

Running Head: INVISIBLE NETWORK DRIVERS OF WOMEN'S SUCCESS

Invisible Network Drivers of Women's Success

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This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Declarations of interest: none

Generating gender diversity at senior levels through gender-inclusive networks

Gender diversity pays off, particularly at senior levels in organizations. Companies with higher rates of gender diversity among senior leaders outperform their peers by a 15% margin; those with the highest percentages of female board directors enjoy as much as a two-thirds higher return on equity, sales, and invested capital. The key to occupying a high-level position in any organization is building an effective network of positive workplace relationships. Decades of research on organizational networks have shown that who you know - and who knows you - is critical to performance and career success. Full inclusion of *both* genders in informal organizational networks has been shown to drive productivity, innovation, and profitability. Full inclusion also supports individual well-being and deep engagement. Yet many leaders - both men and women - fail to develop gender-inclusive networks, potentially disadvantaging women since they are less likely to be connected to people in senior-level positions, given the overwhelming dominance of men in these roles. No wonder that feeling excluded from organizational networks has been identified as one of women's top barriers to career success.

Any organization that is truly trying to promote gender inclusion - as opposed to just managing quotas - needs to assess

and measure how involved women are in the inner workings of an organization. One potent measure of women's involvement is their position in an organization's informal network of relationships. Unlike the formal structure of an organization - usually captured in formal organizational charts - the informal structure reflects how work really happens. Mapping the structure of responses to a question as simple as, *Who do you turn to for information to get your work done?*, can reveal patterns of inclusion or exclusion. It can also locate women (or men) who may be overwhelmed with demands for their input as well as those whose expertise is rarely tapped.

We've long known that men and women create different networks. Research stretching back decades establishes that women's networks differ from men's networks in distinct ways. Compared to men, the average woman's network is smaller and narrower in range, especially in terms of connections to senior leaders. As a result, women have weaker reach into the center of the organization's power structure. Women are also more likely to create two separate networks: one network of people who meet their social and emotional needs - composed mostly of other women - and a second network of people that they turn to for advice on work-related matters, which tends to include a greater proportion of men. In contrast, men have one network that they turn to for both socio-emotional and work-related needs. This

means that they tend to have richer, more complex relationships, a key advantage when others are judging their abilities.

Despite knowing that men and women create different networks, we don't know much about differences between successful and less successful women. Clearly, some women are rising to the highest levels of their organizations. Given the well-documented association between performance on the one hand and particular network structures and networking behaviors on the other, it is likely that these successful women are building networks differently than less successful women. But what are they doing differently?

Specifically, we engaged in this research to focus on one question: What network features distinguish more successful women? We wanted to understand if and how high-achieving women build and use networks differently than other women. We hoped that understanding exactly how high-achieving women build their networks would give us a blueprint for replicating those practices with others.

One problem with the state of the research on gender in networks is that it is often based on findings within one organization or among small samples of MBA students. Conclusions drawn from one organization are hard to generalize and of course, MBA students are a decidedly unrepresentative group because they belong to a relatively short-term organization in

which there is no formal hierarchy. We set out to identify drivers of inclusion in the average professional network by assessing networks within many organizations. We were privileged to have access to network data collected from more than 30 organizations and 16,500 people over 15 years across a range of industries. To supplement our quantitative analyses, we also conducted 125 interviews with individuals at different levels in their organizations and in different positions in networks.

-- Insert *About the Research* here --

What we learned was a surprise. We had hypothesized that the networks of successful women would look more like the networks of successful men. But we learned that what was going on was not what we expected. In some cases, the networking strategies that work for men also worked for women. In other cases, however, the strategy playbook looked different for women. A deep dive into the data revealed four relational elements that distinguished more successful women from less successful women:

- ✓ Boundary-spanning
- ✓ Energy
- ✓ Collaborative Efficiency
- ✓ Stickiness

-- Insert Table 1 here --

Invisible network drivers of women's success

Boundary-spanning

High performers have long been distinguished by the ability to collaborate across various types of boundaries, such as hierarchical level (vertical or horizontal), stakeholder group, demographic category (e.g., gender), and geography. In today's fast-paced marketplace, no one person can possibly have all the knowledge or experience needed to innovate or even to efficiently deliver results. Particularly during early-stage problem solving, network range and structural diversity distinguish high performers from low performers. Boundary-spanners have an advantage because they are more likely to access diverse perspectives, information, and insights, all of which are critical determinants of innovation, high quality decision-making, and performance. Across decades of research, a structurally diverse network is a significant predictor of performance.

