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# **Internal and external networking behaviors and employee outcomes: A test of gender moderating effect**

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## **Abstract**

**Purpose:** Research suggests that engaging in networking behaviors can affect individual work outcomes. However, *relatively less* is known about how internal versus external networking behaviors influence work outcomes, and whether gender moderates these relationships. Drawing on social capital theory and social role theory, we propose a positive relationship between employees' internal and external networking behaviors and their work outcomes (job commitment and career success), and the moderating effect of gender. We also explore employee preference in networking.

**Design/methodology:** Based on a sequential mixed-method research design with a four-month time lag, Study 1 data on networking behaviors and employee outcomes were collected via a survey of middle managers and their supervisors from 10 private sector organizations in Sri Lanka. Study 2 data were collected via interviews from a sample of those middle managers and their supervisors.

**Findings:** Study 1 findings indicate a positive relationship between internal networking behaviors and job commitment, and external networking behaviors and career success. We also found that internal networking behaviors enhance job commitment. Study 2 findings indicate men and women network differently and benefit differently from that networking but achieve equitable workplace benefits.

**Originality/value:** This study provides pioneering evidence that internal networking behaviors enhance job commitment among women. It appears that past research did not test the moderating effect of gender for internal versus external networking behaviors separately. Moreover, this study refines the evidence that internal and external networking behaviors differentially impact employee outcomes and explains the processes through a qualitative inquiry.

## **Introduction**

Networking involves forming and developing mutually beneficial, valuable relationships with various individuals (Porter and Woo, 2015). These relationships are increasingly becoming important to employees in enhancing their work outcomes. Forret and Dougherty (2004) define networking behavior as “individuals’ attempts to develop and maintain relationships with others who have the potential to assist them in their work or career” (p. 420). For instance, employees access career-related resources, such as information, alliances, and social credentials, through their networking behaviors (Lin, 1999; Porter and Woo, 2015). These career-related resources generated through networking behaviors support employees in developing their careers and enhancing their work outcomes (Wolff and Moser, 2009).

Behavioral science researchers have used this concept widely to examine employees’ behavior in an organization (e.g., Forret and Dougherty, 2004; Michael and Yukl, 1993). In the process of employee networking, employees interact with other people such as managers, superiors, and subordinates (Forret and Dougherty, 2004; Singh *et al.*, 2006) who are working inside or outside the organization (Michael and Yukl, 1993) to develop relationships (Brass *et al.*, 2004; Michael and Yukl, 1993; Wolff *et al.*, 2008). The purpose of employee networking is to obtain support and assistance for work-related benefits (Forret and Dougherty, 2004; Singh *et al.*, 2006). These benefits include resources, information, and opportunities that improve work outcomes (Orpen, 1996; Wolff and Moser, 2010).

Internal and external networking behaviors are widely accepted networking categories in the literature and are the focus of this study (Forret and Dougherty, 2001; Michael and Yukl, 1993; Wolff and Moser, 2009). McCallum *et al.* (2014) defined internal networking as employees’ organizational relationships with peers, managers, and work associates, and external networking as including relationships with outside-work friends, customers, suppliers, and associates from professional bodies. The *networking–employee outcomes*

literature can be classified into two categories based on the operationalization of networking behaviors. The first category includes research that does not differentiate between internal and external networking behaviors (e.g., Fryczyńska and Ivanova, 2019; Macintosh and Krush, 2017; Van Emmerik *et al.*, 2006; Volmer and Wolff, 2018; see Appendix 1). The second category includes research differentiating between *internal networking behaviors* and *external networking behaviors* (e.g., McCallum *et al.*, 2014; Porter *et al.*, 2016; see Appendix 2). This body of research provides evidence of how internal versus external networking behaviors can differentially affect work outcomes (Porter *et al.*, 2016; Wolf and Moser, 2010). However, only a few studies fall in this category with a focus on mainly different outcomes, providing *thin evidence* on any specific outcome (see Appendix 2). Career success as an outcome was studied by Wok and Hashim (2017) and Wolff and Moser (2009); however, it was measured differently in those studies. Our study differentiates between internal and external networking behaviors.

We test gender as a moderator in this study. Research shows that men and women may benefit differently from their networking behaviors (see Appendix 3). For instance, Forret and Dougherty (2004) studied the relationship between networking behaviors and career success for men and women. Their results indicate that increasing internal visibility was positively related to perceived career success for women but not for men while engaging in professional activities was positively related to perceived career success for men but not for women. Similarly, Macintosh and Krush (2017) found that professional networking is related to objective performance for women, while customer networking is related to objective performance for men. To the authors' knowledge, past research did not test the differential effects of internal versus external networking behaviors for men and women.

We selected job commitment and career success as work outcomes for this study. Job commitment is important for reducing turnover (McCallum *et al.*, 2014). Networking-related

resources, such as information and emotional support, are significant for employee job commitment (Siciliano and Thompson, 2018). Career success reflects an overall evaluation of the career (Xin *et al.*, 2020). Networking helps employees to enhance their skills, obtain resources, and generate opportunities to improve their career success (De Janasz and Forret, 2008). Appendix 2 indicates that only one study investigated the effect of internal versus external networking behaviors on job commitment (McCallum *et al.*, 2014). The authors focused on three types of job commitments (normative, affective, and continuance commitment) among health sector employees. They found that internal networking behaviors are positively related to affective commitment and normative commitment, while external networking behaviors are negatively related to normative commitment. Only two studies investigated internal versus external networking behaviors/contacts for career success. Wok and Hashim (2017) found that both internal and external networking behaviors are positively related to career success. Wolff and Moser (2009) tested the relationship between internal versus external networking *contacts* (*not behaviors*) and career success. They found that internal contacts are positively related to salary growth and negatively associated with concurrent salary, while external contacts are positively linked to concurrent salary.

This research advances the field of networking behaviors and employee outcomes literature in several ways. First, this study tests social capital theory (Granovetter, 1973; Raider and Burt, 1996) and social role theory (Eagly, 1987). Specifically, drawing on social capital theory, this research predicts that internal and external networking behaviors are positively associated with job commitment and career success. Based on social role theory, we also predict that these are moderated by gender. Women should experience a stronger effect of internal networking behaviors on employee outcomes, while men should experience a stronger effect of external networking behaviors on employee outcomes. Second, this study addresses important research gaps: it provides a pioneering test of the moderating effect of

gender on the relationship between *internal/external* networking behaviors and employee outcomes; and it provides additional evidence of the differential effect of internal and external networking behaviors on job commitment and career success and explains the processes through a qualitative inquiry. The past evidence is limited (McCallum *et al.*, 2014; Wok and Hashim, 2017; Wolff and Moser, 2009). Third, this study uses a sequential mixed-method research design to provide robust empirical evidence (Creswell, 2014; Hasan *et al.*, 2014). The data for the quantitative study were collected via surveys of middle managers and their supervisors to address the limitations of past research, such as a lack of focus on middle managers (e.g., Forret and Dougherty, 2004). With a four-month time lag (Creswell, 2014), the qualitative data were collected through follow-up semistructured interviews of a subset of survey participants. We conducted the qualitative inquiry to answer the questions, “How do employees develop their internal and external networking for work outcomes?” and “How do men and women network differently for work outcomes?” This study was conducted in 10 private sector organizations in Sri Lanka from the manufacturing and services industries. Fourth, this study’s findings have implications for managers in terms of how employees’ internal and external networking behaviors affect work outcomes which may vary for men and women (Macintosh and Krush, 2017).

### **Theories and Hypotheses Development**

We used social capital theory (Adler and Kwon, 2002; Granovetter, 1973; Raider and Burt, 1996) to predict the relationships between networking behaviors and two employee outcomes—job commitment and career success. Job commitment refers to “the relative strength of an individual’s identification with and involvement in a particular organization” (Mowday *et al.*, 1979, p. 27). Judge *et al.* (1995) define career success as “the positive psychological or work-related outcomes or achievements one has accumulated” (p. 3).

