

**Learning experiences of frontline nurse  
managers shadowing a colleague;  
A qualitative study**

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Student: Joanne Bouma, RN

Student number: 3434796

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Supervisor: Pieterbas Lalleman, MA, RN

Co-supervisor: Gerhard A.C. Smid, PhD

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Universiteit Utrecht, Masteropleiding Klinische Gezondheidswetenschappen,  
Masterprogramma Verplegingswetenschap, UMC-Utrecht

## English Abstract

**Title.** Learning experiences of frontline nurse managers shadowing a colleague; a qualitative study.

**Aims.** This paper is a report of a generic qualitative study describing experiences of frontline nurse managers with shadowing as learning tool, and describing whether they developed a more investigative attitude by shadowing.

**Research questions.** Two research questions were addressed: What do frontline nurse managers according to themselves learn from the experience of shadowing a colleague? And: What practical issues ensue when shadowing is used as a learning technique?

**Background.** Frontline nurse managers in hospitals play an important role in patient safety. They can promote open communication that is needed to disclose errors, vital to patient safety. Shadowing was identified as a promising way to learn to investigate patient safety in a nonjudgmental way. No previous studies explored the learning experiences of frontline nurse managers using shadowing.

**Methods.** Semi-structured interviews were conducted between February and May 2012 with eight frontline nurse managers who shadowed one of the others. Qualitative content analysis was used to identify categories and themes.

**Results.** Six categories were found on learning from the shadowing experience. Being aware, recognising, learning to observe, and feedback resulted in new repertoire, namely observing as researcher and an investigative attitude. Enjoying and connecting were important conditions to the successful use of shadowing as learning tool. Practical issues were: demanding activity, making notes and how to shadow.

**Conclusion.** This study is the first to give insight in what frontline nurse managers can learn from shadowing a colleague and the first to join an investigative attitude to patient safety as a possible improved outcome.

**Recommendations.** Further research is needed on how lasting the effect of shadowing is and on the influence of an investigative attitude on patient safety. Findings in this study support the advice to management to start using shadowing as a learning tool for frontline nurse managers.

**Keywords:** Nursing; Frontline nurse managers; Shadowing; Learning; Qualitative research

## Dutch Summary / Samenvatting

**Titel:** Leerervaringen van verpleegkundig leidinggevenden die een collega shadowen; Een kwalitatief onderzoek

**Inleiding.** Verpleegkundig leidinggevenden in ziekenhuizen hebben een belangrijke rol bij patiëntveiligheid. Ze kunnen de open communicatie promoten die nodig is om fouten te bekennen, wat van belang is voor patiëntveiligheid. Shadowen werd geïdentificeerd als een veelbelovende manier om te leren patiëntveiligheid te onderzoeken op een niet beoordelende manier. Tot nu toe waren er nog geen studies die de leerervaringen van verpleegkundig leidinggevenden die shadowen gebruiken, onderzochten.

**Doel.** Het doel van dit generieke kwalitatieve onderzoek was de ervaringen te beschrijven van verpleegkundig leidinggevenden met shadowen als leerinstrument en te beschrijven of ze een meer onderzoekende houding ontwikkelden door te shadowen.

**Onderzoeksvragen.** De eerste onderzoeksvraag was: Wat leren verpleegkundig leidinggevenden volgens henzelf van de ervaring van het shadowen van een collega. De tweede: welke praktische zaken zijn er wanneer shadowen wordt gebruikt als leertechniek.

**Methode.** Tussen februari en mei 2012 werden semigestructureerde interviews gehouden met acht verpleegkundige leidinggevenden die één van de anderen had geshadowd. Om categorieën en thema's te identificeren werd kwalitatieve inhoudsanalyse gedaan.