---Insert Figure 1 here---

Not surprisingly, in our research, women who rose to the highest levels in their organizations were far more likely to have cultivated a network rich with boundary-spanning connections than were women who did not make this ascension. In fact, women were indistinguishable from men in this regard. Everyone at the highest levels in their organizations had structurally diverse networks. For women, though, there was a

catch. While boundary-spanning was clearly associated with successful promotion, it also heightened uncomfortable feelings of *inauthenticity*. Women who fail to address this challenge can find themselves falling out of the upwardly mobile category.

Inauthenticity. Many women, especially at lower levels in their organizations, said that they preferred to let relationships develop organically. They disliked "bothering" people who they didn't already know and were uncomfortable reaching out to others for the explicit purpose of getting work done before they had established a personal connection. In a way, this isn't surprising. The urge to connect with similar others is hard-wired into our DNA. Commonalities foster shared identity, ease of interaction, and liking. Similar others are also more likely to be available for relationship building because similar people tend to be involved in similar activities. In contrast, relationship-building with people across boundaries requires purposeful and strategic action.

Taking purposeful action to build a relationship can also be perceived as inherently manipulative because it suggests that one person is only building the relationship to get something from the other person. For women - who are often socialized to place a high priority on mutuality in relationships - purposefully developing a relationship to support professional goals may go against core values. Women in our research

repeatedly indicated that it felt wrong to build relationships for purely work-related purposes. "I wouldn't feel right doing that," they told us. Perhaps this also is why many lower level women avoided engaging instrumentally with someone in their network until long after a relationship based on purely social interaction had been firmly established. They felt the need to establish mutuality on a social level before they could begin to develop it on a professional level.

Lastly, some women, especially at lower levels, told us that they felt uncomfortable adapting their behavior when interacting with people from different "groups." "That's not really me, you know," said one woman. Successful boundary-spanners adjust their self-presentation for different audiences. They speak accounting with the accountants, marketing with the marketers, and IT with the tech team. They selectively release facets of their true self. But, for some women, this felt inauthentic.

Successful women at higher levels in our research understood the challenge of inauthenticity and resolutely forced themselves to develop relationships with dissimilar others (including men!). In truth, boundary-spanning networks are not difficult to form, but they do require individuals to be proactive and - in some cases - to move out of their comfort zone. High-level women had well-developed strategies for

reaching out to others. One successful woman regularly mapped out her LinkedIn contacts to find individuals that she could ask to introduce her to someone in a different stakeholder group. Another made a point of working out at her organization's on-site gym in order to make "spontaneous" run-ins with different people more likely.

These women were also able to shift relational focus from the interpersonal (*What can I do to enrich this social relationship?*) to the instrumental (*Who isn't in my network but should be based on expertise needed for this new initiative?*). They reframed professional relationships in terms of mutuality and sought to offer their connections information, insight, and professional advice or support. They leveraged their relationship-building strengths by harnessing tendencies toward honesty, civility, and compassion to form authentic relationships across key boundaries. At least four types of boundary spanning ties help women—and men!—from a performance standpoint.

Emergence/Creativity Ties. Bridges across two siloed thought worlds, such as expertise domains and functions, encourage cross-fertilization of ideas. One senior female executive succinctly captured this type of boundary-spanning: "People tell me about great stuff happening in their areas.

Quite often I bring back elements of what they're doing into our organization because I see we could do some of that, too."

Depth/Best Practice Ties. Connections between people with similar expertise—across geography, company, or functional lines—promote depth or efficiency of work. A high-achieving woman at a large organization told us that she regularly reached out to her counterparts in other areas of the company. "I had heard about a tool that they were using in their team and I wanted to know more about it. So I cold-called the team leader. She was great and it worked out really well. Now we use the tool for all of our engagements."

Sensemaking/Landscape Ties. Connections with disparate people that enable an accurate picture of the stakeholder network relative to critical tasks. Senior leaders in our study were more likely to proactively build relationships with stakeholders in anticipation of future collaborations. One woman told us that she attended at least one meeting a month in another part of the organization as a way of getting to know more about the business and to build relationships with opinion leaders and influencers.

