Who Networks? – A Meta-Analysis of Networking and Personality

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ABSTRACT

**Purpose:** Networking refers to goal-directed behaviors focused on building and cultivating informal relationships to obtain career-related resources. According to Gibson et al.’s (2014) model, personality traits represent prominent and important antecedents of networking. We seek to provide robust evidence on relationships between personality and networking by summarizing prior research using meta-analytical tools.

**Design/methodology/approach:** We classify linking attributes between networking and personality into social, idea-related, task-related, and affective behavioral domains, and additionally include three compound traits that relate to several domains. We investigate two potential moderators: internal vs. external networking and prominent networking measures. Our comprehensive literature search identified 41 studies with 46 independent samples.

**Findings:** We find that social, idea-related, and task-related traits have positive relationships with networking of medium effect size, whereas affective traits exhibit small but significantly positive effects. The compound trait of proactive personality appears to be the best predictor of networking. Moderator analyses indicate that there were hardly any differences concerning internal and external networking and also prominent measures.

**Originality/value:** The present study goes beyond narrative reviews contributing the first quantitative summary of these relationships. We identify four behavioral domains that represent characteristics relevant to networking. Our findings largely corroborate, but at times correct, narrative reviews on dispositional antecedents of networking. We highlight the importance of compound traits that have yet been overlooked by narrative reviews (e.g., self-monitoring).
For roughly the past twenty-five years, scholars’ interest in networking has been growing, particularly in the career literature. In line with theories on boundaryless (Arthur, 1994) and protean careers (Hall et al., 2018) scholars have shown that networking represents an important career self-management strategy (Sturges et al., 2010) or competency (Akkermans et al., 2012). In fact, networking is positively associated with career outcomes such as salary (Ng and Feldman, 2014a), promotions (Forret and Dougherty, 2004), or career satisfaction (Ng and Feldman, 2014b). The field has also developed several research streams concerning the antecedents of networking. For example, Gibson et al. (2014) distinguished individual antecedents (e.g., personality: Wolff and Kim, 2012; lay theories: Kuwabara et al., 2018), job characteristics (e.g., job level: Michael and Yukl, 1993), and organizational antecedents (e.g., organizational culture) of networking.

With the research on antecedents mounting, we suggest that it is time to go beyond narrative reviews and set out to summarize the field by means of meta-analysis. Specifically, the relationship between personality and networking has attracted the most research, whereas there are only a handful of studies concerning job and organizational antecedents (see e.g., the reviews Gibson et al., 2014; Wolff et al., 2008). Studies on personality traits converge on some findings, such as a positive relationship between networking and extraversion, but remain inconclusive with regard to others (e.g., conscientiousness). Moreover, reviews have mainly focused on the five-factor model of personality (FFM, the “Big Five”), giving little attention to a broad range of other traits that scholars examined in networking research. Thus, our knowledge appears somewhat fragmented concerning the overall relationship of some traits, such as locus of control (LOC; Sturges et al., 2010). In addition, some of these traits (e.g., creativity, Van Dam et al., 2010) represent facets of the FFM and may be integrated into the FFM framework (i.e., openness to experience), while others, so-called compound traits (Credé et al., 2016; Connelly et al., 2018), represent specific combinations of the five factors. For example, proactive personality, which several studies have linked to networking behaviors (Byrne et al., 2008; Eby et al., 2003), is a compound of extraversion, conscientiousness, and openness to experience (Connelly et al., 2018; Tornau and Frese, 2013) and cannot be subsumed under a single dimension of the FFM.

In this study, we use trait activation theory (TAT) to meta-analytically elaborate the relationships between personality and networking. To organize our paper, we adopt a behavioral domains framework (Ashton and Lee, 2001; Cuperman and Ickes, 2009), classifying traits and cues as linking attributes into four behavioral domains: social, idea-related, task-related, and affective domains.

In addition to main effects of personality on networking, we examine two potential moderators. First, we use the situational strength postulate of TAT to examine whether the situational characteristic of internal vs. external networking moderates the relationship between personality and networking. This distinction refers to networking within vs. outside one’s organization and has been prominent in networking research (Michael and Yukl, 1993; Porter et al., 2015). Second, as a methodological moderator, we examine whether relationships differ in
two frequently used networking measures: the Political Skill Inventory (PSI; Ferris et al., 2005) and Wolff and Moser’s (2006) Networking Behavior Scale (NBS).

Our study contributes to research on networking and the field of careers in several ways. First, after roughly a quarter of a century it is appropriate to go beyond narrative reviews and provide a quantitative summary of the research efforts on this relationship. Meta-analysis is a viable tool to provide more precise, robust insights into the relationship between personality and networking, an important career competency (e.g., Akkermans et al., 2012). Due to higher power, meta-analysis may also detect small effects that have been overlooked or produced inconclusive findings in primary studies. To date, only Thomas et al. (2010) have examined the relationship of proactive personality and networking. After almost a decade, we are able to base our estimate on a larger database and reevaluate their findings. Second, this review provides an overview of studies and constructs that scholars have related to networking and thereby helps to structure the field and identify areas where further research is ample or needed. In this vein, we shed light on relationships between traits that have not yet been discussed in existing narrative reviews (e.g., self-efficacy). Finally, meta-analysis provides the potential to examine additional moderators at the study level. Specifically, by distinguishing internal vs. external networking and their respective relationships with personality, we examine the “differential perspective” on networking (Wolff and Kim, 2012), which holds that networking facets (e.g., internal vs. external networking) possess different antecedents and consequences, which, in turn, might help explain why successful networking is more a rare art than an everyday skill.