### ***Internal Networking Behaviors and Outcomes***

Social capital theory suggests that individuals' internal networks are a resource that is characterized by trust and cooperation (Beard, 2005; Knack and Keefer, 1997). This resource provides various significant benefits to employees, including job-related information/resources (Adler and Kwon, 2002; Raider and Burt, 1996) and emotional support (Granovetter, 1973). By fostering trusting and cooperative relationships with peers, coworkers, and top managers (internal networking), employees gain access to job-related resources such as advice, emotional aid, and information. These resources can help reduce team conflict, dissatisfaction, and other work-related issues (Chiaburu and Harrison, 2008; Connie *et al.*, 2000). These benefits may also support employees' involvement in a particular organization. Moreover, information, trust, and the support of internal networks (coworkers, peers, and top management) can help develop employees' work skills (Kram and Isabella, 1985). By developing work skills, an individual retains his or her identity within the organization. A conducive work environment and improved ability to perform help to build employee commitment to the job (Chiaburu and Harrison, 2008).

This internal social capital includes resources and information which may help an employee to progress their career (Forret and Dougherty, 2004). Employees can use resources and information obtained internally (e.g., information about job promotions, achievements) to attain their expected work-related outcomes, such as promotions and recognition (Judge *et al.*, 1995; Narayan and Cassidy, 2001). Within an organization, if employees have stronger relationships with their peers, coworkers, and top managers, the networks provide a useful and solid resource for revealing organizational information, career-related feedback, and career advice (Kram and Isabella, 1985). For instance, information moving through internal networks can help employees to identify work opportunities (e.g., promotional opportunities)

supporting their career success. Moreover, the emotional support that comes from that internal networking can have a variety of effects on employees that can enhance their career success. For example, peer support is important in identifying mistakes at work and dealing with work-related stress.

Although the evidence is limited (one study for job commitment and two studies for career success; see Appendix 2), past empirical research supports a positive relationship between internal networking behaviors and both job commitment and career success. McCallum *et al.* (2014) found positive relationships between internal networking behaviors and both affective commitment and normative commitment, using 335 managers and professionals from the United States health sector. Wolff and Moser (2009) found that maintaining internal contacts is positively related to salary growth (a proxy for career success), while using internal contacts is negatively related to concurrent salary (a proxy for career success). Thus, it is proposed:

*H1a:* Internal networking behaviors are positively associated with job commitment.

*H1b:* Internal networking behaviors are positively associated with career success.

### ***External Networking Behaviors and Outcomes***

Social capital theory suggests that individuals generate social capital through external networking (Burt, 1998). Employees' strong networking relationships with parties outside the organization provide job-related resources (e.g., information about new technological devices and software) to individuals for accomplishing job tasks. These resources include information related to business trends and work-related issues, which can help employees to identify and address issues in their organization (Chang, 2005). Moreover, external networks involve meeting professional mentors to obtain emotional support (Hartmann *et al.*, 2013). These



resources and external network support may help an employee settle in their job, perform their job tasks, and feel part of a profession, enhancing their job commitment.

Employees can use resources and information obtained externally (e.g., information about salary levels in the job market, promotion strategies) to attain their expected work-related outcomes, such as promotions (Judge *et al.*, 1995; Narayan and Cassidy, 2001). Professional networks enable employees to obtain information on the external environment, business trends, and work practices (Niehaus and O'Meara, 2014). Strong employee relationships with reputed professional organizations can enhance recognition and status within their organization (Forret and Dougherty, 2004). Through these networks, employees may meet prominent inspiring professionals who can help them develop their skills (Durbin, 2011). Such recognition and status along with enhanced skills can help develop careers (Forret and Dougherty, 2004; Nahapiet and Ghoshal, 1998).

It appears that past research does not provide evidence of a *positive* relationship between external networking behaviors and job commitment (see Appendix 2). Instead, McCallum *et al.* (2014) found a negative relationship between external networking behaviors and employee normative job commitment. Thus, it is proposed:

*H2a:* External networking behaviors are positively associated with job commitment.

*H2b:* External networking behaviors are positively associated with career success.

### ***Moderating Effect of Gender***

We draw on social role theory to predict the moderating effect of gender on the relationships between internal/external networking behaviors and work outcomes. Social role theory suggests differences exist between men and women in terms of their social behaviors (Eagly, 1987; Eagly *et al.*, 2000). These different social behaviors can be attributed to the different roles society has placed on men and women (Eagly and Wood, 2012). The breadwinner

versus taking-care-of-the-family roles can lead to agentic-communal behavior differences (Eagly and Wood, 2016). The agentic behaviors refer to men being assertive and goal-oriented, while communal behaviors refer to women being friendly and relationship-oriented (Macintosh and Krush, 2014). At work, these differences can make men more instrumental (task-focused) and women more expressive (relationship-focused) (Parsons and Bales, 1955). These different work behaviors may have implications for how male and female employees benefit from their internal and external networking behaviors.

The societal expectations of a support role for women and their communal behaviors position them to benefit from internal networking behaviors. Women are seen as less of a threat to other colleagues for the limited number of senior roles they hold in organizations (Ellemers *et al.*, 2012). This low perceived threat, along with their relationship-focused behaviors, enable women to draw fully on resources, development opportunities, and emotional support provided within internal networks. Alternatively, men often aspire to compete for promotions, which can make them less collegial or team-oriented (Martin and Barnard, 2013; Kanter, 1977). This perceived competitiveness, along with task-focused behaviors, often undermines the ability of men to benefit from the resources, development opportunities, and emotional support that internal networks offer.

Societal expectations of men to be assertive and goal-oriented with task-focused behaviors position them better to benefit from external networking behaviors. Such expectations and behaviors generate positive perceptions of their capabilities among external networks, including professionals from other organizations and associations (Burt, 1998). Moreover, men tend to work in influential positions (e.g., management) and outsiders who often place a higher value on these roles frequently offer additional benefits, hoping for future reciprocity (Durbin, 2011; Spurk *et al.*, 2015). These positive perceptions, along with the higher perceived value placed by external networks, enable men to draw on the resources,

development opportunities, and support provided by those relationships (Forret and Dougherty, 2004; Ibarra, 1993). Alternatively, women's dual responsibilities (at home and work) can hinder their ability to maintain external networks, which often demand time and effort outside job hours (Mooney and Ryan, 2009; Tlaiss and Kauser, 2010). This low maintenance of external networks and less assertive behaviors can be falsely interpreted as signs of low aspirations and moderate capabilities (Amanatullah and Morris, 2010; Ming *et al.*, 2007). Women often do not work in upper-level influential positions and thus their roles are not valued as much by their external networks (Durbin and Tomlinson, 2010; Ibarra, 1993; Kanter, 1977). These false signals, along with the low value assigned by their networks, can prevent women from fully benefiting from their external networks. In sum, women may benefit more from their internal networking behaviors than men, while men may benefit more from external networking behaviors than women (Forret and Dougherty, 2004).

It appears that past research did not test the moderating effects of gender on these relationships: internal networking behaviors and work outcomes, and external networking behaviors and work outcomes. A small body of literature tested the gender moderating effect for other types of networking behaviors or general networking behaviors (see Appendix 3). For instance, Macintosh and Krush (2014) studied a sample of real estate sales employees in the United States and reported a stronger relationship between peer networking and job satisfaction for men, whereas the link was stronger between professional/customer networking and job satisfaction for women. Similarly, Forret and Dougherty (2004) found that internal visibility is beneficial for promotion and total compensation for men, and involvement in networking is beneficial for their career progression. Internal visibility alone contributed to career success for women. Those authors focused on professionals from different sectors (e.g., management, finance, and marketing) in the United States. Using a sample of 276 middle and top managers from Dutch banks, Van Emmerik *et al.* (2006)

reported that engagement in informal versus formal networks and career satisfaction relationships are stronger for men than for women. Thus, it is proposed:

*H3a:* Gender moderates the positive relationship between internal networking behaviors and job commitment such that the relationship is stronger among women than among men.

*H3b:* Gender moderates the positive relationship between internal networking behaviors and career success such that the relationship is stronger among women than among men.

*H4a:* Gender moderates the positive relationship between external networking behaviors and job commitment such that the relationship is stronger among men than among women.

*H4a:* Gender moderates the positive relationship between external networking behaviors and career success such that the relationship is stronger among men than among women.

