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Identifying support functions in developmental relationships: A self-determination perspective

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ABSTRACT

This study examines the content of developmental networks from the perspective of self-determination theory. We qualitatively examine 18 protégés' constellations of developmental relationships to identify specific types of developmental support functions. Our study shows that the adoption of self-determination theory leads to a theory-based classification of support functions. The results show the manner in which developmental relationships meet protégés' needs for autonomy, competence, and relatedness. Protégés identified the importance of their developer's need-supportive functions to their success, including creating freedom, encouraging self-initiation (autonomy), emulating effective behaviors, confirming and praising (competence), and intimacy and self-disclosure (relatedness). Implications of the findings and suggestions for future research are presented.

Employees who are ambitious and want to increase their professionalism benefit from the help of others. Therefore, researchers and practitioners have paid much attention to relationships that promote individuals' professional and personal growth, in particular, to mentorships. The prevalence of formal mentoring programs and the flourishing field of mentoring research reflect the importance placed on mentoring relationships at work.

In the last decade, mentoring researchers have broadened their scope to developmental networks (Higgins & Kram, 2001) acknowledging that one specific mentorship may not provide everything a protégé needs. In developmental networks, attention is paid to various developmental relationships, from traditional mentorships to relationships that only provide limited developmental support. This "microsystem perspective" (Chandler, Kram, & Yip, 2011) has proven its usefulness in the mentoring literature, especially by extending our understanding of factors that influence the structure of developmental networks (Dobrow, Chandler, Murphy, & Kram, 2011). However, insight into the specific content and full range of processes in developmental networks is still limited (Cotton, Shen, & Livne-Tarandach, 2011). In this paper, we contribute to the understanding of how protégés perceive the specific types of support provided by intraorganizational and extraorganizational work developers. By applying self-determination theory (SDT), we present a theory-based framework for identifying these support functions.

This study contributes to mentoring theory in two ways. First, previous qualitative research has shown that the content of exchanges between parties in developmental networks is broader than in traditional mentoring dyads (Cotton et al., 2011; Murphy & Kram, 2010). These studies added new subfunctions to Kram's (1985) original mentoring functions, showing that the generalizability of mentoring support functions to other developmental relationships may be more limited than previously thought. This research line is still in its infancy, and we aim to contribute to a detailed description of the full range of developmental support functions in developmental networks.

Second, we suggest the adoption of SDT as a framework for identifying developmental support functions. This adoption will contribute to a comprehensive view regarding the types of support provided by developers. Central to SDT is the fulfillment of people's

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basic needs, which are autonomy, competence, and relatedness (Deci & Ryan, 1985). The use of SDT in this study is in response to the recent call of relational mentoring researchers (Ragins & Verbos, 2007) to include not only processes and support functions aimed at individual mastery (i.e., autonomy and competence), but also those aimed at interdependence with others (i.e., relatedness). A better understanding of these three needs together, will provide new insights into the types of support provided by developers.

Our research question is the following: How are protégés' needs for autonomy, competence, and relatedness fulfilled by their developers? To address this question, we conducted a qualitative study among protégés from various organizations. Before we describe the design and results of our study, we will first discuss the theoretical background.

Theoretical background

Developmental support functions

In her seminal work, Kram (1985) identified a set of mentoring functions and classified them into two broad categories: (1) career support, which includes sponsorship, exposure and visibility, coaching, protection, and challenging assignments, and (2) psychosocial support, which includes role modeling, acceptance and confirmation, counseling, and friendship. This set of mentoring functions created the foundation for a wide range of mentoring studies. Yet, it is still unknown how these support functions change when a broader range of relationships in addition to the traditional mentorship is included. In developmental network research, all people who are "taking an active interest in and action to advance the protégé's career by providing developmental assistance" are viewed as developers (Higgins & Kram, 2001, p. 268). Studies that examine the generalizability of traditional mentoring functions show that including such developers adds several subfunctions to Kram's (1985) classic set. For example, Murphy and Kram (2010) examined the support functions of work and non-work developers and added subfunctions, such as encouragement and emotional support, and work–life interface failure. Further, Cotton et al. (2011) showed the importance of freedom and opportunity for skill development, and inspiration and motivation. These studies show the relevance of extending traditional mentoring functions to developmental networks. This study aims to contribute to this line of research by qualitatively examining protégés' developmental networks to identify specific types of developmental support functions. We classify these support functions using SDT, as we believe this will lead to a comprehensive view of developmental support functions.