Professional Growth Ties. Relationships with formal or informal mentors and sponsors play an important role in the career success. Women are typically over-mentored and under-sponsored. Sponsors are particularly valuable because they are

usually skip-level (or higher) managers who promote talent. They provide access to jobs, high-visibility projects, and other powerful people. Both men and women in our research reported that their sponsors initiated the relationship, although successful women were more likely than other women to seek out opportunities to build visibility and attract sponsors. But men and women perceived the benefits of a sponsor differently. Women identified their sponsors as senior leaders who *persuaded* them to take on a new position, even when they doubted their own capability. Men described their sponsors as senior leaders who *facilitated access* to opportunities by vouching for their capabilities. This subtle difference means that sponsors of women need to be more proactive than do sponsors of men. This may be why male protégées are far more likely to benefit from their relationships with male - or female - sponsors than are female protégées.

Energy

We mapped the networks of high performers in over 30 organizations and found that having a structurally diverse network - one rich in boundary-spanning relationships - is the *second* biggest predictor of high performance. The biggest? It turns out that it has nothing to do with reaching across boundaries but, instead, has everything to do with creating engagement and energy in others. Across the many industries and

organizations that we have worked with, we consistently see that being an *energizer* is four times more predictive of performance than the most significant network variables.

Energizers win not because they are happy people - although they usually are - but because the way that they engage with others results in better opportunities, ideas, talent, and resources that flow to them over time. People want to be around energizers. But energizers may not be who you think they are. Certainly, they aren't all stereotypical cheerleaders or hyper-extraverted networkers. In fact, a low-key person is just as likely to be an energizer as someone who is considered charismatic, and introverts are just as likely to be seen as energizing as extraverts. Rather, it is what energizers *do* that sets them apart.

Energizers create enthusiasm in part because they engage in a set of foundational behaviors that build trust. When you interact with an energizer, you don't have to worry that you will be judged, dismissed, or devalued. Without fear of rejection, it's easier to share fledgling ideas or novel plans - to innovate, take risks, and think big. Energizers create trust, but trust isn't all that they create.

Energizers go a step further and engage in behaviors that instill a sense of purpose and energy in the work. However, it is not *their* purpose and energy. Rather, it is the sense of

purpose and energy of *others*. As a product of these investments, energizers win because people bring them their newest, boldest ideas and their most exciting innovations. Although most top energizers in networks are themselves high performers, the real magic comes from what they bring out in others. Energizers attract other high performers, have lower attrition rates and higher engagement scores among the people they work with, and increase their own performance over time as their own abilities are enriched by what is shared with them.

When we asked men and women in our study who energized them, we made an unexpected discovery. Both men and women were more likely to identify *women* as energizing. Successful women were most likely to identify other successful women as energizing, especially when the overall percentage of women in their organization was low. What surprised us, though, were the differences in *why* men and women identified someone as energizing.

Although men and women listed some of the same reasons, the women we interviewed were much more likely to single out *caring* as critical to the energizing relationship. Some women noted that their new ideas felt "fragile" and that they could share them only in a "safe space." Others described the energizers in their network as providing needed emotional support. In contrast, men explained that energizing people either helped

them explore new ideas or provided a welcome, critical eye on more fleshed-out ideas before they were shared with others. For them, the foundational component of the energizing relationship was a deep trust in the other's *competence*. While trust in the other's competence was also important to women, caring was much more foundational to the energizing relationship than it was for men. An energizer, then, must communicate both competence and caring. High-achieving women know this. "I am intentional about how I build credibility with men," one high-achieving woman told us. "I focus on evidence of what I have done to build their trust. With women, I focus more on getting to know them. Energy gets built in these relationships once trust is there. But I do build it differently."

Women in our study were *more* likely to be identified as energizing by both men and women, suggesting that they may have an edge when it comes to being an energizer. However, this edge may be double-sided. We know from other research that women in the workplace often face a trade-off between being perceived as competent and being perceived as warm and likable. This can make it difficult for them to be perceived as both caring and competent. Backlash occurs when people feel that women *should* be caring and come to resent those women who aren't. Perhaps this explains why our research also found that women were more likely to be identified as de-energizing, especially by other women.

More so than men, women described their de-energizers as self-centered complainers who talk too much about themselves and rarely listen to the concerns of others. Men - sometimes when describing the same individuals - were much more likely to describe de-energizers in instrumental terms: as people who blocked their ability to get work done.