## **Methods and Results**

We used a sequential mixed-method design comprising a quantitative study (Study 1) and a qualitative study (Study 2), with a four-month time lag (Creswell, 2014). Data were collected from private sector organizations in Sri Lanka as follows: a survey of middle managers and a survey of supervisors for Study 1; and semistructured interviews of a set of managers and their supervisors for Study 2. Fifteen private sector organizations from across industries were approached for participation in this research. Ten private sector organizations (service and manufacturing sectors) participated in this study.

### ***Study 1 Sample and Data Collection***

Survey participants were middle managers and their supervisors. Ethical approval was received before commencing the survey. Eight hundred surveys were distributed to middle managers and 800 surveys to their supervisors. We received 372 completed surveys (46.5% response rate) from middle managers and 295 completed surveys (36.8% response rate) from supervisors. We matched the supervisor responses with middle managers and arrived with a total sample of 295 matched surveys. Middle managers reported on internal networking behaviors, external networking behaviors, gender, age, educational background, organizational tenure, marital status, childcare responsibility, industry type, and job commitment. Supervisors reported on employee career success.

The final sample of 372 middle managers comprised 222 male (59.7%) and 150 (40.3%) female participants, ranging in age from 20–56 years. Of the 372 middle managers, 19.6% had a postgraduate degree, 45.2% had an undergraduate degree, and 34.9% had completed high school (Year 12). A total of 56.7% were married and 43.3% were single. Fifty-seven percent of the participants reported that they had no children, and 42.9% had at least one child. On average, managers had been working for their current organization for over nine (9.2) years. The majority (56.1%) of participants were from manufacturing organizations, with 43.8% from service organizations. The final sample of 295 supervisors comprised 241 males (81.7%) and 54 females (18.3%). Age ranged from 20–66 years, and 51.4% of participants had a postgraduate degree, 11.9% had an undergraduate degree, and 36.7% had completed high school (Year 12). On average, supervisors had been working for their current employer for 13 years. A slight majority of supervisor participants (53.8%) were from manufacturing firms, with 46.2% from service organizations. Information on the survey participants is presented in Table 1.

[Insert Table 1 about here]

### ***Study 1 Measures***

**Predictors.** *Internal and external networking behaviors* were measured on a five-point Likert scale (1=never to 5=often) using the scale developed by Michael and Yukl (1993). The scale comprised 11 items for internal networking, with reported reliability of .83. A sample item is “I offer help to solve a problem for someone in another unit.” Eight items measured external networking, with reported reliability of .87; for example, “I attend parties or social events with externals.” The Cronbach’s alphas for the current study are .72 for internal networking behaviors and .80 for external networking behaviors.

**Outcomes.** *Job commitment* was measured using the three-item scale from Rutherford *et al.* (2009). This scale comprised three items with reported reliability of .89. A sample item is “I find that my values and the organization’s values are very similar”. Career success can be measured in various ways (for a review, see Shockley *et al.*, 2016), including as reported by supervisors (Drewery *et al.*, 2020). Following previous studies (e.g., Mehra *et al.*, 2001), we measured subjective *career success* using supervisor-reported data, utilizing three items, with reported reliability of .75. A sample item is “The likelihood that a subordinate would achieve career-related success.” Participants were asked to rate their answers on a five-point Likert scale (strongly disagree=1 to strongly agree=5) for both outcome variables. Cronbach’s alphas for the current study are .55 for job commitment and .82 for career success.

**Moderator.** Gender was coded as “0” for males and “1” for females.

**Controls.** We controlled for the effects of age (years), education (using two dummy variables for postgraduate education and high school education, with undergraduate qualification as the base category), organizational tenure (years), marital status (“0” for married and “1” for single), childcare responsibility (“1” for yes and “0” for no), and industry type (with “0” representing manufacturing and “1” representing service) (Forret and Dougherty, 2004; Huang, 2016; Macintosh and Krush, 2017; Rasdi *et al.*, 2013; Van Emmerik *et al.*, 2006; Volmer *et al.*, 2017).

### ***Study 1 Results***

Mean, standard deviations and correlations among study variables are presented in Table 2. Networking behaviors (internal and external) were weakly positively related to postgraduate education ( $r = .22$  and  $r = .20$ ), and weakly negatively related to high school education ( $r = -.17$  and  $r = -.13$ ). Past research also reported correlations between education and internal versus external networking behaviors (e.g., McCallum *et al.*, 2014; Porter *et al.*, 2016). Thus, we controlled for the effects of education in our analyses.

[Insert Table 2 about here]

We measured reliability, convergent validity, and discriminant validity of the main constructs (Carlson and Herdman, 2012; Hill and Hughes, 2007). The composite reliability (CR) values ranged from .738 to .856, above the acceptable value of .70 (see Table 3). The average variance extracted (AVE) values ranged from .560 to .696, exceeding the minimum acceptable value of .5 (see Table 3). Thus, sufficient reliability and convergent validity were achieved. Moreover, four constructs reached the discriminant validity, achieved via correlations (see Table 3).

[Insert Table 3 about here]

We conducted a hierarchical multiple regression analysis to test the hypotheses. H1a and H1b proposed positive relationships between internal networking behaviors and work outcomes—job commitment (H1a) and career success (H1b). H2 predicted positive relationships between external networking behaviors and work outcomes—job commitment (H2a) and career success (H2b). To test these four hypotheses, seven control variables (age, high school education, postgraduate education, organizational tenure, marital status, childcare responsibility, and industry type) were entered in step 1 (see Model 1 in Table 4). To test for the main effects, networking behaviors (external and internal) were entered in step 2 (see Model 2 in Table 4). Results under Model 2 indicate that the relationship between internal

networking behaviors and job commitment was positive ( $\beta = 0.18, p < 0.01$ ). Thus, we found support for H1a. Also, results indicate that the coefficient for external networking behaviors and career success was significant and positive ( $\beta = 0.12, p < 0.01$ ). Thus, H2b was supported.

[Insert Table 4 about here]

H3a and H3b proposed that the internal networking behaviors–work outcomes (job commitment and career success) relationship would be stronger for women than men. On the contrary, H4a and H4b proposed that the external networking behaviors–work outcomes (job commitment and career success) relationship would be stronger for men than women. The interaction terms (Internal Networking Behaviors  $\times$  Gender and External Networking Behaviors  $\times$  Gender) were entered in step 3 (see Model 3 in Table 4). The results indicate that only the interaction term Internal Networking Behaviors  $\times$  Gender was significant ( $\beta = 0.45, p = .01$ ) for job commitment. To accurately describe the moderating effect of gender on the relationship between internal networking behaviors and job commitment, we calculated the linear slopes (see Figure 1). Results demonstrate that for females, the slope was significant and positive ( $b = 0.43, p < .001$ ), as hypothesized. However, the relationship was nonsignificant for men ( $b = -0.01, ns$ ). Thus, partial support was found for H3a, and no support was found for H3b, H4a and H4b.

[Insert Figure 1 about here]

### ***Post-hoc Analyses***

As employee education was significantly correlated with internal and external networking behaviors, we performed post-hoc analyses to explore them. Figure 2 presents the means of internal and external networking behaviors for employees from each of the three educational qualifications: Year 12 ( $n = 129$ ); undergraduate ( $n = 168$ ); and postgraduate ( $n = 73$ ).

[Insert Figure 2 about here]



A one-way between-subjects ANOVA was run with three categories of education as the independent variable, with first the internal networking behaviors as the dependent variable and then the external networking behaviors as the dependent variable. The test of homogeneity of variances (Levene statistics) was nonsignificant (internal: .738, *ns*; external 1.718, *ns*), which suggests the Welch corrections were not needed. The results showed a significant difference among the categories of education with regards to internal networking behaviors [ $F(2, 369) = 9.78, p < .001$ ] and external networking behaviors [ $F(2, 369) = 8.92, p < .001$ ]. The partial eta squared calculations suggest that the effect sizes are .051 and .046, indicating that 5.1% variance in internal networking behaviors and 4.6% variance in external networking behaviors are explained by the education categories. As the data was not balanced for the three categories, Scheffe post-hoc analysis was performed. It suggests that only the following educational categories were significantly different from each other for internal networking behaviors: employees with postgraduate education have significantly higher internal networking behaviors than employees with undergraduate education (mean difference = .29,  $p < .01$ ); and employees with Year 12 education (mean difference = .41,  $p < .001$ ). Regarding external networking behaviors, the following categories were different: Employees with postgraduate education have significantly higher external networking behaviors than employees with undergraduate education (mean difference = .32,  $p < .05$ ) and employees with Year 12 education (mean difference = .49,  $p < .001$ ).