**Resultaten.** Er werden zes categorieën gevonden betreffende het leren van de shadowervaring. Bewust worden, herkenning, leren observeren en feedback resulteerden in nieuw repertoire, namelijk observeren als onderzoeker en een onderzoekende houding. Plezier en verbinding waren belangrijke voorwaarden voor het succesvolle gebruik van shadowen als leerinstrument. Praktische zaken waren: een veeleisende activiteit, aantekeningen maken en hoe te shadowen.

**Conclusie.** Deze studie is de eerste die inzicht geeft in wat verpleegkundig leidinggevenden kunnen leren van het shadowen van een collega en is de eerste die een onderzoekende houding koppelt aan patiëntveiligheid als een mogelijk verbeterde uitkomst.

**Aanbevelingen.** Nader onderzoek is nodig naar de duurzaamheid van het effect van shadowen en naar de invloed van een onderzoekende houding op patiëntveiligheid. De resultaten van dit onderzoek ondersteunen het advies aan management om shadowen als leerinstrument voor verpleegkundig leidinggevenden te gaan gebruiken.

**Trefwoorden:** Verpleegkunde; Verpleegkundig Leidinggevenden; Shadowing; Leren; Kwalitatief onderzoek.

## Introduction

Nurse managers play an important role in healthcare, as in ensuring patient safety and quality of patient care (1,2). This is particularly so for frontline nurse managers (FNMs) in hospitals, who are the key interface between care and management (2,3), as they are “close to the action” (1).

A vital factor for patient safety is error disclosure, and nursing leadership has a major influence on promoting the open communication needed to disclose errors (4). An open, blame-free and fair culture that learns from errors, called ‘just culture’, can provide the right environment (4,5). For this culture, leaders, such as FNMs, need to create a learning organisation where errors are seen as chances to learn (5).

Patient safety can be measured in adverse events such as medication errors or patient falls, which affect a considerable number of patients (6). Several studies established that leadership influences patient safety (7-9). All suggested that managers could improve their effectiveness in patient safety by becoming resonant (9), transformational (7) or emotional intelligent (8) leaders. These leadership competencies consist of relational skills and can be developed through education (10). Yet none of the authors explicate how these competencies should be taught.

FNMs receive little formal education (2), which is also true for other managers (11). Moreover the nature of managerial work makes it difficult for managers to apply what is learnt in management training (12,13). Sixty years of management research has shown that the nature of all managerial work, not just that of FNMs, is interruptive, fragmented, and hectic (11,13,14). Particularly frontline healthcare managers have a high frequency of activities per day (15). Because of this fragmented nature, managing has to be learned on the job and in context (11).

During the past 40 years managers have been studied using a structured observation method developed by Mintzberg (11,16) which can be identified as shadowing (17). Shadowing means: following people, wherever they are, whatever they do (17) during a full work day, asking questions when necessary (18). During shadowing one can capture the interruptive, fragmented, and hectic nature of work life (18,19). McDonald identified different purposes of shadowing: learning or research (18). Yet we think that shadowing, regardless of its purpose, is a way of investigative and nonjudgmental observing that helps the shadower learn about the work nature of the person shadowed. This idea is supported by Arman et al. (17) who described how the research experience of shadowing gave them embodied tacit knowledge of the work of managers, which is not easily accessible knowledge and therefore difficult to teach (11).

Shadowing has already been used successfully to teach undergraduate nursing students (20), as a management development tool in education (21-23), and in business curricula (24). In spite of this, shadowing has not yet been used as an instrument for training FNMs. We argue shadowing would be very suitable. Firstly it makes use of concrete learning experiences, preferred by nurses (25), which FNMs originally were. Secondly it helps capture the fragmented nature of managing (18,19). Moreover, because of its investigative character, shadowing can help FNMs to observe systematically and reserve judgement. This is not part of the standard repertoire of managers because of the nature of their work and their preference for action over reflection (16,19,26). Improving patient safety requires a more systematic and nonjudgmental approach as literature on 'just culture' shows (4,5). Shadowing looks promising as a learning tool for FNMs, yet there has not been any research on this subject.

