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The Relationship Between Networking, *LinkedIn* Use, and Retrieving Informational Benefits

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Abstract

Previous research has shown that users of social network sites designed for professional purposes, such as *LinkedIn*, report higher professional informational benefits than nonusers. However, this effect could only be partly explained by social media use as there was also a selection effect, such that people who have more informational benefits were more likely to use *LinkedIn*. The goal of this study was to explore whether differences in networking, defined as a set of behaviors with the aim of building, maintaining, and using internal and external contacts for instrumental purposes, can explain this selection effect. We used data from a panel study with a representative sample of Dutch Internet users ($n = 685$; 259 *LinkedIn* users) to examine the relationships between networking and *LinkedIn* use as well as professional informational benefits, that is, timely access to relevant information. The results showed that people scoring high on external networking (but not internal networking within their organization) are also more likely to use *LinkedIn*. External networking was also positively correlated with active and passive use as well as the number of strong and latent ties on *LinkedIn*. However, in a mediation model the direct effect of networking on informational benefits was not mediated by actual social media use and network composition; instead, the number of weak ties had a direct effect on informational benefits. The results thus indicate that networking is a major driver of informational benefits from *LinkedIn* use.

Keywords: LinkedIn, networking, informational benefits

Introduction

RESEARCH ON SOCIAL NETWORKING SITES (SNS) designed for professional purposes (professional networking services [PNS]),[1] such as *LinkedIn* or *Xing*, has shown that users of these platforms report higher informational benefits, that is, (timely) access to resources and referrals to career opportunities, than nonusers do.[2,3] However, these studies also revealed that only a small percentage of the variance in informational benefits could be explained by social media use. There was also a selection effect, such that people who already had more informational benefits were more likely to use these platforms. The goal of this article is to bring together research on PNS and research from organizational psychology to test whether networking is the variable that could explain this selection effect. Networking is a concept from organizational psychology and defined as building and maintaining informal relationships that might give access to information and resources.[4] So far, research on networking in professional settings did not pay special attention to the role of the medium; a recent review[5] even explicitly excluded studies that focused on SNS. Research on SNS, however, focused mainly on personality traits, such as the Big Five or narcissism, when looking for predictors of social media use,[6–8] but did not consider networking as a key variable. We aim to enrich both streams of literature by examining the role of networking behavior in using and retrieving informational benefits from *LinkedIn.*

Networking

Networking is defined as a set of behaviors aimed at building and maintaining interpersonal relationships that possess the (potential) benefit to facilitate work-related activities by providing access to resources and jointly maximizing advantages of the individuals involved.[4] Researchers

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commonly distinguish between internal networking with colleagues in one's own organization and external networking with people from other organizations.[9]

Wolff et al. provide a model of the antecedents and consequences of networking.[10] They list demographic variables, structural variables (e.g., job function), and individual characteristics (e.g., personality) as antecedents and divide the consequences into individual and organizational benefits (job performance). Individual benefits are further differentiated into access to primary (work-related support and strategic information) and secondary (career success, visibility, and power) resources. Several retrospective, cross-sectional, and prospective studies have focused on the secondary resources and demonstrated that networking can lead to subjective (e.g., career satisfaction) or objective (e.g., promotion) career benefits.[5,11,12] The effects of networking on informational benefits as primary resource, however, received considerably less attention.

For our study, we define and operationalize informational benefits as (timely) access to work-related information and referrals to career opportunities.[13] Based on the model by Wolff and Moser,[10] a positive relationship between networking and informational benefits can be expected. There is also indirect support for this assumption because several studies could show that networking is positively related to career outcomes,[11,12,14] and that access to information predicts positive career outcomes.[15]

H1: Networking is positively related to informational benefits.

The relationship between networking and social media use

Research focusing on *Facebook* or other SNS mainly used for leisure purposes generally found that most users maintain existing relationships rather than build new relationships.[16] Compared with *Facebook*, PNS such as *LinkedIn* or *Xing* are explicitly designed for professional networking.[17] Hence, using these platforms represents a very specific form of online networking behavior. We, therefore, assume that networking is positively related to using *LinkedIn*. In contrast to company-internal enterprise social networks, platforms such as *LinkedIn* allow people also to connect with others across organizational boundaries. Most people on professional SNS have more connections with people from different organizations but the same field than with colleagues from their own company.[18] We, therefore, expect a positive relationship between external networking and *LinkedIn* use, but also want to explore whether internal networking might predict *LinkedIn* use as well.

H2: People scoring high on external networking are more likely to use *LinkedIn*.

RQ1: Are people scoring high on internal networking more likely to use* LinkedIn*?