Self-determination theory

SDT is a theory of human motivation (Deci & Ryan, 1985) that suggests that humans have three basic needs: autonomy, competence, and relatedness. Autonomy refers to having the experience of acting with a sense of choice, volition, and self-determination. Note that a SDT perspective on autonomy differs from "independence." Acting autonomously does not rule out a sense of relatedness, but means a sense of self-directedness in one's actions (Stone, Deci, & Ryan, 2009). Competence means feeling capable and refers to a felt sense of confidence and effectiveness during actions. Individuals experience competence when they feel that they can influence important outcomes. Relatedness reflects the need to feel connected, as in to love and care, and to be loved and cared for (Baumeister & Leary, 1995). Individuals experience relatedness when they have satisfying, supportive social relationships. The central idea of SDT is that opportunities to satisfy these three basic needs facilitate people's self-motivation and effective functioning. SDT conceptualizes motivation as a continuum from non-internalized (controlled) to internalized (autonomous) reasons. When people internalize external requirements into autonomous motivations, they will be more self-determined and motivated. According to SDT, both contextual and intrapersonal factors can facilitate this internalization process. In organizational research, one of the important questions for SDT is how work environments can best support psychological need satisfaction (Sheldon, Turban, Brown, Barrick, & Judge, 2003). Recently, Haggard, Dougherty, Turban, and Wilbanks (2011) suggested to apply SDT to mentoring research. In this study, we examine how developers can support their protégés' psychological need satisfaction. For example, a mentor who understands the protégé's perspective, provides choice, and encourages self-initiation, is autonomy supportive and could facilitate the protégé's self-motivation and performance. To our knowledge, this paper is the first to empirically evaluate the usefulness of SDT in mentoring research.

The application of SDT could broaden the scope of mentoring research. Traditionally, vocational psychology has conceptualized career development as a process leading to individual mastery, differentiation from others, and vertical progression. In mentoring research, this view has led to a strong focus on support functions that promote competence and independence. However, current discourse about vocational behavior is concerned with relational dimensions, such as human strivings for attachment, connection, affirmation, and support (Blustein, 2011; Blustein, Schultheiss, & Flum, 2004; Flum, 2001; Hall, 1996). The call for a relational perspective on mentoring (Ragins & Verbos, 2007) resonates with a basic feature of SDT, i.e. the holistic and theory-based understanding of support functions that define developmental relationships, as it examines the fulfillment of the three basic needs – autonomy, competence, and relatedness – *together*.

Method

Participants

A total of 18 participants from 17 organizations based in the Netherlands were selected using purposive sampling (Patton, 1990). Participants had to meet four selection criteria to be invited. First, we aimed at white-collar employees holding clerical and

professional positions, which limited the possibility of varied occupational group characteristics that might influence the nature of developmental relationships. Second, participants had to have at least 18 months of working experience, as we assumed that this period was sufficient for developing meaningful work relationships. Third, we strived for a balance between males and females. Last, we selected participants across three career age groups: early (age: 25–35 years), middle (age: 36–45 years), and late (age: 46–65 years) (following Kram & Isabella, 1985). This full career perspective (Cotton et al., 2011) provided the opportunity to focus on both current and past relationships. All of the invited participants agreed to take part in this study. Participants were not rewarded for their participation.

All participants (10 men, 8 women) worked full-time and held at least an educational level of a four-year college degree. Participants were aged between 26 and 64 years (mean = 38 years). Most participants were White ($N = 17$). We interviewed 7 participants (5 women) in the early career stage, 6 participants (2 women) in the middle career stage, and 5 participants (1 woman) in the late career stage. Average tenure within an organization was 5.7 years, with a range from 18 months to 29 years, and average job tenure was 3 years. The organizations represented a wide range of industries, including banking, consulting and municipal government. Employees represented job categories such as General Manager, Communications Manager, and Junior Consultant. None of the participants were involved in a formal mentoring program.

Semi-structured interviews

Since this is the first study to apply SDT in a mentoring context, there were no validated scales or taxonomies to rely on. Therefore, a qualitative approach is most appropriate. Interviews enabled us to get a deep understanding of how protégés get support from their developers. During the interviews, the first author invited participants to share their career history in order to explore their developmental network(s). Interviews typically lasted 90 min. All of the interviews were audiotaped with permission. Participants were assured that their responses would remain confidential and anonymous.

We started each interview by asking the participant to describe his or her job and to discuss daily work activities. Then, we asked the participant to describe his or her career history, from leaving school to the present day. In this way, we gained insight in the important steps in each participant's career, and a broader view of the context in which the participant worked. Next, we focused on the participant's past and current developmental networks. Following the definition of developmental networks by Higgins and Kram (2001, p. 268), we asked the participant to name a set of people, "who you believe (currently or in the past) takes or took an active interest in and concerted action to advance your career." We encouraged the participant to think broadly when considering his or her developmental relationships at work (i.e., "they may be people with whom you currently work, have worked with in the past, and from within your organization, or outside"). Participants were not limited in the number of developers they could mention. In this way, we were able to get a deep understanding of the full range of developers who are perceived to give support during a protégé's career.