Networking

Networking refers to goal-directed behavior focused on building and cultivating informal relationships inside and outside an organization to obtain work-related resources (Gibson et al., 2014). As opposed to a personality trait, this definition refers to a behavioral concept. Accordingly, scholars characterize networking as a behavioral syndrome (Wolff et al., 2011), that is, a set of co-occurring goal-directed behaviors, or as a skill or competency (Ferris et al., 2005), referring to the proficiency or ability to show networking. Examples of networking behaviors (i.e., questionnaire items) include giving business contacts a phone call to keep in touch (Forret and Dougherty, 2001) or doing favors for people in other units (Michael and Yukl, 1993). Scholars have examined networking on several hierarchical levels. On the lowest level, some have identified specific dimensions of networking and examined differential relationships of networking facets (Forret and Dougherty, 2001; Wolff et al., 2011). For example, Michael and Yukl (1993) identify dimensions of internal vs. external networking and show that these dimensions are differentially related to organizational characteristics, such as external dependencies. On an intermediate level, networking is considered a unitary construct, (e.g., Thompson, 2005). Finally, on a higher level, scholars have embedded networking into broader concepts, such as political skill (Ferris et al., 2005), career self-management (Sturges et al., 2010), or career competencies (Akkermans et al., 2012).
In their model, Gibson et al. (2014) classified antecedents into three categories: organizational variables (e.g., organizational culture), job characteristics (e.g., type of job) and individual differences (e.g., personality). In the present study, we focus on the most frequently studied group of individual antecedents (Gibson et al., 2014, p.153) – the relationship between networking and personality traits. We suggest that, even though organizational and job requirements determine networking behaviors to some extent, individual differences play an important role in facilitating or inhibiting networking. Scholars characterize networking as voluntary (Bensaou et al., 2013), informal behavior (Michael and Yukl, 1993). Because these behaviors are at the individual’s discretion, they can hardly be formally required by the organization. Therefore, individual differences may be more important in explaining these discretionary behaviors (Nesheim et al., 2017; Wolff and Spurk, 2020).

Trait Activation Theory
We use trait activation theory (TAT; Tett and Burnett, 2003) as a theoretical lens to examine main effects of personality on networking and also as a potential moderator of this relationship. The trait activation mechanism denotes that traits increase the propensity to behave in a specific manner, and people high in a particular trait derive satisfaction from this behavior (Tett and Guterman, 2000; Tett et al., 2013). This mechanism is moderated by additional factors, such as the existence of situational cues and situational strength (Meyer et al., 2010). Even weak cues activate trait-consistent behaviors for those with high trait standings. For example, a person high in conscientiousness derives satisfaction from keeping files or lists even in situations where others would not think about doing so. Next to the signaling character of cues, situations also differ in strength, defined as expectations “provided by external entities regarding the desirability of potential behaviors” (Meyer et al., 2010, p.122). Strong situations are characterized by rules and demands that provide clear guidelines on appropriate behavior, whereas weak situations are ambiguously structured and without clear guidelines. A networking event is an example of a strong situation, where networking is expected from everyone regardless of his or her traits. Hence, people are more likely to socialize, converse, meet other people, etc. By contrast, air travel is an example of a weak situation, where traits are more predictive in determining whether people sleep, read, or network.

Linking Personality to Networking
The broad field of personality research offers various categorizations and taxonomies. One of the most prominent models is Costa and McCrae’s (1995) FFM that has also provided the basis of various meta-analyses (Barrick and Mount, 1991; Judge et al., 2002). The hierarchical structure of the FFM postulates facets (Costa and McCrae, 1995), allowing the assignment of a broad range of personality facets or traits to one of the five factors. For example, Barrick and Mount (1991) assigned achievement orientation to the conscientiousness dimension. Note, however, that some traits do not fit well into the FFM (e.g., self-control), and meta-analyses
often ignore them or assign them to a sixth “miscellaneous” category. In addition, some traits are compound traits that relate to multiple factors (Credé et al., 2016; Hough and Ones, 2001); for example, proactive personality is a compound of extraversion, openness, and conscientiousness (Tornau and Frese, 2013).

While the FFM is a central pillar of our meta-analysis and our theorizing, we apply a slightly different taxonomy introduced by Wolff and Kim (2012) to networking research. Specifically, Cuperman and Ickes (2009; see also Ashton & Lee, 2001) suggest that traits can be classified into the four behavioral domains of social, idea-related, task-related, and affective behavior. Figure 1 presents an overview of our model. We suggest that these domains represent the most important attributes that link personality to networking. They essentially include the FFM factors, assigning extraversion and agreeableness to a broader social category, and relevant compound traits. The use of this classification has two major advantages. First, grounding our reasoning in TAT, we suggest that the four domains are more representative of situational cues as well as characteristics of networking behaviors. They thus represent a viable means to link traits, cues, and characteristics of networking behaviors. This is also in line with and extends prior theorizing in networking research (Wolff and Kim, 2012; Wolff et al., 2008). Second, this taxonomy allows us to include three additional compound traits that are prominent in the networking literature that might otherwise be assigned to a “miscellaneous” category. Compound traits refer to narrow or more specific aspects of personality that result from linear combinations of the FFM (Connelly et al., 2018; Credé et al., 2016). For example, integrity is a compound of agreeableness, conscientiousness, and emotional stability, as rule-following and norm-favoring are elements of all three traits. Scholars have used qualitative, theoretically driven (Hough and Ones, 2001) as well as quantitative, empirical approaches (Credé et al., 2016) to identify compounds. We apply a qualitative approach as this is more prominent in the I/O literature (see Barrick and Mount, 1991; Connelly et al., 2018). Moving beyond assignment to a miscellaneous category, the present meta-analysis thus includes these compounds in addition to FFM.

