junior | 9 |
| Senior | 9 |
| Training program | |
| Internal medicine | 9 |
| Pediatrics | 2 |
| Obstetrics and gynecology | 5 |
| Surgery | 2 |
| | |



medu_14465_f1.png