### ***Problem Statement***

Shadowing was identified as a promising way to learn to attain an investigative attitude towards patient safety. As there have not yet been any studies on FNMs using shadowing to learn, first an exploration of learning experiences needs to be done.

### ***Aims***

The primary aim of this study was to describe experiences of FNMs with shadowing as a learning tool. A second aim was to describe whether FNMs develop a more investigative attitude by shadowing.

### ***Research questions***

The following research questions were addressed:

1. What do FNMs according to themselves learn from the experience of shadowing a colleague?
2. What practical issues ensue when shadowing is used as a learning technique?

## **Method**

### ***Design***

Because little is known about shadowing as a learning tool for FNMs, a generic qualitative study (27) was conducted. FNMs were interviewed before and after shadowing.

### ***Position of the study***

This study is nested in a larger study of the second author (Lalleman). The purpose of this larger study is: 'to get insight in the daily work of nurse managers in the Netherlands and the United States, and the influence the nursing habitus and dispositions have on their leadership practices in the hospital'. The study has a case-study-design in which FNMs are

shadowed by Lalleman. The second aim of the larger study is: 'In co-creation and through practice-oriented research between the participating nurse managers and the investigator, build a model of practice based nursing leadership which could be used for future Management Development programs'. The present study will contribute to this aim.

### ***Participants***

Participants were selected using purposeful sampling. The selection criterion was: having previous experience with being shadowed by Lalleman. For this larger study eight FNMs were selected using purposeful sampling, to obtain a broad range, with managers with longer experience and some who were novice. These managers worked in two different hospitals, which were selected because Lalleman had access.

With an amount of beds between 520 and 600 these two hospitals belong to the largest 50 % in the Netherlands. The hospitals have respectively 19 and 11 wards which are led by a FNM.

For this study all eight participants of the larger study were approached by e-mail, which contained an invitation and information on the study. Participants were asked to observe a colleague from the other hospital for one day using the shadow technique.

### ***Data collection***

Data collection took place from February through May of 2012, and consisted of a background questionnaire, introductory and main interviews, and field notes. The first author organised data collection, including shadow days and did all interviews.

Two semi-structured interviews were held with each participant, using an interview guide (see table 1), which was drawn up in collaboration by the first two authors. The topics were chosen as a narrowing of the research questions, as suggested by Creswell (28). Introductory interviews were done before the shadow day to frame the starting point of learning. Topics concerned experience with shadowing and its effect and goal. After the shadow day participants were interviewed about their experiences during and after shadowing. The interviews were held in a room chosen by the participants in their own hospital.

The first author scheduled who would shadow who, based on similar ward specialism or focus as mentioned in the introductory interview. Participants received written instructions, which were discussed in the introductory interview. No additional training was given as all participants had experience being shadowed.

All interviews were audio taped. Participants filled in a background questionnaire with questions about age, education and experience (table 2). The first author took field notes on impressions and observations on non-verbal behaviour and context after the interviews to obtain thick description (29).

### ***Ethical considerations***

The study was approved by the appropriate university, which supervised the study and confirmed its ethical considerations. Participants received written information on the study objectives, its voluntary nature and the confidentiality and anonymity. They provided verbal and written consent. Personal information and sensitive information about both hospitals was removed from the data.

### ***Data analysis***

Audio recordings were transcribed verbatim. Transcription was done by an independent data typist and assessed for accuracy by the first author. For data management and organisation NVivo 9<sup>®</sup> software ([www.qrsinternational.com](http://www.qrsinternational.com)) was used.

Data were analysed using the analytical steps described by Boeije (30) and the QUAGOL guide (31). After thorough reading of the transcripts, first impressions were noted and discussed by the first three authors. This resulted in a preliminary list of concepts. Then all transcripts were reread, concepts found in the different interviews were compared and the list of concepts was adjusted. These concepts were then used as codes in the analysis of all data, using NVivo. The essence of the concepts was described using quotes associated with the different codes. A story-line in response to the research question was developed by integrating all concepts into categories and themes.