### ***Study 2: Purpose of the Study***

We conducted Study 2 to explain the findings of Study 1. Accordingly, our primary research questions were, “How do employees develop their internal and external networking for work outcomes?” and “How do men and women network differently for work outcomes?”

### ***Study 2: Data Collection***

The research team invited all survey participants via email to participate in interviews (data collection phase two). Thirty middle managers and 10 supervisors accepted invitations for

interviews. Eighteen semistructured interviews were undertaken, comprising 12 from middle managers (coded as MM1–MM12) and six from their supervisors (coded as S1–S6). We identified a situation of data saturation when no new information was being discussed (Saunders *et al.*, 2018). On average, each survey interview took 45 minutes to one hour. To ensure the ethical considerations of conducting research involving human participants were met, ethical approval was received before the interviews commenced.

To avoid interview bias, several precautions were taken. First, before commencing interviews, the first author participated in qualitative research methodology workshops and undertook several test interviews with feedback. Second, two interview protocols were developed, one for middle managers and the other for their supervisors. Third, audio records of the interviews were made and used in the transcription.

### ***Study 2: Participants***

The age range of the middle managers was 25–37 years, with six males and six females. Four had postgraduate qualifications, six undergraduate, and two high school (Year 12). The age range of the six supervisors was 39–49 years, with five males and one female. All participants had postgraduate qualifications. Participants' information is presented in Table 5.

[Insert Table 5 about here]

### ***Study 2 Data Analysis***

**Research team:** A team of four early- to mid-career academics (one based in Sri Lanka and three based in Australia) conducted this study. The first author conducted the interviews of a sample of survey participants (middle managers and their supervisors). The second, third, and fourth authors contributed to data analysis and discussion through their diverse research experiences.

**Analysis:** Using NVivo software, we used thematic analysis (Creswell and Plano Clark, 2017) and content analysis (Hsieh and Shannon, 2005) to identify themes in the data and group

similar information. Data coding was undertaken to answer the research question, using knowledge gained from the findings of the quantitative analysis (Creswell, 2009). Three themes (internal and external networks, network benefits, and gender in networking) were identified that we wanted to explore further. The main findings were segmented into manageable pieces with numeric data (e.g., 50% of male middle managers reported that they like to get together with outsiders such as friends after office hours). Illustrative evidence for themes is presented in Table 6. Interview guides are included in Appendix 4.

[Insert Table 6 about here]

### ***Study 2 Trustworthiness***

The rigor of a study is measured through its trustworthiness, which provides the link between what participants say and how researchers interpret that data (Elo *et al.*, 2014).

Trustworthiness consists of credibility, transferability, dependability, and confirmability (Lincoln and Guba, 1994). We developed trustworthiness as follows. First, this study used two interview protocols to ensure consistency of the measures used (Gray, 2017). Second, the interviews were conducted individually and confidentially to ensure full participation (Gray, 2017). Third, the research team transcribed the audio data into interview datasheets. Fourth, member-checking was undertaken to assure the credibility of interview data. Two interview transcripts were sent to middle manager participants and one to a supervisor participant. The purpose of this was to check for data accuracy, validity, and transferability (Lincoln and Guba, 1994). In all cases, the respondents approved the transcriptions. Finally, we triangulated data sources, by linking the data transcription sheets from the middle managers and their supervisors to consolidate the data (Bush, 2007; Cope, 2014).

### ***Study 2 Findings***

**Developing networks:** Participants reported several different forms of internal and external networks. These forms consisted of both formal and informal networking approaches. Most managers (90%) reported the importance of internal networks and developed networks with the organization's top-level managers, peers, and subordinates. They also identified that they used different internal communication methods such as casual chats, official meetings, and telephone conversations to develop and maintain their networking behaviors with other employees at the office. For example:

*I talk with all levels of people in the organization. No matter they are high or low. Sometimes, I have office meetings and also I like to chat with my office friends after office hours (MM1)*

*Basically, we have formal/informal meetings with the subordinates and everybody and regular discussions (MM2)*

Middle managers (80%) also demonstrated they developed external relationships with stakeholders (e.g., customers, suppliers, business partners, and resource persons), members of external professional bodies (e.g., Lions Club), university classmates working at other organizations, and with officials of some government bodies (e.g., police, government authorities). The middle managers further reported external networking activities as social/community gatherings, public and private events, conferences, and so on. The managers revealed that they used communication methods such as casual chats, telephone calls, casual meetups, and conversations through new technological apps (WhatsApp, Viber, etc.) to develop and maintain relationships with external parties, for example:

*Relationships are important ... so I often participate in various conferences. I have some networks which developed through various meetings. I attend various Old Boys meetings at the university. Also, I have connections with the Lions Club to maintain networks. (MM6)*

*We chat via 'WhatsApp' even in office hours and sometimes it's coming from my supervisory level (MM3)*

Furthermore, we identified that informal communication methods undertake a considerable role in external networking. Eleven of the 12 middle managers reported that they typically contacted their external networks (friends, government officials, members of professional bodies) informally—on a personal level (i.e., as friends) and through casual contacts (e.g., through a phone call, text message). The purpose of these relationships was to earn the benefits of the work through information and resources, for example:

*I did many more company activities through my external networks. I did make links with government bodies, political authorities, friends and other external parties. It's difficult to do some things without personal contact. (MM6)*

**Importance of networking:** All the participants ( $N = 18$ ) reported that developing internal and external networking is vital for several reasons, for example:

*... internal relationships are important, the same as the external ones (MM1)*

*as a company, we believe that networking gives a lot of input to the company and employees, new things, any changing regulations or whatever. It comes through networking very quickly. (S1)*

Our participants revealed that internal networking was important for managing work performance. All middle managers (100%) confirmed the importance of internal networking, which supported employees in productive work functions within the organization. Seven middle managers reported on their specific use of interdepartmental networking support to achieve success in their job tasks. In this case, some of the managers used their skills to maintain their internal networking behaviors effectively, for example:

*... The networks outside of the department were really important for us to get things done. Because of all the work we do, we cannot do it only with our authority and only within a given job scope. I am successful in this organization because of these interdepartmental relationships. Without ... interdepartment networks, nobody can succeed within the organization. (MM7)*

*... I know how to change my relationships person to person ... I have a lot of success in that way. (MM2)*

As reported by the middle managers, external networking was more important for enhancing work outcomes than internal networking. External relationships were identified as helping middle managers with their work-related outcomes in three ways. First, 80% of middle managers reported that they harnessed certain resources to help them perform their job through their external relationships. These resources included obtaining new information; obtaining new knowledge; gaining access to resources (e.g., inviting a resource person to the company for a training session); and obtaining feedback from outsiders to perform in the job:

*... when I am arranging training programs, I am not just thinking about the existing organization. I will arrange a trainer and training instructors through my contacts.* (MM5)

Second, 50% of middle managers reported that their external network resources supported them to do their job more effectively and efficiently through doing things faster, sharing information, building trust with other individuals, and promoting existing relationships.