We used a graphic interview method for elicitation purposes. We asked the participant to write down the names or pseudonyms of these persons on cards and then to arrange the cards in a relational map (Bagnoli, 2009), consisting of an inner and outer circle. We posed the following question: "If you imagine standing here in the middle, how would you order those people you mentioned, such that their positions in the circles reflect their importance to your career?" After the participant had placed the cards, we asked for an explanation regarding the position of the cards. To help participants focus on concrete examples, we asked for examples of how the developers provided support. As we did not want to prime participants' answers with SDT concepts, we did not ask whether the developers fulfilled the concepts of autonomy, competence, and relatedness.

Data analysis procedure

All of the interviews were transcribed verbatim, leading to 133 transcript pages, and were analyzed with the help of Atlas.ti software for tracking code creation. Using a multistep content-analytic procedure, we analyzed the data with three coding rounds. In the first round of coding, the first author read the transcripts and generated a list of comments that reflected the ways that developers fulfill protégés' needs for autonomy, competence, and relatedness. Next, the second author assigned the selected comments to the three SDT categories (autonomy, competence, and relatedness). In the next round of coding, both researchers looked for subcategories in the data while keeping an open discussion regarding the categorization of the comments. These subcategories were then compared with the need-supportive behaviors from the existing literature regarding SDT (e.g., La Guardia & Patrick, 2008; Stone et al., 2009). Additionally, the researchers searched for words such as *self*, *own*, *want* (autonomy), *knowledge*, *experience*, *can* (competence) *together*, *both*, and *common* (relatedness) in the transcripts. Applying an iterative procedure, we moved back and forth between the data and literature on SDT, and added to and adjusted our framework when necessary. The resulting subcategories were labeled to capture the meaning reflected by the group of comments (e.g., "Creating Freedom" as a subcategory of "Autonomy"). All of the (sub)categories were then defined in a codebook. Since the purpose of our analysis was to look for common ideas and patterns in participants' responses, (sub)categories represented by a single comment made by one participant were deleted from further analyses.

In the final coding round, the codebook was given to an independent coder. This coder recategorized each of the comments into the defined subcategories. This independent coding resulted in initial kappas of .60 (autonomy), .80 (competence), and .72 (relatedness). After extensive discussion with the first author and several adjustments to the classification of comments, the (unweighted) kappas increased to .92 (autonomy), 1.00 (competence), and .93 (relatedness). The quotes presented in the Results section are illustrative of the 18 interviews.

Results

In total, 95 developers were identified. The average number of developers per participant was 5.28 ($SD = 3.64$). The smallest developmental network had 1 member, and the largest had 15 members. Interestingly, several participants addressed the importance of negative developers, even though the interview questions focused on positive developmental relationships. These negative examples served as role models in a different way, in that they were examples of how someone would not want to behave (cf. Murphy & Kram, 2010). We will discuss the ways that developmental partners fulfilled the three needs by distinguishing between several forms of developmental support.

Autonomy support

In SDT, autonomy support is obvious when need-supportive partners actively try to understand a person's interests, preferences, and perspectives (La Guardia & Patrick, 2008). Our analysis revealed that developers respond to protégés' initiatives and encourage protégés' exploration. Table 1 shows the types of autonomy support that is provided by developers.

Creating freedom

Participants often stated that their developers were persons who provided them with a sense of freedom. Protégés experienced freedom in the nonprescriptive advice provided by their developers, in the freedom that their developers gave them to perform their jobs, and in the ways they felt free to develop and express their own opinions in discussions. One protégé noted that he preferred the way that his informal mentor provided advice compared to his supervisor because of the supervisor's directive style: "He (informal mentor) had an easy manner. He just told me some things about home, or about life, and we chatted a bit. She (supervisor) had a more directed style. You started a conversation and in the end, so to speak, she had a training company's brochure for you." Consistent with the literature regarding autonomy support (e.g., Gagné & Deci, 2005; La Guardia & Patrick, 2008), negative relationships involved developers who controlled their protégés: "Well, in my second job, my supervisor was very important but in a negative way. From her, I learned everything about how I don't want to supervise. I was under strict supervision, everything had to be done her way. It was a real straitjacket."

Encouraging self-initiation

Another form of autonomy support discussed by the participants was encouraging protégés' self-initiation. Participants described how their developers encouraged them to act in ways that they had not done before (e.g., apply for a job or participate in new projects), even if they hesitated to do so: "She really encouraged me to do things by myself, besides my work at (organization). I developed a workshop on my own and provided training at four or five other organizations and she encouraged me to do so. When I worried about going to the Chamber of Commerce to arrange things, she suggested that I could begin by providing these trainings for book tokens. Then, I thought: Yeah, why not? I'll try it!"