### ***Rigour***

Rigour was improved by writing memos and using a systematic method of coding. Quality of interviewing was assessed by the second author who listened to the first interviews. Audio taping and verbatim transcription was meant to ascertain credibility. Coding was done by the first two authors independently to obtain intercoder agreement (28) and discussed with the third author to improve intersubjective consensus (32). To improve trustworthiness (33) member check was done by presenting findings and discussing these with all participants.

## **Findings**

All eight participants of Lalleman agreed to participate in the study. Due to illness not all participants were shadowed. One participant no longer worked as FNM and hence could not be shadowed. Therefore some participants were shadowed twice. All participants shadowed one of the others once. None of the participants shadowed each other. Figure 1 elaborates who shadowed who.

Four participants worked in a general community hospital in a major city in the West of the Netherlands, and four in a general community hospital in a village, in a rural area in the East of the Netherlands. Background information is displayed in table 2: Participant demographics. These demographics are classified in  $\leq$  three years and  $>$  three years of

manager experience, because literature suggested that experience could make a difference (34,35).

The following results are organised according to the two research questions. The subheadings indicate the categories that were found. Illustrative quotes are provided and italics in the text signify themes. To prevent identification of the two male participants, only female pronouns are used.

## **Learning from shadowing experience**

### ***Enjoying***

All participants repeated several times during both interviews how they had enjoyed shadowing. The experience gave them energy.

### ***Being aware***

All participants described that being shadowed by Lalleman and shadowing a colleague both resulted in becoming more aware of their own behaviour. They used sentences like “it makes you more conscious”. They described it as looking in a mirror, reflecting on what one is doing. One participant described this reflection as a strong drive.

C: Because of him [Lalleman] I also started to look at myself from a distance. You are forced, when someone walks along with you, to suddenly look at your own actions, normally you would just do it. And suddenly you think, ‘Wait, someone is watching. What am I actually doing?’ Yes, you start to look quite differently at yourself.

Another reflected on the more compelling influence of shadowing compared to other management training.

D: And this [shadowing] is more, well, more the nursing way, I think. Doing it, seeing it from someone else, maybe, it sinks in more.

Some participants mentioned that almost a year after they had been shadowed, they still found themselves *coming to a standstill* once in a while, reflecting on what they had done, just like when they were being shadowed. This happened especially when they were not satisfied with events.

A: That’s what shadowing has brought about. Like: if it’s wrong, what is going wrong? That you just, if it’s only five or fifteen minutes, think, well, just can stand outside the circle.

Participants reflected on *taking an example of their colleague* and what they wanted to learn. One wanted to be more serious, the other more direct, yet another realised she had to tackle her busy agenda.

G: She had quite a slow agenda in my view, she had the peace, (she had a difficult conversation that afternoon,) preparing, just writing some things down.

### ***Recognising***

Every participant described recognising many of the activities and problems of the colleague they shadowed, and that they had to deal with the same processes. Several participants mentioned that recognising the same problems in the other organisation helped them realise that they were not alone in dealing with these problems. They mentioned having few contacts with equals and that their position is vulnerable. Shadowing helped them realise they are *part of a greater whole*.

F: It [shadowing] helps me to put my work into perspective, because it's part of a greater whole. It makes it less very important. [JB: You mean?] Of the healthcare system that we create here together. It wants a particular product and the consequence is that it bothers you and that those kind of developments go on and that it's much bigger than our hospital and I actually like that, because it incorporates me in the greater whole.

### ***Learning to observe***

Some participants described how they learnt to observe as an investigator, and also reflected on this being difficult.

H: Just experiencing and observing, I loved it. But on the other hand it was hard to let the think knob go, like, [thinking] how are we doing that.

