

# Applying a Social Network Perspective to Public Relations Pedagogy: Examining the Relationships that Will Build the Profession

Adam Saffer

*School of Media and Journalism*  
*University of North Carolina at Chapel Hill*

Relationships are fundamental to public relations (Broom, Casey, & Ritchey, 1997). Education scholars have found relationships are fundamental to learning (Barkely, 2010). This essay introduces the social network perspective (SNP) as a lens for public relations pedagogy. Network theories and concepts—structural holes, strength of weak ties, centrality, and social capital—are applied to students' and educators' roles in a learning network. Propositions are posed for researchers to consider in future studies of public relations pedagogy. This essay demonstrates how SNP can enhance teaching and long-term relationships with students and practitioners as they build the public relations profession.

Many academics can recall relationships with instructors, classmates, and professionals who were influential in their education and learning. Dewey (1938) wrote that learning is facilitated by the interactions one has through relationships. Sandler and Hoffman (1992) asserted that educator-student relationships significantly influence the classroom dynamics, students' learning, and career paths among other outcomes. Relationships are central to pedagogy (Barkley, 2010). Relationships form in the classroom between educators and students, and among students. Educators in the professional field of public relations know that students benefit from relationships outside the classroom with practitioners (i.e. internships) and professional associations (i.e. Public Relations Student Society of America)

(Coombs & Rybacki, 1999). Over time, educators' *relationships with students* transition into *relationships with practitioners* when former students begin their careers. Public relations scholarship recognizes the importance of relationships (cf. Ferguson, 1984; Heath, 2013); it is time for scholars of pedagogy to examine more fully how relationships influence public relations education.

To accomplish this task, this essay first explains the social network perspective (SNP) and introduces the concept of a learning network. The second section applies three network theories and concepts—strong and weak ties, centrality and prestige, and social capital—to public relations students' relationships in the learning network. Next, this essay discusses structural holes theory (Burt, 1992, 2001) in relation to public

**Keywords:** social network perspective, public relations pedagogy, learning network, network analysis, social capital

**Correspondence:** Adam Saffer, University of North Carolina at Chapel Hill, [adam.saffer@unc.edu](mailto:adam.saffer@unc.edu)

© Adam Saffer 2015. Licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License

relations educators' role in a learning network. Testable hypotheses are posed for public relations pedagogy researchers using the SNP. The final section poses directions for future research using the social network perspective in public relations pedagogy. This essay demonstrates the value of the SNP to enhance public relations educators' teaching and long-term relationships with practitioners as they guide them from students, to practitioners, to leaders in the profession of public relations. The essay that follows provides a roadmap for studying public relations pedagogy within a network perspective.

### PUBLIC RELATIONS EDUCATION AND THE SOCIAL NETWORK PERSPECTIVE

A social network perspective offers the opportunity to examine individuals and the relationships among them by considering how people are influenced by their network of relationships (Wasserman & Faust, 1994). This section of the essay defines the social network perspective, begins to focus on the relationships in pedagogy, and transitions to a consideration of students' and educators' relationships inside and outside of the classroom.

#### Defining a Social Network Perspective

SNP is a distinct approach that places relationships as the primary unit of analysis. Whereas traditional social science is concerned with the attributes of units (i.e. individuals' characteristics and perceptions), SNP is concerned with the relationships between units (Monge & Contractor, 2003). Units are referred to as nodes in network terminology, which may be students, faculty, staff, student organizations, etc. who are connected by relationships known as links or ties. The units and relationships among them form a network.

A network is "a finite set or sets of actors and the relation or relations defined in them" (Wasserman & Faust, 1994, p. 20). Take for instance a classroom, the relationships students have with other students creates a network. Figure 1

illustrates the concepts of a network and the focus on relationships. Relationships are the conduits for the information and knowledge exchanged in a learning network. SNP recognizes that individuals are interdependent and that opportunities (and consequences) are not isolated to a single person but available to others (Yang & Taylor, forthcoming). Network researchers have studied and theorized the consequences and opportunities based on (a) the positions of individuals in networks, (b) the nature of relationships among individuals, (c) the resources available to individuals through connections to others, (d) the flow of information and social capital, and (e) the structures of networks (Wasserman & Faust, 1994). This essay now begins to show how network theories and concepts can be applied to a public relations learning network.