Table 1
Results of the content analysis for developers' autonomy supportive behavior.

Category	Definition	Sample comments
Creating freedom *18 comments*	Developer provides the protégé with the feeling that (s)he has the right to do or say what (s)he wants without being controlled	"For me, an informal mentor is someone who does not have an opinion about what you should do; rather, based on your own strengths, the mentor helps you make your own choices without exerting pressure or saying what you should do."
Encouraging self-initiation *8 comments*	Developer persuades the protégé to decide and act on his/her own, and to engage in new actions	"She said to do other things and to do crazy things. Organize something. Yeah, she was a creative person and that helped me. It stimulated my own creativity. Also, in my own workshops, I do something that is completely different from what you normally do in workshops. So, I try to do things a little bit differently."
Congruency with personal values *3 comments*	Developer helps the protégé decide whether the behavior (s)he is performing is in line with his/her own interests	"He taught me to think of what was important, that I had to look back at my career and think about what suits me, what makes me enthusiastic."
Confirming and praising autonomy *3 comments*	Developer shows approval of or admiration for the autonomous behavior of the protégé	"I went to a conference, and I wrote some notes for practices on paper (and) sent these notes to everyone. Then, (developer) came to me, and said: Wow, this is cool. This really made me happy. It is so good that you did this. I used that freedom, which was then rewarded."
Emulating autonomous behavior *3 comments*	Developer is admired by the protégé because (s)he makes his/her own decisions without being controlled by anyone else, and the protégé tries to copy this	"She was an incredible, atypical… creative nonbureaucrat. She opposed everything, did everything differently from how it was or should be done within the government, and she succeeded. Because of her creative way of thinking, it became ok to go left when 80% of the group went to the right. That inspired me."

Congruency with personal values

According to SDT, self-determined employees engage in their work for several reasons, including integrated ones, such as the value served by a particular behavior being consistent with other personally important values. Developers help their protégés by encouraging to reflect on and assess whether their behavior aligns with their personal values. Participants described how developers encouraged these reflections: "He would state that this way of working was my style, or he would pose questions such as: What gets you really enthusiastic?" Protégés in the older age groups might need this form of autonomy support less, as the following quote from a participant in the middle age group reflects: "I have a few people that I can consult. However, most of the time, I do this when I have already made a choice, and then I test whether this was actually the correct choice. In the beginning of my career, there was a contrast in experience that meant I really needed to ask for advice. But now, I am someone who does, thinks, deduces, and then asks people: Is this correct? Is this my style?"

Confirming and praising autonomy

Protégés experience appreciation of their autonomous behavior from their developers. Developers may note the autonomous behavior of their protégés and then encourage them to behave in this way, by both confirming and praising their protégés' autonomous behavior. As one protégé noted, "And he was also affirmative. He said to me: In this way, you stand out. This is different from how other people will do it. Here, you have your own personal approach… He also said: This is correct. You are on the right track."

Emulating autonomous behavior

Lastly, protégés see their developers as role models whose behavior reflects autonomy. By observing their developers, protégés develop tacit knowledge regarding how autonomous people behave, which they can use in their own roles (Ibarra, 1999) by copying the developers' behavior: "My developers are completely different. They have one thing in common and that is their passion gained from their own values. From their own, authentic, self-will. Yeah, I think that is the correct word. I admire their authenticity."

Competence support

Developmental relationships are important for meeting competence support needs, as reflected by Kram's (1985) subfunctions of career support. Table 2 shows several ways that developers provide clear, consistent, and reasonable expectations, which support competence needs (La Guardia & Patrick, 2008).

Table 2
Results of the content analysis for developers' competence supportive behavior.