During an informal get-together with her staff, one participant realised she was observing as a shadower.

A: I sat there and watched. They [her staff] solved it [irritations], I was spectator and they talked to each other. That was fun.

### ***Feedback***

Most participants described the value of feedback when they were shadowed. One of the participants described her experience after being shadowed the previous day.

B: I had a complicated conversation and she asked if it was okay to give feedback. Then I thought, yes, because I never get this chance that someone listens in. So I never have the chance to get feedback on how I handled this.

### ***Connecting***

Every participant that already had been shadowed by a colleague visited her when she came to the other hospital to shadow. Some expressed how they valued the contact, of connecting, and told about how they miss contact with colleagues.

## **Practical issues**

### ***Demanding activity***

None of the participants shadowed their colleague during their whole workday. Some were unable to get to the hospital in time, due to train delay or because they had to travel far. All participants left before the colleague had ended her day. The reason was mostly that it was a very tiring experience, 'doing nothing all day, yet being concentrated all day', especially because they had to rise early. Some described doing nothing was difficult because they were doers.

### ***Making notes***

Almost all participants started out making notes during shadowing. Some described being hindered by making notes; it consumed too much attention and prevented them from shadowing open-minded. Hence they stopped making notes, or just made notes during idle moments. Others thought it essential to make notes, as 'you forget what happened during the day which results in just an overview'. Notes were used to look back on the experience. One participant decided beforehand not to make notes.

B: I thought about making notes. I considered what I'd write down and realised that I would only make notes on practical things. I was afraid I would miss the big picture while making notes. So I decided not to.

Another participant found it valuable to make notes and to read them again and described what this brought her.

E. It comes back, the feeling of that day, how I experienced it and then I think again, yes, okay, she did that like this. That was a nice way or that was handy to handle it like that.

### ***How to shadow***

The participants used different words to describe how they shadowed, such as: being a shadow, be a little man on her shoulder, gazing unashamed, being inconspicuous, being open-minded.

Several participants described how they interacted and some found it difficult not to join in a discussion, particularly because it concerned similar issues as they had to deal with themselves. Not every participant found she had been successful in avoiding discussion.

Participants' *focus for shadowing* differed. Some had a general focus and looked at the process of managing a ward; others wanted to learn about more specific subjects such as group dynamics or managing sickness absenteeism. Not all these subjects came up during the day. Instead of focusing on specific items, the advice of one participant on how to shadow was: 'stop, look, observe and be amazed'.

## Discussion

A limitation of this study is that one researcher did all data collection, which could have introduced researcher bias. To overcome this bias, two other researchers took part in analysing data and participants were involved in member checking. This study only concentrated on participants perspectives on learning from shadowing. They may be partly unaware of what they learnt, which can be disclosed by observation or interviewing co-workers. The focus of the study changed towards patient safety after all interviews were done; therefore no questions were asked on patient safety. The fact that this subject was not brought up by participants may indicate it is underexposed and needs more attention. Demographic information in table 2 can be used to assess generalisability by comparing participants to FNMs in other situations.

The results of this study imply that participants learnt new repertoire: observing as researcher. This occurred when they became aware of their own actions by shadowing, stepping back and looking at themselves. They observed themselves without judgement, but with curiosity. While shadowing, they also practised observing as researcher as opposed to observing as a nurse, which is directed towards action depending on what is observed. Another indication of new repertoire is that they learnt to put their micro problems in perspective. This led to an investigative attitude, instead of judging and acting. This attitude is possibly important for improving patient safety. However further research is needed to determine whether this attitude does indeed improve patient safety and how lasting the effect of shadowing is.

By opening up ones practice to a colleague, one risks critique, but one can also receive feedback, as was described by one of the participants. When discussing errors, openness is expected from staff (nurses) (4). Therefore by being shadowed the FNM sets an example for her staff.