*... to get things done quickly or maybe done on time, we have to use external relationships ...* (MM7)

Third, external networks also supported middle managers to enhance their future work benefits. In particular, by completing job duties accurately with their external networking support, middle managers reported that they were able to improve their accreditation and prestige within the organization to gain further work benefits, for example:

*My strong and good external relationships have enabled me to carry out my job well ... Sometimes, the company people can't believe "how I can do things so quickly." As an example, working with government agencies in a regular way takes a long time. So, through my contacts, I work quickly by getting support from government bodies and authorities.* (MM6)

**Benefits of networking:** Numerous job-related benefits of networking were identified by the participants. Five middle managers (40%) reported that they obtained increased job

satisfaction, while two middle managers (17%) reported that they obtained increased job performance, through their *internal networking*. For example:

*I get job satisfaction ... I always get this satisfaction through this network. (MM6)*

*External contacts are important for my job performance through job satisfaction (MM2)*

Eight middle managers (67%) identified that they obtained more career-related outcomes, such as job performance, increased job satisfaction, job promotion, career success, and internal visibility (i.e., positive image) through their participation in *external networking behaviors*. It was also noted that they used their external network relationships to find new job opportunities. Ten middle managers (83%) reported that they found their new job through their external network relationships:

*... I found this job through [my] training instructor ... I had a good relationship with him. He nominated me... (MM5)*

**Gender influence in networking:** Our findings also identified male and female middle manager differences in networking. All six of the *male middle managers* reported that they were more likely to socialize with the external parties of their networks. They expected such opportunities to develop their current job role and to assist them to achieve their career success, for example:

*I would get opportunities from the industry or nonindustry by outside people/networks. If I have some kinds of problems, I can explain to outsiders so I can get some different views from people who are outside the organization to improve my job. (MM12)*

*I think that males can develop their outer networking better than females and they get benefits to develop their career. (S5)*

Factors such as increased spare time after office hours and a personal interest in socializing led to men's increased interest in more external relationships. Three male middle

managers (50%) reported that they like to get together with outsiders (e.g., friends) after office hours. For example:

*As a CSR (Customer Social Relationship) manager, I would have to maintain relationships with lots of outside people. My friends. So I use after office hours for meet and chat with them. (MM6)*

Women, on the other hand, referred to their networking differently. *Women middle managers* reported that they benefit more from internal networking. All six of the women managers (100%) conveyed that they preferred internal relationships between office hours. They also reported that internal relationships enhanced their emotional resilience and improved their work outcomes, such as increased job satisfaction and stronger job commitment. For example:

*When it comes to internal communications... some team players, colleagues definitely advise me about the situation on the job. They ask whether you are happy and unhappy. Is there anything to communicate? They are always with me ... They recommend me as a good worker, "She is very helpful." They use those words. (MM3)*

The data also revealed different gender values and traditional social practices affect men's and women's networking behaviors within their external and internal networks. Particularly, factors such as family responsibilities, childcare responsibilities, and male-dominated network groups affected women's decisions to enact fewer external networking opportunities. For example:

*... females have a different way of keeping relationships and doing things with bosses and the other superiors. And the males have a different way of approaching superiors and existing people ... females are not quite able to network because of some commitments ... family commitments, and they don't have more time [sic]. (MM1)*

*Females focus on their job when they are doing job. They don't want to have chats .... They are very precise in doing their job. When they [females] come to work throughout eight hours, they use their full energy. Males can have other reasons. They are energetic. Sometimes they engage with other things as well. (S2)*



### ***Gender-related Networking Outcomes***

Regarding employee networking outcomes, we identified that there was no considerable difference between men and women employees' perceptions of networking outcomes. Three supervisors (50%) and seven middle managers (60%), including both men and women, reported that work outcomes from networking were not different based on gender. For example:

*I find no difference between us (males and females) in workplace success. Yes, we have different relationships with different people; that is not an issue for our performance or success. (MM5)*

*Basically they [males and females] work together. (S1)*

Our data revealed that organizational work practices and policies support both men and women in their work benefits. More than 80% of the middle managers reported that they believed they operated on a common platform, together with the organizational policies and guidelines to accomplish their job tasks. Our findings further reveal that the different work practices of men and women support their work benefits. An example is illustrated in the following comment.

*Females focus on their job when they are doing job. They don't want to have chats .... They are very precise in doing their job. When they (female) come to work throughout eight hours, they use their full energy. Males can be having other reasons. ... They are energetic. Sometimes they engage with other works as well. So, they use their own way to achieve things at the organization (S2).*

### **Discussion**

The objectives of Study 1 were to investigate the impact of internal and external networking behaviors on employee outcomes (job commitment and career success) and whether these effects are different for men and women. Study 2 aimed at exploring how male versus female employees develop internal and external networking behaviors, and how these networking behaviors influence work outcomes. Below we discuss the Study 1 and Study 2 findings.

### ***Internal Networking Behaviors and Work Outcomes***

Study 1 found a significant positive relationship between internal networking behavior and employee job commitment, which is consistent with past research by McCallum *et al.* (2014), who reported a positive association between internal networking behaviors and both affective and normative job commitment. However, we found a nonsignificant relationship between internal networking behaviors and career success, which is inconsistent with past research (Wok and Hashim, 2017; Wolff and Moser, 2009). For instance, Wolff and Moser (2009) found a positive relationship between internal networking contacts and the growth of salary (used to measure career success) and a negative relationship between internal networking contacts and concurrent salary. The sample difference may explain these findings, for instance, we used a sample of middle managers from Sri Lanka, in contrast to Wolff and Moser (2009) who studies employees (not middle managers) from Germany.

Study 2 extended the findings of Study 1 and identified the role of formal versus informal relationships within the internal networking context. Accordingly, employees' formal and informal relationships support them to develop and maintain their internal networking behavior and enhance their work outcomes (Van Emmerik *et al.*, 2006). Study 2's findings indicate that managers maintain relationships with employees at all levels (e.g., top managers, subordinates, and peers) and seek their help in improving job outcomes. Middle managers may use their skills to obtain support from other departments of the organization.

### ***External Networking Behaviors and Work Outcomes***

Study 1 indicates a positive relationship between external networking behavior and career success. These findings are consistent with past research (Wok and Hashim, 2017; Wolff and Moser, 2009). Wok and Hashim (2017) reported a positive relationship between external

networking behaviors and career success, while Wolff and Moser (2009) found a positive association between external contacts and concurrent salary, a proxy for career success.

Study 1 shows a nonsignificant external networking behaviors–job commitment relationship that is not consistent with past research (McCallum *et al.*, 2014). McCallum *et al.* (2014) found a negative relationship between external networking behaviors and normative commitment. This inconsistency can be attributed to industry differences. Employees may demonstrate different behaviors across sectors (Gibson *et al.*, 2014). For example, McCallum *et al.* (2014) focused on health sector employees, while our sample included manufacturing and services managers. Health professionals have more interactions with external parties than do manufacturing sector managers, and thus may benefit more from their external networks in terms of access to resources and information (Schön Persson *et al.*, 2018).

Study 2 extended the results of Study 1 and found that external networks, particularly support managers, harness certain resources such as job-related resources, information, and feedback (Fryczyńska and Ivanova, 2019). Its findings also explain how external networking is important for middle managers in enhancing job-related outcomes. Middle managers use their external networks to receive support for their work practices in the organization, such as using advice from external professionals. Such support improves their work-related outcomes, such as job promotion and job satisfaction (Macintosh and Krush, 2014; Wolff and Moser, 2010).

### ***Moderating Effect of Gender***

The results of Study 1 suggest that gender moderates the relationship between internal networking behaviors and job commitment. They show that internal networking behaviors are beneficial for women in improving their job commitment, which is consistent with our theorizing. It seems that past research did not investigate the link between *internal*

networking behaviors and job commitment for women (see Appendix 3), making the results of Study 1 a pioneering finding. The Study 2 findings show that women middle managers prefer internal networking behaviors. The main purpose of their internal networking is to strengthen their emotional ties to enhance their career benefits (Bevelander and Page, 2011; Forret and Dougherty, 2004). A possible explanation, suggested by Tlaiss and Kauser (2010), is that women's responsibilities as a caregiver for the family will obstruct their development and maintenance of external networks, which often require time and attendance outside work hours (Mooney and Ryan, 2009). Our Study 2 findings supported this notion that women's internal networking behaviors improve their emotional resilience and job commitment. Hence, our findings extend the existing literature on women's internal networking behaviors and job commitment.

Study 1 found that gender did not moderate the following three relationships: internal networking behaviors and career success; external networking behaviors and job commitment; and external networking behaviors and career success. It appears that past research did not test such moderating effects for *internal versus external* networking behaviors (see Appendix 3 for findings of studies that either focused on overall networking behaviors or other types of networking behaviors). For instance, men enhance their objective performance through professional networking and improve job satisfaction through peer networking, while women enhance objective performance and job satisfaction through their customer networking (Macintosh and Krush 2014, 2017). Moreover, the relationships between engagement in informal/formal networks and career satisfaction are stronger for men than for women (Van Emmerik *et al.*, 2006).