Category	Definition	Sample comments
Emulating effective behaviors *15 comments*	Developer is admired by the protégé because of the developer's knowledge, skills, and routine	"I really admire my colleagues. Yeah, I want to be like them. Their work experience and knowledge, how much they know. I look up to them, I want that, too. And their way of working is very precise, professional, and reliable. And then I think: Oh, how I wish I could work like that."
Confirming and praising competence *15 comments*	Developer fosters the protégé's strong belief that (s)he is able to perform his/her job	"I think (developer) is very important, especially helping me gain self-confidence. He gave me the feeling that others saw me as competent. In the beginning, I was insecure about how to do my job, and how I was seen? Am I good enough? Yeah, he taught me how to have faith in myself."
Familiarizing with the working environment *8 comments*	Developer introduces the protégé to the work field and teaches him/her the ropes	"He showed me the ropes of our field and took me along to lots of places, including court and those sorts of things."
Accepting one's own incompetence *5 comments*	Developer helps the protégé accept his/her lack of ability to do the job as it should be done	"I always think that I have to work harder and better, you know? When I look back, he often told me things such as: Relax, take it easy, you don't always have to do the best you can. You don't always have to work."
Stimulating continuous development *5 comments*	Developer encourages the protégé to improve particular qualities or skills	"And he alerted me that, besides your working life, you have to keep developing by taking classes and reading because if you don't develop, then you're just standing still. And be reflective of what you're doing to keep informed about the developments in your discipline."
Problem solving *3 comments*	Developer helps the protégé find ways of dealing with problems in his/her job	"She said: You probably won't solve this, especially after the feedback that you got, because she saw that I worried about that. Then, she said: Meet me in two days. I will reschedule my calendar and, together, we can make an outline for this project. We discussed the situation for two hours and then it was solved."
Creating an environment for practice *3 comments*	Developer creates conditions that allow the protégé to practice his/her skills related to performing the job	"That was one of my learning aims when the project started. He told me: I want you to focus only on what you feel now and on what happens in that conversation? Not on the content, but on what happened? …That was such a clear exercise that, at first, I found it very difficult."

Emulating effective behaviors

Previous research shows that protégés try to copy the career behavior of their developers (Kram, 1985; Murphy & Kram, 2010). Also in the current study, participants reported several ways in which their developers serve as role models whose behavior reflects competence. Participants discussed how they admire their senior developers' positions, experiences, and skills. Some of the quotes in this category involved developers such as CEOs or important persons in the field, with whom there was no reciprocal relationship: "I see him for about one hour a month, and we have email contact, but he is the one I appreciate the most as an ideal model." When protégés do not have a role model, they express that they miss this type of developer: "This (organization) is a bit disappointing. I miss interacting with a person who inspires me. I don't have that kind of person here. I would like to know someone who is five, six, or seven years further than I am in this organization."

Familiarizing with the working environment

Employees have to learn the ropes of an organization. Protégés discussed how their developers helped them navigate in the organizations correctly. Developers told their protégés to put events in perspective, thereby familiarizing the protégés with the attitudes within an organization or work field: "This is just the way it is done here. Don't get upset about that." Comparable to the visibility and exposure functions reported in previous mentoring studies (Kram, 1985; Murphy & Kram, 2010), data suggest that developers introduce their protégés to the field or organization by providing the protégés with opportunities to show competence. The following quote is an example of how a protégé earned respect because her developer familiarized her with several projects: "He took me along as a junior-consultant. He asked me to join him when he went to a client. I was the only junior-consultant who didn't have time for the orientation course because of all the projects I was involved with. I immediately earned the respect of my colleagues: Oh, she is good because she already has clients and works claimable hours." Participants discussed their visibility with peers and provided examples of opportunities created by developers to prove their competence to seniors in the organizations. In contrast, negative developers did not introduce their protégés into the organization or work field, which caused the protégés to be overwhelmed by challenges and tasks: "I was thrown in at the deep end. I mean, he (supervisor) has not helped me, in my opinion."

Confirming and praising competence

Participants discussed the various ways that their developers showed appreciative behaviors. Protégés are rewarded by their developers with kind words and other informal rewards: "When I left, there was no money for a farewell drink but he gave me a big bouquet of flowers with a card that thanked me for my quickness, understanding, profundity, and those kinds of things. He was good at saying: This is what you do well. This is your strength." Moreover, developers provide protégés with a feeling of self-confidence when they are performing their jobs. In particular, protégés at the beginning of their career are likely to be insecure about their performance. Participants discussed how their developers helped them being positive about their performance and having faith in their success during a certain task. As one protégé noted: "I often thought: am I good enough to do this? There are huge differences in the levels of expertise between mathematicians and because of him (developer), I thought: Well, at least I can try!" Lastly, developers often praised protégés in public, which is comparable to Kram's (1985) sponsorship function: "She spoke very appreciatively of me. I liked that. She gave me confidence by saying to others that if I participated in their projects, they would know for sure that the projects would be successful and that it would even go one step further than that." This public support of protégés also occurred when developers recommended protégés for promotions or other jobs in discussions with (other) supervisors: "She is always willing to put in a good word for me to other managers, especially when I am looking for something new."

Accepting one's own incompetence

Another way to show competence support occurs when developers help protégés accept their own incompetence: "He helped me become self-satisfied. To find certain explanations but also to accept some things." Stating that the protégé does not have to be perfect might sound like a paradoxical way of providing competence support, but, in doing so, the developer provides the protégé with reasonable expectations. In this way, developers help protégés avoid becoming overwhelmed by their job requirements.