We argue that compound traits affect behavior due to mechanisms rooted in several domains and might represent particularly strong predictors of networking. Specifically, we include self-monitoring (e.g., Snyder, 1974), proactive personality (Seibert et al., 2001), and core self-evaluations (CSE; Judge and Bono, 2001; Judge et al., 1998). Since the components of CSE are well defined (i.e., neuroticism, self-esteem, self-efficacy, and LOC), we assign these components to the respective domains in the subsequent development of our hypotheses. We assign self-monitoring and proactive personality to several behavioral domains because specific components are not well developed and typically not specified in primary studies (see also Barrick et al., 2005; Tornau and Frese, 2013).
The Social Domain

The first behavioral domain of social traits characterizes endeavors that aim to attract social attention (Ashton and Lee, 2001). Social traits represent the propensity to engage in interpersonal behavior. Because networking involves social behaviors to a high extent, people with high levels of social traits are more prone to network because it is intrinsically satisfying.

We focus on extraversion, agreeableness, and two compound traits that possess social attributes: self-monitoring and proactive personality. Individuals high in extraversion tend to be sociable and assertive: they prefer social interactions and are more sensitive to social cues (Ashton et al., 2002; Costa and McCrae, 1995; Judge et al., 2002). Following TAT, extraverts should experience networking as more rewarding because it represents social behavior. Accordingly, the literature reports predominantly positive relationships (Forret and Dougherty, 2001; Wanberg et al., 2000). While extraversion affects the quantity of social behaviors, agreeableness refers to the quality of social interactions (Cuperman and Ickes, 2009; Wolff and Kim, 2012). We suggest that individuals with high levels of agreeableness form trusting and warm relationships that facilitate the exchange of resources and, therefore, networking (Wanberg et al., 2000; Wolff and Moser, 2006). Networking is thus consistent with agreeable behaviors based upon reciprocity and trust. We expect a small effect, as studies have reported mixed findings with positive (Porter et al., 2015) as well as null effects (Casciaro et al., 2014).

Two compound traits, self-monitoring and proactive personality, also carry social attributes. Self-monitoring represents the extent to which individuals control their expressive behavior in social situations (Gangestad and Snyder, 2000, p.124). High self-monitors easily adapt their self-presentation to social situations. The ability to analyze social situations and to adapt one’s behavior supports networking behaviors because this facilitates making a good and likeable impression on others (Ferris et al., 2007). While the core of proactive personality refers to the initiation of behaviors and taking charge (Bateman and Crant, 1993), scholars also attribute social features to this trait, such as relationship building (Wanberg and Kammeyer-Mueller, 2000) and information seeking (Ashford and Black, 1996). Networking provides the opportunity to exhibit these self-starting behaviors in the social domain, and proactive people will more likely react to such opportunities and take the initiative to shape their work and career by means of their social contacts. Prior meta-analytical findings report a positive relationship between proactive personality and networking (Thomas et al., 2010).

*Hypothesis 1:* Social traits, specifically a) extraversion, b) agreeableness, and the compounds of c) self-monitoring and d) proactive personality, are positively related to networking.

The Idea-Related Domain

Second, we look at idea-related traits that outline the engagement in behaviors that contribute to the processing of ideas (Ashton and Lee, 2001). People high in these traits seek out and react more intensely to informational cues and experience satisfaction in collecting, thinking
about, and creatively using information (Cuperman and Ickes, 2009). Idea-related traits and networking share an informational focus (Wolff and Kim, 2012). Resources attainable from networking often represent information, such as strategic information, task advice, or other knowledge (Podolny and Baron, 1997), that can be combined into good ideas (Burt, 2004).

We focus on openness to experience and the compounds of self-monitoring and proactive personality as relevant idea-related traits. Openness to experience is characterized by creativity, curiosity, and flexibility (Barrick and Mount, 1991; Judge et al., 2002). Individuals high in openness to experience initiate more new conversation topics (Cuperman and Ickes, 2009) and exchange more information and ideas (LePine and Van Dyne, 2001). As information and ideas represent important resources exchanged while networking, openness to experience should more likely activate networking behaviors. With regard to the self-monitoring compound, high self-monitors manage the information flow by seeking and providing useful information to respective individuals (Fang and Shaw, 2009). They occupy broker positions in social networks that hold the potential to combine information into good ideas (Burt, 2004). Lastly, regarding proactive personality, action theory (Zacher and Frese, 2018) postulates that action and planful behaviors must rely on monitoring the environment and the search for information to act upon when people orient themselves within a situation or attempt to attain feedback (e.g. Glaub et al., 2014). Likewise, Thomas et al. (2010) suggest that a proactive personality subsumes an imagination-based capacity to see beyond present circumstances and envision the future. This informational component of proactive personality should facilitate networking behaviors because it represents the tendency to actively search for and process information that conveys important resources available from people’s contacts.