The Study 2 findings indicate that men are more likely than women to maintain external networks to obtain greater development in their job roles and increased career success. We also found that external informal and formal networking behaviors can play a

significant role in job-related benefits. Hence, we can assume that informal and formal external networking can have a stronger influence on men's than women's work benefits (Van Emmerik *et al.*, 2006). Further, we found that men and women middle managers' networking behaviors differ on social, situational, and gender lines, supporting the findings from past research (Forret and Dougherty, 2004; Ibarra, 1993; Nesheim *et al.*, 2017; Rowley *et al.*, 2016). Although their behaviors vary by factor, our data revealed that the differences in outcomes for men and women are not seen as debilitating for women in terms of workplace benefits, unlike the results of previous research. For example, Forret and Dougherty (2004) indicate that women benefit less than men in the workplace.

### ***Employee Education and Networking Behaviors***

The post-hoc analyses indicate that employees' education has an impact on their internal and external networking behaviors. Specifically, employees with postgraduate education have both higher internal networking behaviors and external networking behaviors than those who have undergraduate education or Year 12 education. One possible explanation is that higher education institutions develop students' networking skills (Pagés-Serra and Stampini, 2007; Raj *et al.*, 2017). Students from these institutions often network with their former classmates during their professional careers. It seems that past research did not investigate the relationship between level of education and networking behaviors. Evidence exists for a link between education and employment (Pagés-Serra and Stampini, 2007).

### **Theoretical and Research Contributions and Practical Implications**

This research offers several theoretical and research contributions. First, this study found some support for social capital theory, which suggests networking behavior as a resource generated from individuals' networks (Burt, 1998). These resources assist employees in

achieving goals through emotional care, information, and resources (Narayan and Cassidy, 2001; Van Emmerik, 2006). Our findings, therefore, support the two ends of the social capital continuum: internal networking behavior and job commitment; and external networking behavior and career success. Hence, these results support social capital theory by distinguishing internal versus external networking behavior as a social capital that enhances individuals' work outcomes (Adler and Kwon, 2002; Granovetter, 1973). Second, this study contributes to social role theory (Eagly, 1987), which suggests that men and women have different gender identities that develop through their gendered learning process. The results found a moderating effect of gender on the relationship between internal networking behavior and job commitment. Hence, the present study supports social role theory by identifying that gender identities influence employees' internal networking behavior and job commitment.

Third, this research provides pioneering evidence to show women managers' intention to develop internal networking behaviors and their impact on work outcomes. Through a qualitative inquiry, this study further explored the perceived importance and benefits of internal and external networking behaviors and the gender-related networking outcomes. Using a mixed-method design, the study further explains the results of the quantitative study through qualitative inquiry, providing strong empirical evidence for our findings (Creswell, 2014). Fourth, this research provides the first evidence that employees with postgraduate education are more engaged in both internal and external networking behaviors than are employees with lower levels of education.

The findings also offer implications for practice. First, our findings will help employees to understand and use their networking behaviors for positive work outcomes. Specifically, middle managers can strategically manage their internal and external networking behaviors to advance their job commitment and career success. Middle managers need to understand the importance of their external networking to improve recognition in the

workplace and, in return, positively affect their future work benefits. Moreover, this study can assist middle managers to understand how to access organizational information, internal job-related resources, and career-related feedback to obtain work benefits (Macintosh and Krush, 2017). These findings can also help women middle managers in developing internal networks to build emotional resilience and improve job commitment. In addition, our findings of Study 2 highlight the importance of formal and informal networking within internal and external network contexts for middle managers.

Second, it is important for senior managers (e.g., training and development managers and human resource managers) to consider employees' networking behaviors and their benefits when delegating tasks and duties among employees (Forret and Dougherty, 2001; Nesheim *et al.*, 2017). Therefore, higher-level managers can create avenues, such as organizing social events, promoting professional memberships, and encouraging community organizational memberships (e.g., Lions Club), for employees to develop external relationships with outsiders for the benefit of their career (Forret and Dougherty, 2004). On the other hand, managers can organize training workshops/activities to develop employees' internal networking skills to enhance their job commitment (Rasdi *et al.*, 2013). Moreover, counsellors and training and development managers may use these findings to develop the networking skills of men and women in the organization (Spurk *et al.*, 2015). Managers may facilitate internal networking as a career management strategy for women employees to gain high levels of job commitment (Forret and Dougherty, 2001). Findings relating to education and networking behaviors are also important to human resource professionals in selecting employees for jobs which require networking behaviors.

## **Limitations and Future Research**

This research has some limitations. First, the convenience sampling techniques may reduce the study's generalizability (Choi and Park, 2015). Also, our findings may not be fully generalizable to other national cultures. Future research could investigate how internal and external networking behaviors differentially impact other employee work outcomes that are important in their context (Porter *et al.*, 2016). Future studies could also make inquiries into informal and formal relationships within internal and external networking contexts, and their impact on work-related benefits. More research is needed to investigate the differences between men's and women's external networking behaviors–work outcomes relationships and the moderating role of cultural sensitivity. Also, as men and women report different networking behaviors in the organization, it is important to look at other cultural, personal, and organizational factors that influence men's and women's networking behaviors. Future research could examine the effectiveness of employee networking behaviors on organizational outcomes with a multilevel research design. Moreover, only 18 semistructured interviews were conducted, through 10 organizations. If we could do such research with a greater number of organizations, we may find more rich information. Finally, a time-lagged research design could be used to investigate employees' networking behaviors–work outcomes relationships at different stages of the employee work life cycle (Macintosh and Krush, 2014).

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## Tables

*Table 1.*

Demographic information about survey participants, by industry

Participants	Middle managers, by industry		Supervisors, by industry	
	Service (%)	Manufacturing (%)	Service (%)	Manufacturing (%)
	163 (43.8%)	209 (56.2%)	102 (46.2%)	120 (53.8%)
<b>Gender</b>				
<i>Male</i>	88 (39.9%)	134 (60.1%)	109 (41.5%)	132 (58.5%)
<i>Female</i>	73 (50%)	74 (50%)	32 (66.6%)	22 (33.4%)
<b>Education</b>				
<i>High school</i>	62 (48.6%)	66 (51.5%)	2 (11.9%)	13 (88.1%)
<i>First degree</i>	65 (38.9%)	101 (61.1%)	24 (31.4%)	53 (68.6%)
<i>Postgraduate</i>	33 (46.6%)	39 (53.4%)	93 (74.2%)	31 (25.8%)
<b>Marital status</b>				
<i>Married</i>	96 (45.7%)	135 (54.3%)	N/A	N/A
<i>Single</i>	66 (41.3%)	94 (59.7%)	N/A	N/A
<b>Children</b>				
<i>No children</i>	87 (41%)	123 (59%)	N/A	N/A
<i>One or more children</i>	73 (33%)	85 (77%)	N/A	N/A
<b>Age (years)</b>				
<i>20–29</i>	62 (41.7%)	88 (58.3%)	22 (47.7%)	20 (52.3%)
<i>30–39</i>	69 (45.6%)	81 (54.4%)	11 (48.1%)	15 (51.9%)
<i>40–49</i>	23 (47.1%)	26 (52.9%)	38 (39.6%)	61 (60.4%)
<i>50+</i>	3 (30%)	5 (70%)	11 (52.3%)	11 (47.7%)
<b>Organizational tenure (years)</b>				
<i>&lt; 1</i>	(16.6%)	5 (83.4%)	26 (54.2%)	22 (45.8%)
<i>1–10</i>	63 (44.4%)	80 (55.6%)	56 (43.4%)	75 (56.6%)
<i>11–20</i>	29 (31.6%)	62 (68.4)	50 (34.1%)	91 (65.9%)
<i>&gt; 20</i>	20 (73.8%)	7 (26.2%)	25 (54.2%)	21 (45.8%)

Source: Survey data.