Stimulating continuous development

While acceptance of one's weaknesses was deemed important, a focus on development of protégés' competencies remained key. Some participants mentioned that their developers continuously stimulated them to work harder, aim for better results, and learn new skills: "He repeatedly got me out of my comfort zone. Every time I thought that I got it right, he would come up with something else." Though this 'pushing the boundaries' behavior from developers might contradict the principles of autonomy support, it seems to mobilize the protégés' resources (La Guardia & Patrick, 2008), creating a sense of competence.

Problem solving

Protégés received help from their developers during difficult times, such as when they are experiencing problems at work or get stuck in a job. By helping the protégé, and providing the protégé with a step-by-step plan to solve a problem, the developer creates structure and gives the protégé the feeling that he or she can overcome these difficulties.

Creating an environment for practice

Finally, developers create environments for practice where they allow protégés to make mistakes: "He always said to me: You learn more from a game you lose than from a game you win". This is another way of setting reasonable expectations and providing the necessary foundation to face challenges (La Guardia & Patrick, 2008).

Relatedness support

In line with a relational view of development, protégés often reported the importance of learning in the context of a caring relationship, like with a developer who provides positive regard and creates a warm, loving, nurturing environment (La Guardia & Patrick, 2008). Table 3 shows the types of relatedness support that are provided by developers.

Intimacy

Although the levels of intimacy vary across the various developmental relationships described by the participants, intimacy was the form of relatedness support that was reported most often. Protégés describe their relationships with important developers as close, warm, special, and long-lasting (e.g., "Nobody knows me better than he does.") Participants even reported being connected such that the developer and protégé empathize with each other, almost telepathically: "I don't have to explain anything to them. It is almost telepathic, especially with her (mentor). We recognize so many things."

Self-disclosure

The opinion that protégés could discuss almost anything with their developers was also an important form of need-supportive behavior. By disclosing emotionally relevant information to each other and by mutually responding to these disclosures, intimacy is formed between the protégé and developer. This disclosure process distinguishes reciprocal relationships (such as relationships with informal mentors) from nonreciprocal relationships (such as relationships with coaches): "He was a coach for me, so he kept me at a certain distance. I told him many things about myself, but it was not equally open. It was not a give and take type of relationship. And this type of relationship was also evident with my supervisor. It is just her job, and she supervised so many (employees) that she didn't talk about herself. She listens to you and lets you talk." This specific quote shows how participants may regard the support provided by supervisors as being just part of the supervisors' job. This makes the relationship less exclusive, and for relatedness, this may devaluate feelings of the developmental partner being sincerely interested or caring.

Additionally, some participants reported being cautious about disclosing personal matters in supervisory developmental relationships. Participants discussed feelings of vulnerability that were associated with disclosing emotionally relevant information to their supervisors. The following quote serves as an example from a participant who described her supervisor as being a role model, which caused a professional distance leading her to be reluctant to disclose personal information: "With (supervisor), I only discuss work-related things because I admire her so much and place her on a pedestal. So, I won't talk about my personal troubles with her. I wouldn't go to her to talk about problems at home or something like that. She does something. I want to be that kind of woman. I would like to be that kind of mother and professional." This specific quote also marks a spillover effect from private to work life. This protégé describes how she notes or imagines elements from her supervisor's private life and wants to copy these elements.

Relatedness behavior to emulate

Similar to role modeling in autonomy and competence support, participants identified role models whose relatedness supportive behavior they wanted to copy. Developers serve as role models for relatedness as they are persons who show that they care about others: "She was focused on her relationships with others. How do you enter into relations? And that it can be more important to have a good relationship than to get a project outcome of 100%. I think she was somebody who stimulated this."

Table 3
Results of the content analysis for developers' relatedness supportive behavior.

Category	Definition	Sample comments
Intimacy *13 comments*	Developer has a close personal relationship with the protégé	"This felt so intense and so warm. And that is very special and beautiful. I don't think you have that with many others… I don't have to explain anything to him."
Self-disclosure *8 comments*	Developer and protégé (both) share personally relevant information.	"Because I can discuss my deepest doubts with my (mentor) and, yeah, the feeling of being a hand in a glove. (Supervisor) was also important, but I could never discuss my emotions with him."
Relatedness behavior to emulate *5 comments*	Developer is admired by the protégé because of the way (s)he has significant relationships with others	"For me, (developer) is a model for how to have good interpersonal relationships."
Showing genuine interest *5 comments*	Developer provides the protégé with the feeling that (s)he sincerely cares about the protégé	"(Mentor) is a counselor for some big consultancy firms in (city). He calls me every week to ask me how I am doing. Every week. I think that's fascinating. Very loyal."
Caring *4 comments*	Developer worries about what happens to the protégé	"My mentor took me under her wings. And sometimes she took care of me. It is like she thought that she should take charge of me or something like that."