Hypothesis 2: Idea-related traits, specifically openness to experience, are positively related to networking (and also to compounds of self-monitoring and proactive personality).

The Task-Related Domain

Task-related traits aim at improving efficiency in the completion of tasks and thus relate to self-regulatory concepts such as goal setting, planning, organizing, or control (Ashton and Lee, 2001). Networking is typically goal-directed (Gibson et al., 2014), and, as a means of work- and career-related resource attainment, its success is measured against this goal (Kilduff and Tsai, 2003). Task-oriented traits should facilitate these behaviors; for example, traits like persistence are relevant to networking when a contact initially refuses support.

Here, we examine conscientiousness and two CSE facets, LOC and self-efficacy, and, again, the compound trait proactive personality. Individuals high in conscientiousness are motivated, systematic, and efficient in their pursuit of tasks (Ashton and Lee, 2001). Conscientiousness facilitates networking because it furthers people’s systematic and efficient efforts to attain their networking goals (Wanberg et al., 2000). So far, studies have reported mixed (i.e., null and positive) findings that may indicate the presence of moderators (Ferris et al., 2005; Tziner et al., 2004). Relationships may depend on the relative strength of the two main facets of conscientiousness: dependability and achievement (Judge et al., 2002). Yet, due to a
lack of primary studies concerning these facets of conscientiousness, we were unable to include this moderator into our meta-analysis. Overall, we expect a positive but small relationship between conscientiousness and networking.

LOC refers to the extent that people believe their actions affect outcomes. Individuals with an internal LOC (internals) believe they possess control over their environment, whereas individuals with an external LOC (externals) believe that outcomes are a result of fate or luck (Judge et al., 1998; Ng et al., 2006). Compared to externals, internals tend to increase their efforts to accomplish difficult tasks (Judge and Bono, 2001) and use more social influence tactics (Kapoor et al., 1986). Because networking refers to task-related (i.e., instrumental) behavior and the attainment of work- and career-related goals, beliefs that people are in control of their environment should facilitate task-related behaviors and goal-directedness. Likewise, self-efficacy refers to people’s beliefs about their abilities and the likelihood of goal attainment (Judge and Bono, 2001; Yu and Davis, 2016). We propose that self-efficacy is positively related to networking as these general beliefs about capabilities should heighten expectations to attain goals by means of networking. The proactive personality compound also relates to task-related aspects because it refers to how individuals approach their tasks, that is, whether people set high aspiration levels (Tornau and Frese, 2013, p.54), self-start activities, or actively scan the environment to identify opportunities (Seibert et al., 2001). Because proactive personality facilitates these task-related activities, and networking is one means to attain work and career goals, we predict proactive personality to positively affect networking.

Hypothesis 3: Task-related traits, specifically a) conscientiousness, b) locus of control, and c) self-efficacy are positively related to networking.

The Affective Domain

Our final category denotes affective traits that describe an individual’s affective experience and feelings (Cuperman and Ickes, 2009; Wolff and Kim, 2012). Affective traits represent interpersonal differences in emotional reactivity (Watson et al., 1988) and, thus, the ability to cope with and anticipate positive and negative emotions. We suggest that low reactivity facilitates networking because it mitigates the handling of negative emotions, such as discomfort (Wanberg et al., 2000), dirtiness, or moral impurity (Bensaou et al., 2013; Casciaro et al., 2014). Wanberg et al. (2000), for example, proposed that people generally possess the skills required to network but fear the discomfort associated with networking.

We assign two traits to this behavioral domain: emotional stability (Costa and McCrae, 1995) and self-esteem (Judge et al., 1998). Emotional stability represents the positive pole of neuroticism and expresses the tendency to feel secure, self-conscious, and less depressed or anxious (Judge et al., 1998; Costa and McCrae, 1995). We expect that emotional stability positively affects networking as it buffers negative emotions resulting from networking. Note that though we presume that self-esteem, a facet of CSE, would positively affect networking (Forret and Dougherty, 2001), the number of studies was too low to examine this relationship meta-analytically.
Hypothesis 4: Affective traits, specifically emotional stability, are positively related to networking.

Moderator Variables

In further exploring the relationships between networking and personality, we also examine two moderators that relate to the differential perspective and measurement scales, respectively.

First, we examine whether relationships depend on the structural facet of internal and external networking. This distinction is prominent in the networking literature (Gibson et al., 2014; Michael and Yukl, 1993; Porter et al., 2015). It is also at the core of the differential perspective, which suggests that facets of networking differ in their relationships with other criteria. Based upon the situational strength account, it appears plausible that internal networking situations are strong situations that provide clarity regarding expected behavior. For example, Wolff and Kim (2012) argued that within organizations the choice of contacts is limited to organizational members, and individuals’ discretion appears somewhat limited. Internal networking situations, such as conversations at the vending machine, are hard to avoid, and normative expectations are strong, as it is even impolite to remain silent. In contrast, external networking is mostly voluntary and takes place in weaker situations where behavioral expectations are ambivalent, and extrinsic rewards for behavior are less powerful. In weaker situations, traits might be of higher importance to networking. However, empirical findings are mixed. Porter et al. (2015) consistently found stronger relationships for internal as opposed to external networking, whereas Wolff and Kim (2012) failed to find any consistent pattern and suggested that differences also depend on the functional facet of networking (i.e., building vs. maintaining vs. using contacts). In light of this evidence, we decided to explore this question but abstain from formulating a specific hypothesis.