Successful women walked a fine line. They demonstrated their capability, expertise, and knowledge so that people learned to trust their competence. They avoided making comments that downplayed their abilities or that attributed their success to random factors. They conveyed ideas quickly through concrete examples and storytelling to shift attention onto what they had done and what they could do next (and away from whether they could actually do it). At the same time, they signaled caring and positivity by communicating warmth through humor, presence, and small gestures. One C-Suite woman literally closed all of her emails with *Warmly* rather than *Best* or *Best regards*.

Lastly, many successful women leveraged strong listening skills to demonstrate caring and to lower barriers to information-sharing and creative brainstorming. In fact, the women we interviewed felt that it was easier for them to build trusting relationships than it was for men. They cited their listening skills as their main relationship-building strength and one of the reasons that people sought them out. They

leveraged these skills to develop a reputation as someone who listens more than talks, someone who is other-focused rather than self-centered.

Collaborative Efficiency

At every level in their organizations, women in our study were *more* likely to be sought by their coworkers for information and advice but - at the most junior and most senior levels - were *less* likely than men to seek information and advice from others. Networks characterized by unbalanced relationships leave individuals susceptible to the performance degradation and burnout associated with collaborative overload.

Our research on collaborative efficiency over the years shows that engaging in just a handful of critical behaviors can help create more efficient networks, typically returning 18-24% of collaborative time. We wanted to know if successful women employed different strategies than did men or less successful women. To get at this, we surveyed 2,000 women and 1,500 men regarding their collaborative efficiency practices.¹ Although men

¹The Collaborative Overload Assessment is a diagnostic tool that captures the extent to which people manage their collaborative demands. Participants are presented with a number of statements about collaborative practices and ask to indicate the extent to which they agree or disagree with each statement. Statements include, *My desire to be influential or recognized for my expertise*

and women utilized a number of collaborative efficiency practices similarly, some practices were particularly potent enablers for women while a few others could lead to career derailment. We combined these data with insights gleaned from interviews to identify three (in)efficiency traps that some women fall into and ways that our successful women avoided them.

Feel compelled to collaborate. The need for control and concern over identity and reputation drives some individuals to engage in excessive collaborative demands. Although men and women share many similarities in this regard, the women in our survey enjoyed several advantages over men when it came to collaboration. Women were more likely than men to credit their higher comfort level with ambiguity and managing adaptation as a factor in their collaborative and career success. They were also far less likely than men to report engaging in excessive collaborative work out of a desire to be recognized for their expertise or because their need for closure led them to communicate in ways that created unnecessary work or stress for others (e.g., late-night emails). High-achieving women, in particular, avoided the FOMO trap - taking on more work out of fear of missing out.

sometimes creates excessive reliance on me and I write streamlined emails and encourage efficient norms of email use.

Yet, at all levels - and particularly at lower levels - women reported a greater sense of obligation to respond to requests for their time and energy. Men rarely saw a downside of turning down a request for their time, but women reported "feeling bad" if they were unable to say Yes and often took steps to "soften" the blow by offering to give time in another way (e.g., by setting up an informal meeting). In one sense, this is smart. Previous research tells us that women who don't respond positively to requests for help are perceived far less favorably than are men who don't. Nevertheless, feeling the pressure to respond positively to requests puts women at increased risk of collaborative overload.

More successful women were much more likely than junior women to challenge their identity-driven desire to help, even though they received as many and often more requests for their time and energy. They avoided seeing the word "no" as binary. When responding to a request for collaboration, they offered transparency into competing demands and discussed alternatives to complete what needed to get done. As one woman told us when reflecting upon the early stages of her career, "I tended to jump into help mode too much. When I began to look at every decision to jump in with a quick rubric - Saying Yes Means Saying No - whether No was to priorities, personal goals, or health, I was able to catch myself more often."

Fail to impose structure. To improve collaborative efficiency, both men and women focused on priorities and reshaped roles, routines, and interactions. Women were especially skilled at employing regularly scheduled meetings to address one-off requests. But women were far less likely than men to block out time each day for reflective work or to periodically review their calendar to remove non-essential requests, decisions, or meetings. By not imposing structure on their schedule, women give themselves fewer opportunities to engage in higher-level thinking which hinders their ability to innovate, strategize, and make high-level decisions.