As noted by Kram (1985), the identification process in role modeling is complex. The protégé may mimic some aspects of the developer while rejecting others. Also in the current study, participants report using a form of 'selective imitation' (Ibarra, 1999). The next example shows a protégé who sees his supervisor as a role model for competence but not for relatedness: "I also saw the downside. She and her husband worked hard. They had a son that they barely thought about. I had a glimpse of her private life and I really did not like it. There is no way that I am going to live like that. In that way, she was not really an example, but she was a good role model in business." Additionally, in this quote, the protégé describes how he observed elements from his supervisor's private life, which suggests a spillover effect.

Showing genuine interest

Another way that protégés experience a warm, loving, and nurturing environment is by having developers who show genuine interest in them. Participants discussed how their developers always make time for them and sympathize with them. However, protégés sometimes have ambivalent feelings about the interest shown by their developers: "She once told me: Life is like a play, you know, a puppet show. Everything is a farce, and you can bend things to your own will, or something like that. That was her perspective. Yeah, sometimes I was a bit skeptical. It felt real and genuine, but sometimes I thought… I don't know. It all felt real, but sometimes what she said rankled me. I think it is good that I am no longer there."

Caring

Lastly, participants reported that their developers, especially their informal mentors, cared for them, like parents care for their children. Protégés discussed their most intensive developmental relationships using metaphors, such as "He was the father of our company" and "She took me under her wings." Additionally, this caring behavior from the developer leads to feelings of being protected: "He cared for me. He gave me the feeling of having a bodyguard. That was so great, it felt like a partner, like police officers have." This behavior shows similarities with Kram's (1985) protection function, though it is not characterized by specific behaviors of the developer, such as taking blame and credit in controversial situations.

Discussion

The aim of this study was to examine the support functions provided by developers from a SDT perspective. Our study shows that adopting SDT in mentoring and developmental network research leads to a theory-based classification of support functions. The results show how developers fulfill protégés' basic needs for autonomy, competence, and relatedness. Data from our interviews enrich our understanding of how developmental relationships enable one's growth and development. The present study makes three theoretical contributions to the mentoring and developmental network literature.

First, the results showed the relevance of a self-determination perspective for mentoring research. Each of the basic human needs could be identified in the stories of the protégés, in different variations and subtleties. The richness of SDT can inform future research on developmental relationships. Our SDT framework complements the classic conceptualization in career and psychosocial support functions (Kram, 1985). For the category competence, the overlap with career support is most notable with its focus on "mastery". Autonomy has also been included in previous mentoring studies (e.g., Fagenson, 1992), although the subcategories identified in this study exceed previous conceptualizations. In current mentoring research, autonomy is conceptualized as *individual* mastery, as in getting a job done without the help of others. In contrast, SDT has a different take on autonomy, which protégés mention as they talk about their development in terms of 'doing things my way'. Autonomy is then about getting feedback on one's own actions. Developing autonomy in this sense not only means mastering, but also getting a sense of self as a professional. Studying autonomy in mentoring according to SDT raises new research questions, like 'How do mentors provide feedback on protégés' identity formation?' Of the three basic needs, relatedness is mostly overlooked in mentoring research. Although relatedness functions can be traced in Kram's conceptualization (e.g., friendship and protection), our study paints a broader picture of belonging and interpersonal sensitivity. This is a promising contribution, because in this way the relationship becomes a need in itself, rather than the vehicle for individual mastery. This is in line with recent calls for the importance of relationships in organizational life (e.g., Ragins & Verbos, 2007). Following the conceptual proposition by Allen and Eby (2007), we suggest scholars to consider 'the need to belong' (Baumeister & Leary, 1995) in their research on developmental relationships. Besides, our findings reiterate the importance of role modeling. The position of role modeling as a function of mentoring is ambiguous. Initially, role modeling was seen as a subcategory of psychosocial support (Kram, 1985). Later, it was found to be an aspect of career support (Noe, 1988), while Scandura (1992) found a three-factor structure, in which role modeling is a separate support function. In our interviews, participants related role modeling not only to emulating effective behaviors (a subcategory of competence support), but also with regard to developers' autonomous and relatedness supportive behaviors. Since we identified role modeling as relevant for each of the three basic needs, its prominence is striking. This is in line with Murphy and Kram's (2010) plea to consider role modeling as a broad category, relevant in different areas, making it a highly important support function in developmental relationships.