Research Question 1: Do internal and external networking relate differently to traits?

Second, we examine whether relationships are comparable for two prominent measures: the Networking Behavior Scale (NBS; Wolff and Moser, 2006; Wolff et al., 2011) and the networking ability scale of the Political Skill Inventory (PSI; Ferris et al., 2005). Wolff et al. (2011) conceptualized a 44-item scale that differentiates between two facets, a structural and functional facet. The structural facet refers to internal vs. external networking, and the functional facet is divided into building, cultivating, and using a networking relationship. Items refer to behavior, and participants indicate how often they exhibit them. The networking ability scale by Ferris et al. (2005) is based upon a competency perspective (Ferris et al., 2007) and includes a mix of behavioral items (e.g., “I spend a lot of time and effort at work networking with others”) and also self-ratings of behaviors (e.g., “I am good at building relationships […]”) and individuals’ networks (e.g., “I have developed a large network [...]”). In theory, abilities drive behaviors and, thus, networking ability might exhibit higher correlations with personality traits. However, the broader mix of item content that refers to behaviors as well as networks may also
yield weaker relationships. To inform scholars whether choice of measures affects relationships, we explore potential differences between the two measures.

Research Question 2: Does the used measure influence the networking-traits relationships?

Method

Literature Search

We conducted a comprehensive literature search in PsycInfo, Psyndex, and Business Source Complete databases. We searched for studies through October 2018 by pairing the keyword networking with business, job, career, organization or workplace. Since we found many IT-related studies, we excluded the keyword computer network. To identify studies that we did not capture through our electronic search, we reviewed the reference lists of relevant qualitative reviews (i.e., Gibson et al., 2014; Porter and Woo, 2015) and Thomas and colleagues’ (2010) meta-analysis [1]. We also reviewed articles that cited relevant measures (e.g., Forret and Dougherty, 2001). A small number of studies was added from our own bibliography that we keep updated continuously. Because this meta-analysis is part of a larger networking-project, we did not use any more specific keywords referring to personality but instead utilized personality as an inclusion criterion.

Inclusion Criteria

Our search yielded 11336 articles, and we used five inclusion criteria to select relevant studies. First, we included only empirical studies that measured networking behavior in work contexts. Second, we included studies that assessed networking behavior in dyadic relationships to several contacts. Third, networking had to be investigated on an individual level of analysis. Fourth, we only considered samples consisting of working adults (i.e., employed people, entrepreneurs, or business owners) as opposed to samples with undergraduates or unemployed persons. Finally, studies had to report a quantitative effect size, i.e., a bivariate correlation coefficient between a networking variable and a relevant personality variable. We identified 41 empirical articles (46 samples) that met all criteria and were included in our final database.

Coding and Meta-Analytical Procedures

Two research assistants coded all studies. Prior to coding, the authors trained them and explained the coding protocol thoroughly. Then, the two research assistants coded 27 studies together (66%). The coders reached an interrater agreement of 97%. Disagreements were discussed and resolved with the authors. The remaining studies were coded separately, and emerging questions were discussed during weekly meetings.

We coded several networking operationalizations. First, we coded all studies that measured networking either by a validated scale or its subscales (e.g., Forret and Dougherty,
or with an ad hoc measure. For example, we included studies that measured networking as the frequency of interactions with business contacts (Casciaro et al., 2014). If studies reported correlation coefficients between a trait and multiple networking measures (e.g., internal and external networking), we computed a composite effect size (Schmidt and Hunter, 2015). This accounts for dependence of the effect sizes and prevents double-counting of samples. In some studies, networking was subsumed under a higher-order construct (e.g., political skill). We coded only those studies that reported a specific effect size for networking, excluding relationships between higher-order constructs and personality. For the moderator analyses, we coded the structural facet of networking – internal or external networking – excluding studies when items were ambiguous or not reported. For the methodological moderator, we used a specific code for studies employing the PSI and NBS measures.

We coded personality variables using two taxonomies that allow the subsumption of specific trait measures under the FFM. Specifically, we relied upon the taxonomies by Barrick and Mount (1991) and Hough and Ones (2001). For example, we subsumed a measure of autonomy (Nesheim et al., 2017) under openness to experience. Although congruence of the taxonomies is high, some measures are only included in one of them, and, in some rare cases, classifications diverged. In these cases, the authors discussed the matter.

Several studies required additional decisions. Momm et al. (2013) measured networking and personality variables by self- and other-ratings. Due to the low number of studies, we could not account for methodological influences of different rating sources on the effect size. Accordingly, we computed a composite effect size (Schmidt and Hunter, 2015). Also, in some studies it was not clear on which sample size an individual correlation coefficient was based (Ferris et al., 2005), or more than one reliability was reported (Forret and Dougherty, 2001). We chose a conservative approach by coding the smallest reported sample size and higher reliability.