Failing to impose structure also leaves some women even more susceptible to performance degradation from switching costs—moving from one cognitive task to another. This is a subtle but very important way that collaborative overload hurts performance. Cognitive psychologists have shown that even the simple act of checking a text takes 64 seconds' recovery to get back on track. Successful women scheduled regular time for reflective thinking. The majority preferred to engage in reflective work early. As one senior executive told us, "Most people come in around 9 but I like to get in my office by 7:30. That gives me time to plan my day and catch up on how my accounts are doing without being pinged by a dozen IMs. By the time everyone else shows up, I'm ready to chit-chat or stomp out

fires or whatever else needs to be done." Several women told us that they used their reflective time to identify potential boundary-spanning ties by thinking about core objectives or projects for the coming six months and identifying the project-relevant categories of people (or roles) with whom to connect.

Fail to create pull. Compared to men, women were far less likely to draw people toward collaborative work. Pulling people toward collaboration means envisioning joint success, diffusing ownership, generating a sense of purpose/energy around an outcome. Pulling encourages others to seek out opportunities to collaborate. When this is done well, colleagues come to collaborative work prepared and willing to engage. In contrast, pushing is much less efficient. People who push others toward collaborative work use persuasion or coercion. Pushing requires time, effort, and some degree of skill. Even so, it often results in mere compliance rather than true collaboration.

Successful women created pull rather than push to bring people to the table. They clearly articulated a vision and generated enthusiasm to motivate collaboration, instead of hoping that the work alone would provide a compelling reason to collaborate. "I spend a lot of time building rapport and community in my teams," said one leader of top-performing teams. "That way, when someone needs something done, they all jump to help each other out." People who create pull seed relationships

long before they are needed by looking for opportunities to give first; giving sparks a cycle of gratitude and reciprocated giving that makes collaboration much more likely downstream. Successful individuals also assess the interests and workstyles of those who will or could support their work. "I always make a point of sending a quick Welcome email whenever a new director comes on board. I write maybe three sentences: welcome, here's who I am, look forward to meeting. I don't do it to kiss up but just so that when I meet them later, they'll remember the initial email. And so we've already started a relationship."

Part of the reason that some women failed to create pull is that they were also less likely to run streamlined meetings and more likely to allow inefficient norms of use with communication. Inefficient meetings and technology usage discourage deep collaboration. Successful women adopted efficient meeting practices. They distributed materials beforehand, focused their meetings on desired outcomes, set - and adhered to - efficient agendas and agile practices, included only people who need to be involved, and posted minutes after meetings. Successful women also proactively set norms around technology usage for themselves and their teams that remove barriers to collaboration (e.g., send after-hours emails on delay). One senior executive told us that she instructed all her direct reports to summarize all email requests in the first

three sentences and to pick up the phone if the request was more complicated.

Creating efficiencies in collaboration has another bonus: it opens up space for other, more strategic activities. In addition to creating more time for reflection, it also creates time to engage in energizing conversations, which often occur under more impromptu circumstances - a head popped into an office, an IM asking for a chat, or bumping into someone in the hall. It also opens up opportunities to tap broad networks early in a project's history, a practice linked to performance success. As one successful woman put it, "It's so easy to fall into the habit of just stomping out fires and getting the job done. I have learned the hard way that I can't just focus on what's happening today. I also have to figure out what's going to happen tomorrow."

Stickiness

Women in our study demonstrated a greater stickiness in their relationships over time. When we assessed networks at two points in time, we found that women were much more likely than men to form and maintain same-sex relationships. Further, women's relationships - unlike men's relationships - grew stronger and more mutual over time. In contrast, men were more likely to build relationships with either gender, adapting their networks instrumentally to meet shifting work demands.

Underlying this tendency is a fundamental difference in how women and men develop their professional networks. Women tend to perceive relationships as important for their own sake. The women we interviewed, for example, were much more likely than men to report exchanging personal, authentic, and sometimes intimate information with select work colleagues, often bonding over family or children. Most men took a more instrumental approach to relationship building. When they reported socializing with their work colleagues, men were much more likely to describe their interaction as "good for team building" or as a necessary aspect of good work relations. For men, relationships are the backdrop through which work is accomplished.

These different ways of approaching work relationships have significant implications. On one level, greater relational stickiness may deepen collaborative demands as women feel ever more obligated to respond to demands for their time or attention. Too, women can get derailed if they focus too much on the social side of professional relationships without searching for ways that relationships can also support professional growth. But the biggest career derailer caused by stickiness is the failure to maintain *network churn*.