*Table 2.*  
Means, standard deviations, and correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1 Age	32.34	7.23											
2 High school education	0.37	0.48	.17**										
3 Postgraduate education	0.18	0.38	.16**	-.36**									
4 Organizational tenure	9.19	6.95	.87**	.22**	.13*								
5 Marital status	0.43	0.49	-.56**	-.13*	-.14*	-.52**							
6 Childcare responsibility	0.41	0.49	.55**	.18**	.12*	.52**	-.69**						
7 Industry type	0.57	0.49	-0.1	-0.1	-0.1	-0.1	0.0	0.0					
8 Internal networking behavior	3.40	0.65	0.0	-.17**	.22**	0.0	0.0	0.1	0.0				
9 External networking behavior	3.11	0.81	0.0	-.13*	.20**	0.0	0.0	0.0	0.0	.50**			
10 Gender	0.4	0.49	-.19**	-0.1	0.0	-.23**	.18**	-.18**	-0.1	0.0	-.14**		
11 Job commitment	3.39	0.73	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	.18**	.11*	0.0	
12 Career success	3.72	0.62	-0.1	0.0	0.1	-0.1	0.0	0.0	0.0	.17**	.20**	0.0	.24**

Note: \*\*Correlation is significant at the 0.01 level (2-tailed). \*Correlation is significant at the 0.05 level (2-tailed).

Table 3.  
Convergent and discriminant analysis

Variables	CR (Composite Reliability)	AVE (Average Variance Extract)	1	2	3	4
1 Internal networking behavior	0.738	0.696	<b>0.834</b>			
2 External networking behavior	0.749	0.654	.50	<b>0.808</b>		
3 Job commitment	0.836	0.560	.18	.11	<b>0.748</b>	
4 Career success	0.856	0.651	.17	.20	.24	<b>0.807</b>

Note: Diagonal elements (bold) are the Square Root of Variance shared between the constructs and their measures (AVE). Off-diagonal elements are the correlations among constructs for discriminant validity. The diagonal elements should be larger than the off-diagonal elements.

Table 4.  
Hierarchical regression analysis result for job commitment and career success

Variables	Job commitment			Career success		
	$\beta$ (Model 1)	$\beta$ (Model 2)	$\beta$ (Model 3)	$\beta$ (Model 1)	$\beta$ (Model 2)	$\beta$ (Model 3)
<b>Controls</b>						
Age	-0.01	-0.01	-0.02	-0.02	-0.01	-0.01
Education, high school	-0.06	-0.03	-0.02	0.06	0.09	0.09
Education, postgraduate	0.09	0.03	0.01	0.19	0.13	0.13
Organizational tenure	0.01	0.01	0.01	0.00	0.00	0.00
Marital status	-0.09	-0.11	-0.12	0.15	0.13	0.13
Childcare responsibility	-0.02	-0.06	-0.05	0.22*	0.21	0.20
Industry type	0.11	0.10	0.11	-0.04	-0.05	-0.05
<b>Predictors</b>						
Internal networking behavior		0.18*	-0.01		0.06	0.05
External networking behavior		0.02	0.12		0.12*	0.09
<b>Moderator</b>						
Gender (0: Male and 1: Female)			0.02			0.02
<b>Interaction terms</b>						
Internal networking behaviors*gender			0.45**			0.02
External networking behaviors*gender			-0.21			0.06
$R^2$	0.02	0.05	0.08	0.04	0.08	0.08
$F$	0.91	5.00**	3.46*	1.52	5.28**	0.19
$\Delta R^2$	0.02	0.03	0.03	0.04	0.04	0.00
$F$ for $\Delta R^2$	0.91	1.83*	2.27**	1.52	2.39*	1.82*

Note:  $n = 343$  (job commitment), 273 (career success); \* $p < 0.05$ , \*\* $p < 0.01$ .

Table 5.

Participant information

Employee interview code	Job title	Gender	Age	Industry
Employee 1 (MM1)	HR Officer	Male	33	Service
Employee 2 (MM2)	Raw Material Officer	Male	37	Manufacturing
Employee 3 (MM3)	Specialist	Female	25	Manufacturing
Employee 4 (MM4)	Finance Officer	Female	26	Service
Employee 5 (MM5)	Assistant Sales Manger	Female	32	Service
Employee 6 (MM6)	CSR Manager	Male	36	Manufacturing
Employee 7 (MM7)	Senior HR Executive	Male	29	Manufacturing
Employee 8 (MM8)	Executive	Female	28	Manufacturing
Employee 9 (MM9)	Executive	Female	27	Service
Employee 10 (MM10)	Executive	Male	27	Manufacturing
Employee 11 (MM11)	Executive	Female	31	Service
Employee 12 (MM12)	Executive	Male	34	Service
Supervisor 1 (S1)	Head of HR	Male	44	Service
Supervisor 2 (S2)	Manager – Manufacturing and Plant	Male	49	Manufacturing
Supervisor 3 (S2)	Head of Sales	Male	48	Service
Supervisor 4 (S4)	Senior Manager – HR	Female	46	Manufacturing
Supervisor 5 (S5)	Senior Manager – Sales	Male	40	Service
Supervisor 6 (S6)	Manager HR and Administration	Male	39	Service

Source: Survey data.

Table 6.

Illustrative evidence for themes

Themes	Codes	Representative quote
Internal and external networks	Developing networks	“Relationships are important ... so I often participate in various conferences. I have some networks which developed through various meetings. I attend various Old Boys meetings at the university. Also, I have connections with the Lions Club to maintain networks.” (MM6)
	Importance of networking	“... to get things done quickly or maybe done on time, we have to use external relationships ...” (MM7)
Network benefits	Benefits of networking	“I get job satisfaction ... I always get this satisfaction through this network.” (MM6)
Gender in networking	Gender influence in networking	“I think that males can develop their outer networking better than females and they get benefits to develop their career.” (S5)
	Gender-related networking outcomes	“I find no difference between us (males and females) in workplace success. Yes, we have different relationships with different people; that is not an issue for our performance or success.” (MM5)

## Appendices

Appendix 1: Studies not differentiating between internal and external networking behaviors

Study	Theory	Networking behaviors	Outcomes	Main findings
Fryczyńska and Ivanova (2019)	Social capital theory	Networking behaviors	Career satisfaction	Networking behaviors are positively related to career satisfaction.
Volmer and Wolff (2018)	Conservation of resources theory	Networking behaviors	Job satisfaction Career satisfaction	Networking behaviors are positively related to both outcomes.
Volmer <i>et al.</i> (2017)	Social capital theory	Networking behaviors	Objective career success (salary and promotions)	Networking behaviors are positively related to career success.
Batistic and Tymon (2017)	Social capital theory	Networking behaviors	Social capital Employability	Networking behaviors are positively related to access to information and resources, internal and external perceived employability.
Qureshi and Saleem (2016)		Networking behaviors	Career progression	Four out of five dimensions (maintaining contact, internal visibility, engaging in professional activities, and socializing) are positively related to career progression.
Rasdi <i>et al.</i> (2013)	Social influence theory  Social role theory	Networking behaviors	Subjective career success Objective career success (Gross income and number of promotions)	Internal visibility is positively related to subjective career success and gross income. Engaging in professional activities is positively related to subjective career success. Maintaining external contacts is marginally positively related to subjective career success. Socializing is marginally positively related to subjective career success.
Ismail and Rasdi (2007)		Networking behaviors	Career development	Networking is important for female managers' career development.
Forret and Dougherty (2004)	Social capital theory  Tokenism theory	Networking behaviors	Career success Career progress Promotions Total compensation	Engaging in professional activities and internal visibility are positively related to total compensation. Internal visibility is positively related to number of promotions. Engaging in professional activities and internal visibility are positively related to perceived career success. Socializing is marginally related to perceived career success.
Langford (2000)	Leader–member exchange theory	Networking behaviors	Objective career success Subjective career success	Networking behaviors are positively related to objective career success.
Orpen (1996)		Networking behaviors	Career success (promotions and salary growth)	Networking behaviors are positively related to both promotions and salary growth.
Macintosh and Krush (2017)	Network theory  Social role theory	Peer networking Professional networking Customer networking	Subjective performance Objective performance	Professional networking behaviors are positively related to subjective performance. Customer networking behaviors are positively related to both outcomes.

Macintosh and Krush (2014)	Social role theory	Customer networking behaviors Peer networking behaviors Professional networking behaviors	Job satisfaction Organizational commitment	Customer networking is positively related to job satisfaction.
Van Emmerik <i>et al.</i> (2006)	Social networks theory Socialization perspective	Formal networking Informal networking	Career satisfaction	Both informal and formal networking are positively related to career satisfaction.