We identified enjoyment as an important theme. Enjoyment is important to keep someone motivated to learn (36), it must therefore be valued, especially because shadowing is a demanding activity.

Contact with colleagues turned out to be important to participants. Unlike the participants in another shadowing study (21) who constructed networks to support their career, our participants sought connectedness. Social psychology identified seeking connectedness as a basic human motive: people need support, liking and acceptance from others they value (37). This motive is even more important for FNMs who feel isolated, like our participants described. Connectedness may be an important condition to facilitate learning.

Literature suggested that experience could make a difference (34,35), but this was not found in this study. Previous studies on shadowing as learning technique used it for aspiring managers (21-23). We found that also experienced leaders benefited from learning through shadowing.

Shadowing can be used in many countries because it uses local practice. Previous research on shadowing to learn was done in the UK (22), USA (20,23,24) and Australia (21). It may also be suitable to use shadowing to learn in Non-Western countries, but further research needs to be done here.

Some practical issues were identified as important when using shadowing to learn: the demanding nature of shadowing; whether to make notes; and how to shadow. None of the other studies using shadowing to learn, described the demanding nature of it, although Arman et al. (17), whose purpose was research, did. Our advice is that designated practices should be within reasonable travelling distance from shadowers. No studies discussed making notes during shadowing. This may not be essential but can be valuable. Before shadowing FNMs need some instruction on how to shadow. Discussing the focus may be helpful (22), although all participants described a changed self-awareness no matter their focus.

## **Conclusion**

FNMs learnt new repertoire when they shadowed a colleague. This consisted of observing as a researcher and of an investigative attitude. Enjoying shadowing and seeking connectedness were important conditions to the successful use of shadowing as learning tool. Important practical issues were the demanding nature of shadowing, making notes and how to shadow. This study is the first to give insight in what FNMs can learn from shadowing a colleague and the first to join an investigative attitude to patient safety as a possible improved outcome.

## ***Recommendations***

Further research needs to be done on how lasting the effect of shadowing is and on the influence of an investigative attitude on patient safety. Nevertheless the findings in this study justify the advice to management to start using shadowing as a learning tool for FNMs.

**Tables and figure:**

Subject	Topics introductory interview	Topics main interview
Concerning shadowing	Experience with shadowing	Experience shadow day
	Effect of shadowing	Recognisable
	Goal of shadow day	Surprise
		Most remarkable
		Insights
		Influence on own actions
		Look back on goals
		Usefulness
Added questions after 2 main interviews		Compare with other management training
Added question after 6 main interviews		Could you take over the job of your colleague?
Practical issues:	Plans how to shadow	Sequence of day
	Any questions?	How did you go about?
		What went well?
		What would you change?
		Practical tips

Table 1: Interview guide

		≤ 3 years of manager experience	> 3 years of manager experience
N		4	4
Participant codes		B C E H	A D F G
Manager experience *		1.8 – 3 years (M = 2.5)	3.5 – 10 years (M = 6.1)
Age *		31 – 39 years (M = 34)	43 – 48 years (M = 47)
Nursing experience *		4 – 11 years (M = 8.4)	15 – 22 years (M = 17.3)
Span of control *		27 – 46 persons (M = 35)	43 – 75 persons (M = 53)
Amount of ward beds *		22 – 44 beds (M = 28.5)	26 – 44 beds (M = 32.5)
Education	Nursing	Nursing diploma (n = 1) Bachelor (n = 3)	Associate (n = 2) Bachelor (n = 2)
	Management	Post Bachelor (n = 2) In company training (n = 1) None (n = 1)	In company training (n = 2) Post Bachelor (n = 1) Master in healthcare (n=1)
Gender		3 females	3 females
Ward specialism		Surgical n = 2 Internal n = 2	Surgical n = 2 Internal n = 1 Specialist n = 1
Region		Rural n = 2 City n = 2	Rural n = 2 City n = 2