Networking and informational benefits retrieved from professional SNS use

In the next step, we want to examine whether people scoring higher on external networking are not only more likely to use *LinkedIn*, but also to use it in a way that further increases informational benefits. Basically, two effects could be expected. First, networking might be related to the size and composition of the *LinkedIn* network. Second, networking might also be related to actual *LinkedIn* use.

Since networking is defined as building and maintaining contacts, we also expect people scoring high on external networking to have a larger number of contacts. First, they probably already have larger offline networks when they start using *LinkedIn*, which should be mirrored in their online networks. Second, we assume that people who score high on external networking also use social media platforms more for making new contacts, for example, by reacting to contact recommendations made by the platforms. Reacting to such recommendations often creates so-called latent ties, which are ties that are ''technologically possible but not yet activated socially.''[19(p137)]

H3: External networking is positively related to the number of strong, weak, and latent ties on *LinkedIn*.

It is less clear whether people scoring high on networking also use *LinkedIn* in a way that is beneficial for retrieving informational benefits. People scoring high on networking engage in various offline activities, such as attending conferences or going for a beer with colleagues. Hence, we expect that they also use *LinkedIn* in an active way. In previous empirical studies, posting professional content and activity in groups turned out as predictors of informational benefits.[2,3] Research on enterprise social media as well as on *LinkedIn* argued and found that passive use, that is, reading or skimming social media updates is positively related to building ambient awareness, a cognitive representation of who knows what, which is an antecedent of retrieving informational benefits.[20–22] People engaging in networking behavior usually want to be well informed about what is going on in the field. Accordingly, we also expect a positive relationship with passive *LinkedIn* use.

H4: External networking is positively related to (a) active and (b) passive *LinkedIn* use.

In a last step, we examine whether social media use and network composition partly or fully mediate the effect of external networking on informational benefits. This would be a first hint that people scoring high on external networking have higher informational benefits because they use PNS in a more efficient way. If there is an independent effect of networking behavior, this could imply that, although online platforms are used as additional channels, the informational benefits are obtained outside of them (i.e., offline).

RQ2: Do network composition and* LinkedIn *use mediate the effect of external networking on informational benefits?

Methods

Sample and procedure

We used a subsample of working people ($n = 685$; 262 women, 423 men; age: 13.4 percent between 18 and 29, 20.7 percent between 30 and 39, 25.8 percent between 40 and 49, 34.7 percent between 50 and 64, and 5.3 percent older than 65) from wave 6 from a larger longitudinal study of Dutch

Internet users (eight waves with a time interval of 6 months; see https://www.redeftiedata.eu/ for all measures and data). Among those, 43 percent ($n = 297$) reported that they use PNS; in most cases, this was *LinkedIn* ($n = 259$).

Measures

LinkedIn use. We asked participants whether they used *LinkedIn* or another PNS. For this article, we focused on people who use *LinkedIn*.

Passive and active *LinkedIn* use. To measure frequency of passive use, we asked *LinkedIn* users how often they read posts. For frequency of active use, we assessed how often they posted on *LinkedIn*. Answers were given on a scale from (1) ''never'' to (5) ''very often.'' One item specifically addressed activity in groups on a scale from (1) ''not at all'' to (5) ''regularly.'' In addition, we assessed posting professional content by asking respondents how often they post about professional success, general information about work, or ask for job-related advice on five-point scales ranging from (1) ''never'' to (5) ''very often'' (5). Cronbach's alpha for this three-item scale was 0.87.

Network composition. Respondents were told that it would be helpful to open their account in another window or tab of their browser for answering the network questions. They first reported the overall number of contacts they have. After reading a brief description of strong and weak ties, they were asked to estimate how many of those are strong or weak ties, respectively, and how many they would not even recognize when they meet them on the street (to capture the even weaker latent ties). Since these numbers showed severe skewness and kurtosis, we log-transformed them using the formula $\ln(x + 1)$ to avoid missing values for people who reported zero ties.

Professional informational benefits. We used five items from the scale by Wickramasinghe and Weliwitigoda.[23] Respondents indicated their agreement on five-point scales ranging from (1) ''strongly disagree'' to (5) ''totally agree'' (5). Cronbach's alpha for this scale was 0.89.

Networking. Networking was assessed with nine items on networking within one's own company (internal networking, Cronbach's $\alpha = 0.90$) and nine items on networking with people outside one's own company (external networking, Cronbach's $\alpha = 0.95$).[24]

Results

Descriptives and correlations

The descriptives and zero-order correlations for internal and external networking, informational benefits, *LinkedIn* use indicators, and network composition are presented in Table 1.

As can be seen in Table 1, both, external and internal networking, were positively correlated with informational benefits. Hypothesis 1 is thus supported. The correlations also provide some support for H3. External networking was positively related to the number of strong and latent ties, but not to the number of weak ties. Also, H4 was largely supported by the correlation analysis: External networking was positively related to frequency of reading (H4a), activity in groups and posting professional content (H4b). Only the correlation with frequency of posting was not significant ($p = 0.061$).