## Appendix 2: Studies differentiating between internal and external networking behaviors

Study	Theory	Internal versus external networking behaviors	Outcomes	Main findings
Wok and Hashim (2017)	Social capital theory	Internal networking behaviors External networking behaviors	Career success	Internal networking behaviors and external networking behaviors are positively related to career success.
Porter <i>et al.</i> (2016)	Social exchange theory	Internal networking behaviors External networking behaviors	Voluntary turnover	Internal networking behaviors are negatively related to voluntary turnover. External networking behaviors are positively related to voluntary turnover.
McCallum <i>et al.</i> (2014)	Social information processing theory	Internal networking behaviors External networking behaviors	Job commitment	Internal networking behaviors are positively related to affective commitment and normative commitment. External networking behaviors are negatively related to normative commitment.
Wolff and Moser (2010)	Career mobility theory	Internal networking contacts External networking contacts	Promotions Change of employer	Internal networking behaviors are positively related to promotions. External networking behaviors are positively related to change of employer.
Wolff and Moser (2009)	Social capital theory	Internal networking contacts (building, maintaining, and using internal contacts) External networking contacts (building, maintaining, and using external contacts)	Career success (Concurrent salary/growth of salary) Career satisfaction	Maintaining internal contacts is positively related to salary growth, while using internal contacts is negatively related to concurrent salary. Maintaining external contacts is positively related to concurrent salary.

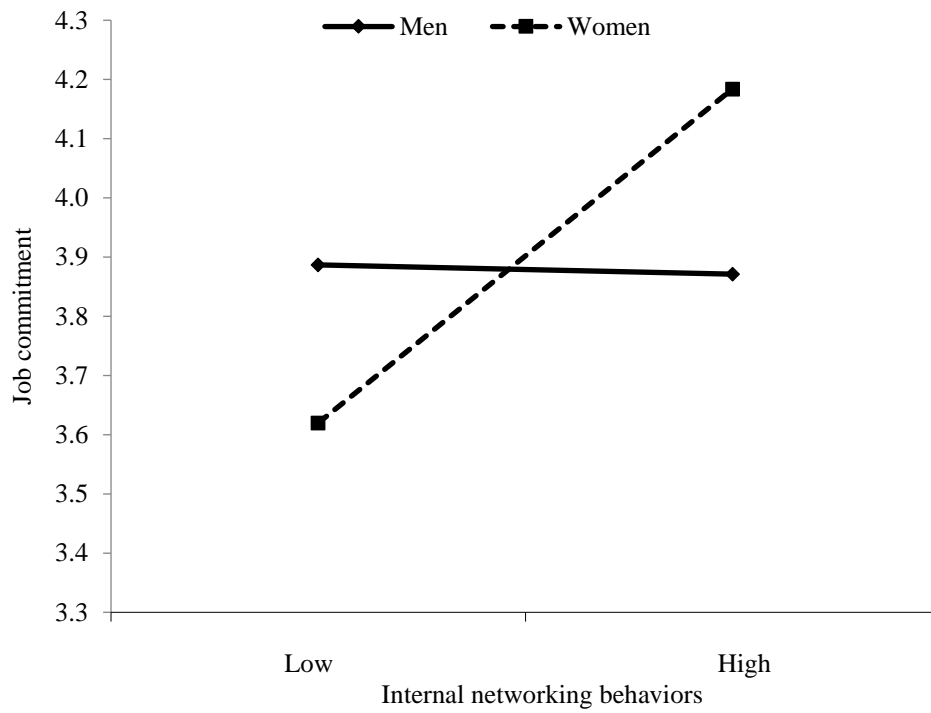


### Appendix 3: Studies focusing on gender moderating effect

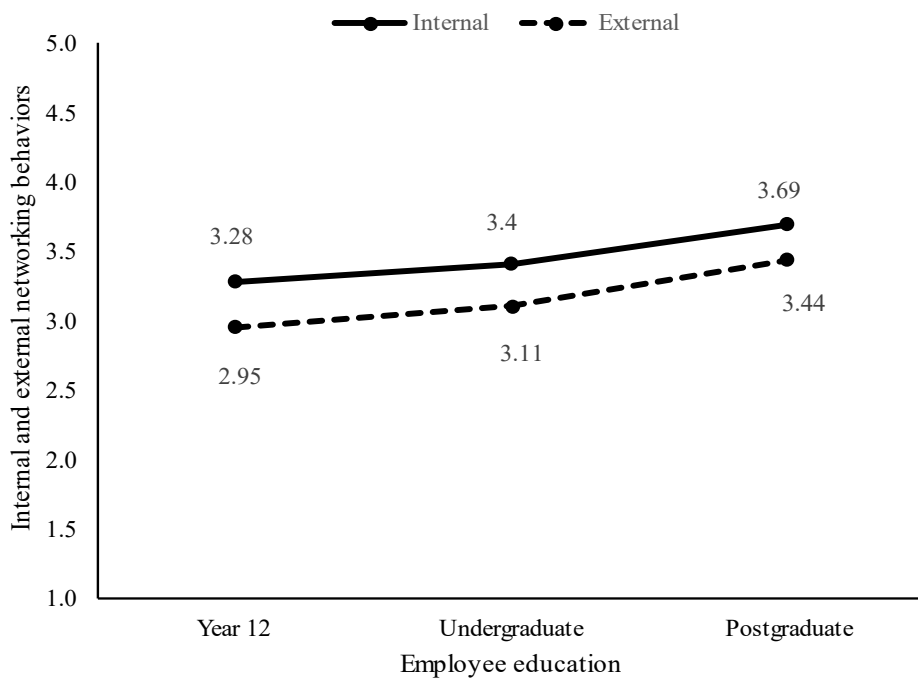
Study	Theory	Networking behaviors	Outcomes	Gender moderator findings
Qureshi and Saleem (2016)	—	Networking behaviors	Career progression	Maintaining contact and internal visibility are related to career progression for men. Socializing is related to career progression for women.
Rasdi <i>et al.</i> (2013)	Social influence theory Social role theory	Networking behaviors	Subjective career success Objective career success (Gross income and number of promotions)	Nonsignificant
Ismail and Rasdi (2007)		Networking behaviors	Career development	
Forret and Dougherty (2004)	Social capital theory Tokenism theory	Networking behaviors	Career success Career progress Promotions Total compensation	Internal visibility is beneficial for promotion and total compensation of men, and involvement of networking is beneficial for their career progression. Internal visibility alone contributed to career success of women.
Macintosh and Krush (2017)	Network theory Social role theory	Peer networking Professional networking Customer networking	Subjective performance Objective performance	Professional networking is significantly related to objective performance only for women. Customer networking is significantly related to objective performance only for men.
Macintosh and Krush (2014)	Social role theory	Customer networking behaviors Peer networking behaviors Professional networking behaviors	Job satisfaction Organizational commitment	Stronger link between peer networking and job satisfaction for men. Stronger link between professional/customer networking and job satisfaction for women.
Van Emmerik <i>et al.</i> (2006)	Social networks theory Socialization perspective	Formal networking Informal networking	Career satisfaction	Engagement in the informal/formal networks-career satisfaction relationship is stronger for men than for women.

### Appendix 4: Interview guides

- a. Interview guide 1: Questions for middle managers
  1. How do you develop your networking behaviors?
  2. What do you do to develop your internal and external networks?
  3. How important are internal/external networking for you? Why?
  4. What are the benefits of internal/external networking for you?
  5. How do your internal and external networking behaviors influence work outcomes?
  6. Are there any differences between men and women in networking behaviors within your networks? If yes, how?
  7. How would you explain the different work outcomes based on men's and women's networking behaviors?
- b. Interview guide 2: Questions for supervisors
  1. How do you encourage internal and external networking behaviors for your employees? Why?
  2. How do networking behaviors influence work outcomes for employees?
  3. How do you help your employees to develop internal/external networking? Why?
  4. What are the benefits of internal/external networking to your employees?
  5. What is the difference between your male and female employees in their networking behaviors and networking-related work outcomes?



**Figure 1.** Moderating effect of gender on the internal networking behaviors–job commitment relationship



**Figure 2.** Mean internal and external networking behaviors for education