We applied Schmidt and Hunter’s (2015) methods to calculate our meta-analytical effect sizes. We corrected for measurement unreliability in each networking and personality variable. We tested our moderator variables by subgroup analyses, as recommended by Schmidt and Hunter (2015; see also Hwang and Schmidt, 2011).

**Results**

| Insert Table 1 about here |

Table 1 shows meta-analytical estimates using the four linking attributes to arrange effect sizes for the general effects and subgroup analyses. Hypothesis 1 predicted that the relationship between social traits and networking is positive. This hypothesis received full support. Extraversion ($r_{c}=.31, 95\% CI [.24, .38]$), agreeableness ($r_{c}=.13, 95\% CI [.04, .21]$), self-monitoring ($r_{c}=.36, 95\% CI [.27, .44]$), and proactive personality ($r_{c}=.41, 95\% CI [.33, .49]$) were all significantly and positively related to networking. In comparison to agreeableness, effects of
proactive personality, self-monitoring, and extraversion were significantly stronger as confidence intervals did not overlap. In support of Hypothesis 2, idea-related traits, that is, openness to experience, exhibited a positive relationship with networking ($r_c = .26, 95\% CI [.19, .33]$). In Hypothesis 3, we proposed positive relationships between task-related traits and networking. Conscientiousness ($r_c = .17, 95\% CI [.09, .25]$), LOC ($r_c = .23, 95\% CI [.09, .37]$) and self-efficacy ($r_c = .36, 95\% CI [.22, .51]$) related positively to networking. Thus, Hypothesis 3 received support. Finally, supporting Hypothesis 4, affective traits, that is, emotional stability, exhibited a positive relationship with networking ($r_c = .11, 95\% CI [.02, .19]$).

Several statistical criteria suggest the presence of moderators in trait-networking relationships. Most heterogeneity estimates were significant, and 80% credibility intervals were large (i.e., >.11; cf. Hwang and Schmidt 2011). Also, the credibility intervals of agreeableness, conscientiousness, and emotional stability included zero, which indicates the presence of moderators.

Our first research question focused on the relationship between networking facets (internal vs. external networking) and traits. There were six cases with enough information (i.e., $k > 2$) to calculate separate effects, though some effects relied on very few studies. Overall, all meta-analytical estimates were higher for internal networking than external networking. However, moderator analyses (see Table 1) suggested negligible differences as all 95% confidence intervals and 80% credibility intervals overlapped. Of note, agreeableness showed no significant relationship with external networking ($r_c = .05, 95\% CI [-.06, .15]$). Likewise, effects of emotional stability on internal ($r_c = .07, 95\% CI [-.11, .24]$) and external networking ($r_c = .05, 95\% CI [-.13, .23]$) were not significant.

With regard to networking measures, Table 1 exhibits separate effect sizes for the PSI (Ferris et al., 2005) and the NBS (Wolff et al., 2011). Overall, the measures did not moderate the trait-networking relationship except for extraversion. Networking measured with the NBS related more strongly to extraversion, as neither confidence nor credibility intervals overlapped (NBS: $r_c = .45, 95\% CI [.403, .504], 80\% CrI [.45, .45]$; PSI: $r_c = .29, 95\% CI [.180, .395], 80\% CrI [.17, .41]$). Of note, the relationship between networking and emotional stability was not significant for the PSI ($r_c = -.03, 95\% CI [-.28, .23], 80\% CrI [-.29, .24]$), while it was significant for the NBS ($r_c = .19, 95\% CI [.15, .23], 80\% CrI [.19, .19]$). Note, however, that estimates for the NBS and PSI were not significantly different as confidence as well as credibility intervals overlapped.

**Discussion**

For about the past 25 years, scholars have accumulated studies relating personality traits to networking, thus shedding light on a prominent individual antecedent in Gibson et al.’s (2014) model of networking. This study extends narrative reviews by providing a first quantitative summary of the relationship between personality and networking. Our findings show that all four linking attributes contribute to networking, but on different levels. They also highlight the important role of compound traits that are typically ignored in studies with an exclusive focus on the FFM.
With regard to the four linking attributes, our findings show that all four behavioral domains subsume traits that exhibit significant relationships with networking. Effects for social traits, idea-related traits, and task-related traits were mostly of medium size (Cohen, 1988), whereas affective traits (i.e., emotional stability) only displayed a small effect on networking. Thus, the former three are the major dispositional drivers of networking. Our findings also support Gibson and colleagues’ (2014) definition that highlights that networking is social and goal-oriented, yet, it does not include the idea-related domain. We thus highlight that networking is oriented towards resources, and many of them may involve information, for example, knowledge on job openings, timely information, or the potential to combine information into good ideas (Burt, 2004). As Judge et al. (2002) note that openness to experience plays a marginal role in IO/OB scholarship, its association with networking represents another instance where openness is of relevance in the work domain. Effects of affective processes on networking have been demonstrated (e.g., Casciaro et al., 2014), yet our findings suggest these might be small and, in comparison to social, idea-related, or task-related aspects, of less relevance. Yet, we add to Gibson and colleagues’ (2014) contention of inconsistent findings for affective traits, stating that effects are small but meaningful.