Table 2: Participant demographics (\* ranges of minimum and maximum)

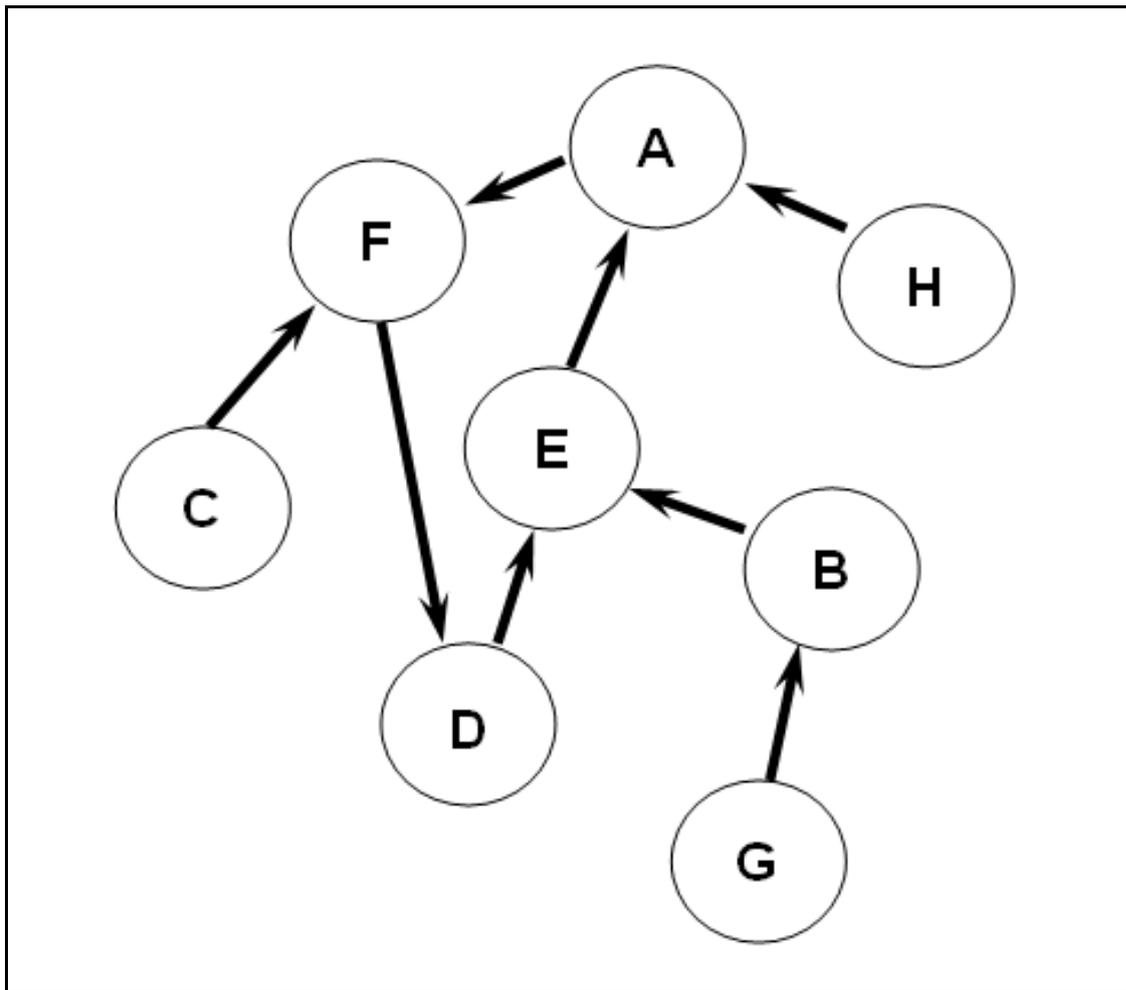


Figure 1: Who shadowed who.

(A-H are codes for the respective participants; an arrow points at a person who was shadowed).

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