Networking and LinkedIn use

To test H2 and answer RQ1, we conducted a logistic regression with using *LinkedIn* (no/yes) as criterion and internal and external networking as predictors. This analysis only revealed a significant effect for external networking, Exp(B) = 1.53, 95 percent confidence interval (CI) [1.20–1.95], Wald = 11.98, $p < 0.001$. H2 is thereby supported. The answer to RQ1 is that internal networking is not related to *LinkedIn* use, Exp(B) = 1.12, 95 percent CI [0.84–1.49], Wald = 0.62, $p = 0.433$.

Indirect effects of external networking on informational benefits

To answer RQ2, we ran a mediation model using PROCESS[25] model 4. External networking was the independent variable, informational benefits the dependent variable, and frequency of reading, activity in groups, professional content as well as number of strong, weak, and latent ties (log-transformed) were the predictors. We did not include frequency of posting since the correlation analysis showed that it was unrelated to networking and informational benefits (Table 1 and Fig. 1).

The mediation analysis revealed, again in line with H1, a direct effect of external networking on informational benefits, 0.38, standard error (SE) = 0.06, 95 percent CI [0.26–0.50]. As in the correlational analysis, networking was positively related to frequency of reading, activity in groups, posting professional content, and number of strong and latent ties in this more complex model (see Fig. 1 for coefficients and CIs). However, none of the indirect effects was significant because the relationships between the various indicators of *LinkedIn* use and network composition and informational benefits were weaker when controlling for external networking. Only the direct effect of number of weak ties on informational benefits was significant: 0.16, $SE = 0.05$, 95 percent CI [0.06–0.25]. The answer to RQ2 is, hence, that *LinkedIn* use and network composition do not mediate the effect of external networking on informational benefits.

Discussion

The aim of this article was to bring together research on PNS and research on networking behavior to explore whether networking behavior is related to *LinkedIn* use and the informational benefits derived from PNS use. The results show that people scoring higher on external networking are more likely to use *LinkedIn* as a tool for managing their networks. External networking was also positively related to passive and active use of *LinkedIn*, as well as to the number of strong and latent ties. Whereas the *LinkedIn* use indicators and the network variables (with the exception of posting frequency) were positively correlated with informational benefits, in the mediation model only external networking and number of weak ties remained as significant predictors.

Table 1. Descriptives and Intercorrelations of the Central Variables

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
1. Internal networking	—									
2. External networking	0.70**	—								
3. Informational benefits	0.52**	0.56**	—							
4. Frequency of reading	0.19**	0.33**	0.27**	—						
5. Frequency of posting	0.02	0.13	0.09	0.49**	—					
6. Activity in groups	0.22**	0.18*	0.25**	0.44**	0.31**	—				
7. Professional content	0.18*	0.28**	0.19**	0.48**	0.52**	0.38**	—			
8. Strong ties (ln +1)	0.18*	0.17*	0.21**	0.28**	0.05	0.25**	0.14*	—		
9. Weak ties (ln +1)	0.20**	0.04	0.29**	0.25**	–0.02	0.26**	0.03	0.56**	—	
10. Latent ties (ln +1)	0.25**	0.16*	0.22**	0.26**	0.12	0.18**	0.15*	0.42**	0.63**	—
N	635	628	685	255	256	253	259	259	259	259
Mean	3.25	2.88	2.70	2.15	1.21	1.69	1.82	25.42	129.98	69.97
SD	0.92	1.06	0.92	1.04	0.62	0.94	0.93	52.08	199.39	169.96

The means for strong, weak, and latent ties are based on the untransformed values; the correlations are based on the log-transformed values.
*$p < 0.05$, **$p < 0.01$.

Our results have implications for several domains. First, we extend prior research on social media use by introducing a new predictor from organizational psychology. We demonstrate that this makes sense in the context of professional networking: external but not internal networking predicts the likelihood of using *LinkedIn*. Within the group of *LinkedIn* users, networking was further positively related to passive and active use as well as the number of strong and latent ties. Whereas it has been argued that SNS such as *Facebook* are mainly used for maintaining existing relationships but not for building new relationships,[16] we find that *LinkedIn* is also used for extending networks as indicated by the high number of latent ties.

On the correlational level, we also replicated prior findings on the relationships between passive (reading) and active use and informational benefits.[2] The correlation between reading and informational benefits fits with theoretical work on ambient awareness.[21,26] Passive social media use is often regarded as having negative consequences, for example, for life satisfaction.[27] However, our findings suggest that the quality of these effects strongly depends on the domain. Professional informational benefits are positively related to career satisfaction, which is also a determinant of overall life satisfaction.[28] Future research should examine whether and how PNS use contributes to career satisfaction and, thus, potentially also overall life satisfaction.