We also acknowledge that the relationships of traits in social and task-related domains are not homogeneous, indicating that these broad domains are multi-faceted, and some trait measures appear to focus on specific facets. In this vein, conscientiousness had only a small effect on networking behaviors, whereas relationships of LOC and self-efficacy with networking showed medium effects. We assume that conscientiousness has a lower degree of correspondence with networking: LOC and self-efficacy focus on goals to a higher extent, whereas conscientiousness not only subsumes goal relevant processes such as achievement striving but also facets such as order or cautiousness (Connelly et al., 2018) that might exhibit little correspondence with networking. Likewise, agreeableness, which possesses a stronger focus on the quality of social behavior, had only a small effect on networking. In contrast, traits that refer to the quantity (i.e., extraversion, proactive personality) or adaptability (i.e., self-monitoring) of social behaviors exhibited significantly higher effects on networking.

As many reviews focused on the FFM, an important finding is that two compound traits exhibit the strongest relationships with networking. In this vein, our meta-analysis provides additional insights going beyond prior narrative reviews. Specifically, proactive personality as well as self-monitoring showed effects of medium size. This suggests that these traits represent relevant combinations of linking attributes to predict networking behaviors. Research indicates that proactive personality consists of task-related, social, and idea-related facets, and this specific combination is an important driver not only of networking, but also of other important variables in the work domain, for example, job performance (Thomas et al., 2010) and career success (Seibert and Kraimer, 2001). Networking may therefore be an important mediator of the relationship between personality and positive work (Thompson, 2005) or career outcomes (Hall et al., 2018). Furthermore, self-monitoring combines social and idea-related facets that foster networking. This finding corroborates the importance of self-monitoring not only in networking,
but also in social capital research, where it has emerged as a prominent predictor of beneficial network positions (e.g., Kilduff and Lee, 2020).

With regard to potential boundary conditions of effects, we did not find much evidence for moderating effects. With the exception of extraversion, the two most prominent scales showed comparable relationships between traits and networking. This finding suggests that relationships are largely independent from item content, that is, whether they refer to behavior, network structure, or self-rating of competencies. Choice of a measure thus appears to exert little effect, and scholars may therefore take other considerations (e.g., length) into consideration. Furthermore, we found little evidence for a moderating effect of internal versus external networking, though internal networking consistently exhibits somewhat stronger relationships with personality traits. While this may indicate that the differential perspective of specific effects of sub-facets is of little importance, we highlight that this assumption is tentative and future research much needed. For example, Wolff and Kim (2012) noted that their findings were differentially affected by a combination of internal vs. external networking and building vs. maintaining vs. using contacts. For this meta-analysis, we could not find enough studies to examine this assumption, as the latter facet is specific to the NBS measure. Also, going beyond personality as an antecedent of networking, others have shown differential effects of facets on consequences, for example that external but not internal networking predicts turnover (Porter et al., 2015).

Concerning practical implications, our results provide more robust information for individuals who aim to improve their networking competencies. As networking relates positively to career success and job performance (Gibson et al., 2014), knowledge on their dispositions and how they relate to networking may help people improve their networking by playing their strengths and working on their weaknesses. For example, those with low standings on task-related traits may attempt to improve their self-regulatory skills or focus on other strengths, for instance if they exhibit high standings on social traits. In this vein, our findings may also help tailor trainings on networking to individuals with different dispositions. Schütte and Blickle (2015), for example, selected more trainable participants based upon their standing on extraversion, conscientiousness, and neuroticism. Based on our findings, we would recommend adding openness to experience or focusing on compounds, such as proactive personality or self-monitoring. Next to selecting trainable participants, trait standings might also be useful in tailoring trainings (e.g., length, delivery style). Also, managers might benefit from knowledge on the relationship between dispositions and networking when they assign employees to different tasks or work with employees on improving their skills. Finally, knowledge of an individual’s traits and respective relationships with networking might help organizations achieve optimal person-job fit. If networking is required, recruiters might pay particular attention to self-monitoring and proactivity.

Our research has several limitations. First, some of our findings rely on a small number of studies. This affects the precision of our meta-analytical estimates and also constrains opportunities to examine moderators. In this regard, some of our subgroup analyses rely on few
studies and should be interpreted with caution. Likewise, our meta-analysis is restricted to the availability of primary studies. For example, although self-esteem is part of CSE, we were unable to include it in our analyses, because we found only one study (Forret and Dougherty, 2001). Likewise, recent theorizing (Kuwabara et al., 2018) has highlighted the relevance of attitudes and lay theories as individual antecedents of networking (see also Forret and Dougherty, 2001); yet the lack of studies made investigations unfeasible. Furthermore, this also applies to some traits that scholars classify as dark traits, such as narcissism or low honesty-humility. As recent research links these traits to political skills (Kholin et al., 2019; Templer, 2018) and interpersonal relationships (Back et al., 2010), future research might investigate how these traits affect networking. The lack of research on honesty-humility also highlights that research largely follows the taxonomy of the FFM, and other models of personality structures may be less well represented in our current taxonomy and findings (e.g., HEXACO-model, Thielmann et al., 2017). As personality traits have received the most attention to date, we emphasize that future research should take other antecedents into account. Availability of studies also limited our examination of potential moderators; for example, we could not examine relationships between different cultures. Furthermore, publication bias may pose a threat to our conclusions. To examine this concern, we conducted cumulative meta-analyses (Schmidt and Hunter, 2015). There was some indication of publication bias for emotional stability and LOC that we further examined with the trim-and-fill method (Duval, 2005). Yet, in both cases, no additional studies were imputed, indicating that publication bias is not likely a threat to our findings.