Fail to maintain network churn. Forging new relationships and letting others go dormant is a critical component of network

effectiveness. Women get trapped in outdated networks when they fail to reach out to new stakeholders or seek out new learning partners. Worse, they may be creating tightly knit echo chambers, blocking out new ideas and perspectives.

In work contexts characterized by a greater velocity of change or where project teams form and disperse rapidly, relational stickiness is even more problematic. People who do not adapt their networks to match the new contexts or the pace of change in a given context are likely to fall behind those who do adapt their networks more fluidly. Network adaptability is critical during times of transition. Our research shows that people need to build diverse networks, engage others, and refine their networks to successfully transition to new roles and positions. Those who don't, don't make it.

Successful women surround themselves with a few trusted advisors and truth tellers - people who offer ideas based on a long personal history. They lean on established relationships for honest feedback and personal support during inevitable setbacks and uncertainties. But they don't let their networks stagnate. Instead, they also build relationships with a steady and constantly evolving stream of people who bring expertise and perspectives that align with their current constellation of work activities. They do this by identifying skill gaps created by new projects or shifting role requirements and then initiating

new connections that help them close those gaps by developing, for example, agility on market understanding, technical expertise, political acumen, and cultural awareness. These successful women know that it is highly unlikely that all the people who should be part of a professional network in one year are the same people who should be there even a few years later.

In stark contrast to their internal relationships, a core strength for women's networks appears consistently to be their *external* connections. Women are much more likely than men to maintain relationships with co-workers from previous positions and jobs, through one-on-one phone calls and get-togethers, or even just through social media. Successful women leveraged the greater strength and external reach of their networks without getting derailed by collaborative demands and sticky lower-level internal relationships.

Strong external networks offer natural boundary-spanning opportunities. They provide access to new ideas, job opportunities, and sales possibilities. They can also enhance visibility and create influence. A female executive at a consulting company told us, "I make sure to stay in touch with people from my previous company and the one before through dinners or coffee. It is amazing the number of times those relationships have led to opportunities."

Organizations have begun to tap the power of women's external networks by instituting cross-organizational mentoring programs and alumni networks, and providing explicit opportunities for women to connect to their community through nonprofit organizations or targeted conferences. Savvy women build these connections whether or not they work in sponsoring organizations. By taking part in events hosted by other companies - and by inviting members of their external network to participate in their own companies' events - successful women build their organizations' expertise and brand along with their own.

Building gender diverse networks

Gender diversity can and does work, but creating gender-inclusive networks can be challenging. If the ultimate goal of gender diversity efforts is to build organizations in which employees work together and evolve as professionals without regard to gender, then leaders must focus on the relationships themselves. When it comes to job and career outcomes, networks and networking do matter. They matter for women for the same reasons that they matter for men. Creating a sustainable, strategic, and effective network is just as important for a woman as it is for a man. But what our research has shown is that the playbook and strategies for cultivating an effective network looks different.

Our research suggests that successful women build networks of professional relationships characterized by four network drivers. One, they overcome challenges posed by feelings of inauthenticity to develop critical boundary-spanning relationships. Two, they create efficiencies in the way they work to open up opportunities for balanced relationships without collaborative overload. Three, they create energizing relationships by leveraging relational strengths such as listening skills. Four, they overcome internal stickiness by continually refreshing their networks—and they leverage their stronger external connections to expose themselves to new ideas, opportunities, and perspectives. By creating opportunities for men and women to work together, and by supporting the invisible network drivers of women's success, organizations and individuals can dramatically reshape their networks.

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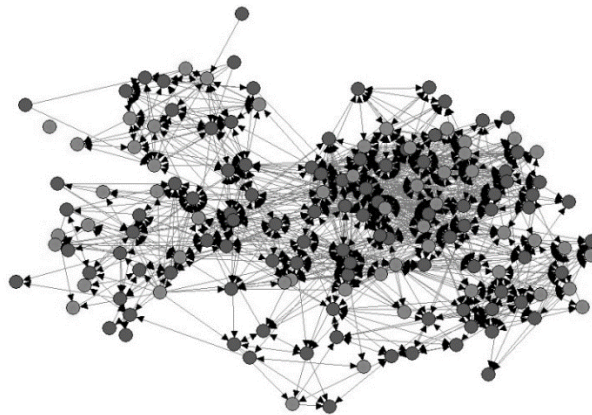
A well-developed literature based on several decades of research has firmly established the link between characteristics of networks and performance outcomes. For overviews of this research see: Burt, R. (2005). *Brokerage and Closure: An introduction to social capital*. Oxford: Oxford University Press; and Kilduff, M., & Brass, D. J. (2010) Organizational social network research: core ideas and key debates. *Academy of Management Annals*, 4(1), 317-357. This literature has particularly stressed the career and performance implications of boundary-spanning positions (see, for example, Burt, above), energy (see Owens, B. P., Baker, W. E., Sumpter, D. M., & Cameron, K. S. (2016). Relational energy at work: Implications for job engagement and job performance. *Journal of Applied Psychology*, 101(1), 35-49), collaborative efficiency (see Cross, R., Rebele, R., & Grant, A. (2016). Collaborative overload. *Harvard Business Review*, 94(1), 74-79), and stickiness (see Uzzi, B. (1996). The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review*, 61(4), 674-698).