Interestingly, the effects of the *LinkedIn* use indicators were no longer significant when all predictors were included in one mediation model. Instead, external networking had a direct effect on informational benefits. Earlier work has found that *LinkedIn* use explains only a part of the variance in informational benefits. This research indicates that networking might be the crucial variable that explains why *LinkedIn* users report higher informational benefits. A reason for the smaller relationship between *LinkedIn* use and informational benefits when controlling for external networking might be that many informational benefits are obtained in offline situations, such as conferences or social events. Using *LinkedIn* could also be a proxy for a stronger career orientation or working in a sector in which information and referrals are very important.

Interestingly, the number of weak ties was not correlated with external networking, but predicted informational benefits independently of networking. Thus, we find support for the assumption that weak ties provide access to nonredundant information,[29] and show that using *LinkedIn* for keeping in touch with weak ties also benefits people who do not score high on external networking. It is still puzzling that external

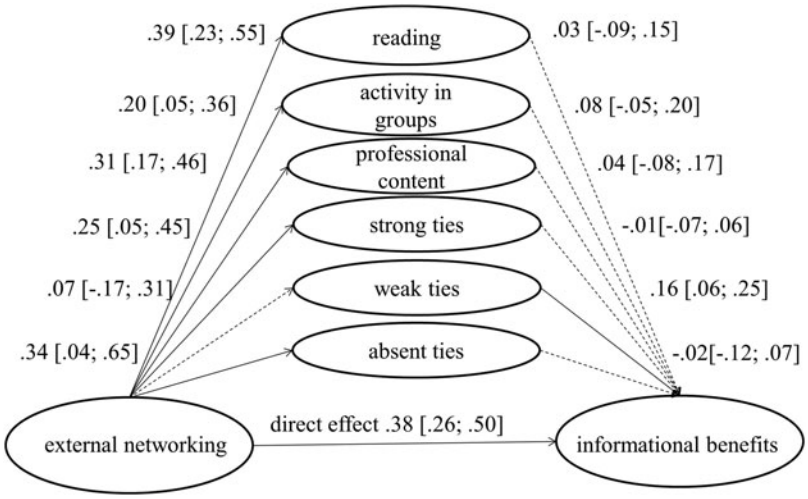

FIG. 1. Results of the Process Model (Hayes[25]) testing for indirect effects of external networking on informational benefits (unstandardized effect sizes).

networking was positively correlated with the number of strong and latent ties, but unrelated to the number of weak ties. This finding could be due to the particular measure we used. It might, however, point to an important difference between skilled networkers and people who network less: Whereas it seems common to add weak ties, such as former colleagues, on *LinkedIn*, regardless of one's networking skills, people who frequently engage in networking seem to focus more on the other types of ties. On the one hand, they are more likely to strategically add people that might become useful at some point of time (latent ties). On the other hand, they might report a higher number of strong ties because they also leverage their networks more frequently and, therefore, interact more frequently with more people (the correlations with active use support this notion). To further explore this explanation, it might be valuable to investigate this in future research using more detailed network measures. As the survey was part of a larger study also including Facebook and Twitter use, and many people have several hundreds of *LinkedIn* contacts, it was not feasible to assess tie strength for each and every contact.

Our study also extended prior research on networking that mostly focused on indicators of career success by looking at informational benefits, thereby testing another part of the model by Wolff et al.[10] We found that both, internal and external networking, correlated with informational benefits. However, only external networking predicted *LinkedIn* use. This shows the value of the distinction between internal and external networking. This pattern can be explained by the affordances of the platform. *LinkedIn* explicitly promises its members to connect them with professionals from all over the world. These are mainly external contacts, so external networking is the better predictor of using this platform. Future research could examine whether internal networking predicts the (frequency of) use of enterprise social media.

Before closing, we would like to note the strengths and limitations of the study. A limitation is that we had single items measures for reading and activity in groups because the data are part from a larger survey covering a variety of topics related to SNS use. The number of strong, weak, and latent ties is also a somewhat crude proxy of network structure. The finding that networking is unrelated to the number of weak ties could thus be due to the operationalization. Future research should use measures of network structure (e.g., density, bridging ties). A key strength of our study is that our sample is largely representative for Dutch online users. We assume that the general pattern also holds for other Western countries because positive effects of networking on organizational outcomes have been found for German and American samples[11,12,14]; what might differ is the social media platform use. In German-speaking countries, Xing is more popular than *LinkedIn*.[18]

Taken together, this is the first article to bring together research on PNS and research on networking behavior. The results show that networking is a promising variable when it comes to social media use in the professional domain.

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Author Disclosure Statement

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