Conclusion

To conclude, this study provides more robust evidence on the relationship between personality and networking. Clarifying some assumptions from narrative reviews, we show that social, idea-related, and task-related traits facilitate networking behavior, and proactive personality might be the trait most closely aligned with these mechanisms.

[1] Note that we did not receive any information from the authors concerning the studies they used to investigate the relationship between proactive personality and networking. Hence, we screened through their references and included all studies that matched our inclusion criteria.
References

* We marked references that we included in the meta-analysis with an asterisk.


Figure 1. Overview of our research model. PSI = Political Skill Inventory (Ferris et al., 2005); NBS = Networking Behavior Scale (Wolff et al., 2011); a Traits represent sub-facets of the core self-evaluations.
| Table 1 | Summary of Meta-Analytic Relationships of Networking with Personality |
|-----------------------------------------------|-----------------|--------|-----|-----|-----------------|-----------------|
|                                | k  | N   | r   | SDr | rε | SDε | 95% CI       | 80% CrI         | Q               |
| **Social traits**               |    |      |     |     |     |     |              |                 |                 |
| Extraversion                    | 24 | 4999 | .25 | .16 | .31 | .16 | [.24, .38]   | [.11, .51]      | 141.53***       |
| (1) Internal NW                 | 12 | 2779 | .30 | .13 | .36 | .12 | [.28, .44]   | [.21, .51]      | 59.31***        |
| (1) External NW                 | 10 | 2408 | .16 | .18 | .20 | .19 | [.08, .33]   | [-.05, .45]     | 89.73***        |
| (2) PSI                         | 5  | 1043 | .24 | .11 | .29 | .12 | [.18, .40]   | [.17, .41]      | 15.57**         |
| (2) NBS                         | 6  | 1177 | .41 | .07 | .45 | 0   | [.40, .50]   | [.45, .45]      | 7.55            |
| Agreeableness                   | 15 | 3186 | .10 | .13 | .13 | .14 | [.04, .21]   | [-.05, .30]     | 57.69***        |
| (1) Internal NW                 | 7  | 1729 | .17 | .14 | .20 | .14 | [.08, .32]   | [.02, .38]      | 33.38***        |
| (1) External NW                 | 4  | 1062 | .04 | .09 | .05 | .07 | [-.06, .15]  | [-.05, .14]     | 8.19*           |
| (2) PSI                         | 3  | 744  | .24 | .06 | .20 | 0   | [.14, .26]   | [.20, .20]      | 2.80            |
| (2) NBS                         | 4  | 844  | .15 | .06 | .20 | 0   | [.14, .26]   | [.20, .20]      | 2.80            |
| **Idea-related traits**         |    |      |     |     |     |     |              |                 |                 |
| Openness                        | 17 | 4082 | .22 | .13 | .26 | .13 | [.19, .33]   | [.09, .43]      | 73.48***        |
| (1) External NW                 | 5  | 1458 | .21 | .10 | .25 | .07 | [.16, .34]   | [.16, .35]      | 14.82**         |
| (2) PSI                         | 2  | 527  | .28 | .11 | .32 | .12 | [.13, .51]   | [.17, .47]      | 7.53**          |
| (2) NBS                         | 3  | 721  | .34 | .04 | .37 | 0   | [.34, .41]   | [.37, .37]      | 1.42            |
| **Task-related traits**         |    |      |     |     |     |     |              |                 |                 |
| Conscientiousness               | 21 | 4754 | .14 | .16 | .17 | .18 | [.09, .25]   | [.06, .40]      | 133.25***       |
| (1) Internal NW                 | 8  | 2274 | .12 | .11 | .14 | .11 | [.05, .23]   | [-.00, .29]     | 29.11***        |
| (1) External NW                 | 7  | 2044 | .17 | .18 | .20 | .22 | [.02, .37]   | [.09, .48]      | 82.76***        |
| (2) PSI                         | 4  | 965  | .14 | .09 | .17 | .08 | [.06, .27]   | [.07, .27]      | 8.34*           |
| (2) NBS                         | 5  | 1437 | .17 | .07 | .19 | .07 | [.11, .27]   | [.11, .27]      | 8.35            |
| Locus of Control                | 5  | 859  | .18 | .12 | .23 | .13 | [.09, .37]   | [.06, .40]      | 13.06*          |
| (1) Internal NW                 | 2  | 301  | .22 | .05 | .29 | 0   | [.19, .39]   | [.29, .29]      | .69             |
| Self-Efficacy                   | 6  | 1323 | .30 | .15 | .36 | .17 | [.22, .51]   | [.15, .58]      | 37.64***        |

26
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Note. *k* = the number of effect sizes; *N* = the total sample size; *r* = the mean observed correlation; *SD_r* = the standard deviation of the observed correlation; *r_c* = the mean effect size corrected for unreliability; *SD_r_c* = the standard deviation of the corrected effect size estimate; 95% CI = 95% confidence interval for *r_c*; 80% CrI = 80% credibility interval for *r_c*; *Q* = heterogeneity in the effect sizes; internal NW = internal networking facet; external NW = external networking facet; PSI = Political Skill Inventory (Ferris et al., 2005); NBS = Networking Behavior Scale (Wolff et al., 2011).

* *p < .05. ** *p < .01. *** *p < .001.