Second, our study offers new insights regarding the examination of the effectiveness of developmental relationships. Formally, SDT is a macrotheory consisting of five mini-theories. The current study is concerned with the fulfillment of protégés' needs, in that way applying key aspects of SDT's mini-theory of basic psychological needs. One of the claims of this theory is that the three basic needs serve as the underlying mechanisms for well-being. From studies examining romantic relationships and close friendships using SDT, we know that need fulfillment in relationships leads to relationship functioning and well-being (La Guardia & Patrick, 2008). If the three basic needs are not met, a relationship does not live up to its full potential. It might be that, in dysfunctional

mentorships, mentors and protégés differ in their expectations regarding the need-fulfillment for basic needs. For example, in the taxonomy of negative mentoring experiences by Eby, McManus, Simon, and Russell (2000), distancing behavior seems to reflect a lack of relatedness support by the mentor, inappropriate delegation seems to reflect a lack of autonomy support, and a lack of mentor expertise seems to reflect a lack of competence support. It would be useful to examine how both mentor's and protégé's perceptions regarding the fulfillment of the basic needs within a specific relationship (mis)match can influence a relationship's effectiveness. We encourage mentoring researchers to explore the usefulness of the other mini-theories of SDT. For example, cognitive evaluation theory addresses the effects of social contexts on intrinsic motivation. With regard to mentoring research, it would be fruitful if researchers examine how exactly developers can create an autonomy-supportive context for the protégé and foster intrinsic motivation. According to organismic integration theory, social contexts can enhance the internalization process. Future studies could investigate how mentors can help their protégés to feel a sense of identification with their work behaviors, even while doing extrinsic tasks. In such ways, SDT opens up new ways for understanding how and why developmental relationships can contribute to personal and organizational goals.

Third, this study contributes to the understanding of how various developers foster their protégés' development by providing insight into the specific types of developmental support. Previous research regarding developmental networks has mainly focused on the antecedents of developmental networks' structure (Dobrow et al., 2011). The current study joins the research lines of Murphy and Kram (2010) and Cotton et al. (2011) by examining the specific ways that developers support their protégés. This qualitative approach leads to a realistic evaluation of developmental relationships. Similar to Murphy and Kram (2010), participants discussed the importance of negative developers, although we focused primarily on positive developmental relationships. Further, our results reveal that protégés report various ambivalent feelings towards their developers. We showed that protégés use selective imitation when copying their developers' behaviors. For example, protégés explained that they appreciated and copied elements from their developers' work lives, while condemning elements from their developers' private lives. Moreover, in general, developers' autonomy supportive behaviors are important for providing support to protégés and protégés appreciate that developers create freedom for them. However, developers who were most important to the protégé were often described as hard disciplinarians who carefully recorded the protégé's learning process. To conclude, this qualitative inquiry shows a nuanced and theory based exploration of the underlying dynamics of developmental relationships and a better understanding of why relationships are considered as developmental.

Limitations

We note that this study is only a starting point in examining the usefulness of SDT in developmental networks and mentoring research. Several limitations should be noted. First , this is a typical single-perspective study, as we did not involve developers in our study. We encourage researchers to examine whether and how developers' motivations can be explained using an SDT framework (see also Haggard et al., 2011). Most of the developmental relationships discussed in this study were described as reciprocal relationships. In particular, relationships with informal mentors were described as relationships with mutual exchanges and matching forms of need-fulfillment, including intimacy and self-disclosure. This is consistent with previous literature that assumes that mentoring relationships are reciprocal (Eby, Rhodes, & Allen, 2007). However, we also found nonreciprocal processes within the developmental relationships and mentorships. Caring is an example of a subcategory that is nonreciprocal in that mentors care for their protégés, but this caring is unlikely to be reciprocated. Thus, it would be useful to examine what motivates developers to engage in developmental relationships, and which specific forms of support functions *they* perceive that they are providing and gaining.

A second limitation is that we only focused on work relationships. Previous research (Higgins, 2000; Higgins & Thomas, 2001; Murphy & Kram, 2010) shows that developmental relationships are likely to exist both within and outside of work organizations. Although participants mentioned developers outside of their work context (family and friends), our analysis focused only on work-related developers. The developmental relationships perspective allows for a broader range of developers than we included.

Further, our findings are based on a small number of protégés ($n = 18$). Although theoretically data saturation can be achieved with 12 interviews (Guest, Bunce, & Johnson, 2006), we do not state that the needs identified within this study are the *only* needs fulfilled with regard to SDT. We look forward to seeing similar studies conducted with other samples so that we may compare and extend our findings. Furthermore, we recognize that the types of support are not distinctive in that there is an interplay between the different forms of need fulfillment. For example, the competence subfunction regarding creating an environment for practice relates to fulfilling autonomy in that, by providing an environment for practice, the developer is providing the protégé with the *freedom* to practice and make mistakes. Therefore, we believe that future studies should examine whether the fulfillment of the three basic needs *together* leads to an increase in a protégé's psychological health, relationship satisfaction, and career outcomes.

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