In contrast to the above research, relatively little has looked at gender differences in network characteristics and career or performance outcomes. For some examples of work in this area, see Brands, R. A., & Mehra, A. (2019). Gender,

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Insert: About the Research

Organizational Network Analysis (ONA) is grounded in the idea that formal structures in organizations do not reflect the actual patterns of connection in an organization. Our data captured the networks of more than 16,500 individuals in 31 different companies via web-based surveys. To ensure that we accurately represented each organization's network, we collected responses from at least 80% of organizational members in every organization. Each individual was asked to name the people in their organization to whom they turned for "important work-related information" and about whom they said that interactions with this person left them "feeling more energized, with a sense of enthusiasm and/or that your work really matters." Below is a graphic depiction of one of the organizational networks, with circles indicating people, lines indicating relationships, and arrows indicating the direction of the relationship (i.e., who nominated whom).



These data were organized into matrices and analyzed statistically. To complement our quantitative findings, we also interviewed 125 individuals in these organizations. These semi-structured hour-long interviews included open-ended questions such as,

I want you to think about the people who get you energized and excited about new ideas and directions. These are the people you enjoy bouncing around ideas with. You come away from conversations with this person jazzed and motivated. They may be people in your organization or outside of it. Tell me about some of them. What did they do or say that got you energized? What do you say or do that leaves other people energized?

Transcripts were analyzed to identify themes, patterns, and examples.

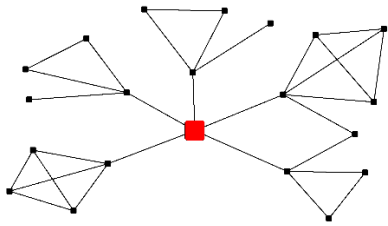
Table 1. Invisible network drivers of women's success

Network Driver	Career enabler	Career derailer for women	Suggested Strategies
Boundary-spanning	<ul style="list-style-type: none"> • Access diverse perspectives, information, and insights 	<ul style="list-style-type: none"> • Feelings of inauthenticity 	<ul style="list-style-type: none"> • Move out of comfort zone • Build 4 types of ties
Energize	<ul style="list-style-type: none"> • Attract talent and high-performers 	<ul style="list-style-type: none"> • May face backlash if not appearing both caring and competent 	<ul style="list-style-type: none"> • Harness relationship-building strengths, such as listening • Proactively demonstrate competence • Demonstrate warmth
Collaborative efficiency	<ul style="list-style-type: none"> • Optimize time spent on collaboration 	<ul style="list-style-type: none"> • Feel compelled to collaborate 	<ul style="list-style-type: none"> • Reduce tendency to say Yes to all requests

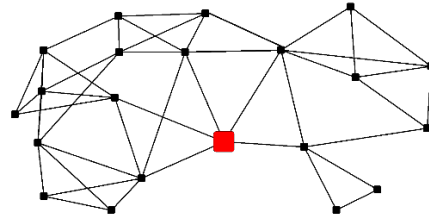
		<ul style="list-style-type: none"> • Fail to impose structure • Fail to create pull 	<p>for time or effort</p> <ul style="list-style-type: none"> • Schedule reflective time • Adopt meeting and technology usage efficiency practices
Stickiness	<ul style="list-style-type: none"> • Build strong and enduring connections 	<ul style="list-style-type: none"> • Fail to maintain network churn 	<ul style="list-style-type: none"> • Maintain a core group of trusted advisors • Identify skill gaps and reach out to others to close gaps • Leverage strong

			external connections
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Figure 1. Structurally diverse versus closed network



Structurally Diverse



Closed Network

Network