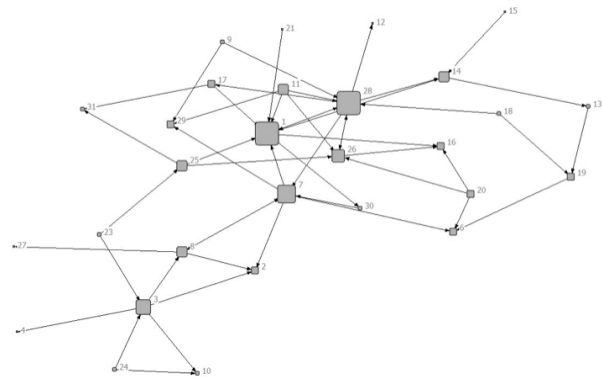


Figure 1. Learning network. The dots represent the nodes which maybe students, teachers and/or practitioners. The lines represent the relationships between the nodes. Not all nodes are connected. The larger nodes receive more connections; meaning, they have more relationships. The strength of the relationships can also be assessed through network analysis.

#### Applying a Social Network Perspective to Learning Networks

A *learning network* is a concept that refers to social relations that are created by students, faculty, and professionals in the classroom, department, college, university, and professional associations (Neubauer, Hug, Hamon, & Stewart, 2011). Relationships between students and instructors, between students and practitioners, and between instructors and public relations practitioners are examples of relationships

that form learning networks. SNP is a way of looking at students' and educators' roles in the context of a learning network. Merely looking at the "classroom network" limits the full potential of the network perspective to artificial boundaries (Barkley, 2010). Relationships in public relations pedagogy go beyond the classroom to the profession (Coombs & Rybacki, 1999).

SNP is not new to studying education and various pedagogical approaches. In fact, many of the seminal network studies began in the classroom. Almack (1922) and Wellman (1926) studied school children's friendships and found that children with similar IQ levels associated together. Studies such as these gave way to the development of sociometry—the basis for visualizing networks (Freeman, 1996). Other studies have broadened their scope from the classroom to the campus using the network lens to study faculty connections (Carpenter, Coughlin, Morgan, & Price, 2010). Today, researchers have used network analysis to study the sense of community formed in online classes (Dawson, 2008; Shen, Nuankhiedo, Huang, Amelung, & Laffey, 2008) and the influence students' network positions have on performance (Yang & Tang, 2003; Wang, 2010). Unfortunately, network methods and theories have not been used in public relations pedagogy research. This essay begins to fill that void.

Public relations pedagogy can benefit from studying the relationships inside and outside the classroom. Waymer's (2012) autobiographical account of his mentor-mentee relationships with students described the benefits relationships have for instructors and the students. SNP, using network analysis, can show the benefits for relationships for both students and instructors. Applying network analysis to public relations, Yang and Taylor (forthcoming) postulated several network concepts that can measure dimensions of organization—public relationships. This essay builds from their postulations and poses new postulations specific to public relations pedagogy. The following sections apply social network theories

and concepts in two ways. The first section applies SNP to students' learning. Then SNP is applied to educators' roles in learning networks.

**THE SOCIAL NETWORK PERSPECTIVE AND THE PUBLIC RELATIONS STUDENT** SNP has conceptual, methodological, and tactical value to studying public relations pedagogy. This section demonstrates how the concepts of strength of weak ties, centrality and prestige, and social capital can be applied to studying students' learning behaviors. These concepts can prepare students for their future careers while also giving educators measures for studying students' social relationships in learning networks. Within this section, learning networks are contextualized to discuss the relationships students form within the classroom and the possible connections they will need outside the classroom to maximize their learning.

### **Strengthening Students' Ties**

The classroom is an excellent laboratory for observing students' relationships. Some students come to class with no connections to their classmates but leave a class with strong relationships. Other students enter a class with strong relationships with others and further those relationships on group projects and studying for exams. Sometimes the stress of a group project can weaken existing relationships. The strength of relationships that students have varies greatly. Dawson (2008), studying the community-centered approach to teaching, examined the influences of students' relationships and their positions in a learning network. He hypothesized that students share information and resources with their strong ties. Dawson's findings revealed a significantly positive relationship between students with stronger relationships with classmates and feelings of social and academic support.

In network terms, a tie "establishes a linkage between a pair of actors" (Wasserman & Faust, 1994, p. 18). A tie signifies a relationship in a network. Network analysis can

measure the intensities of relationships (Knoke & Yang, 2008). Granovetter (1973), who studied how the strength of ties influence interpersonal relationships, suggested the strength of ties is comprised of the time commitment, emotional investment, and intimacy two actors reciprocate to one another. Granovetter (1973) asserted that individuals' strong ties connect them to people with redundant information and resources while the weak ties offer a person access to new information and resources. Testing this notion, Granovetter (1974) found that people are more likely to find a job through weak ties, not their strong ties. The logical explanation of this finding suggests that individuals receive non-redundant information about job opportunities from these contacts because weak ties connect individuals to a number of different individuals that have their information and resources. Today, Granovetter's strength of weak ties theory has developed into a general sociological theory (Borgatti, Mehra, Brass, & Labianca, 2009). Research has demonstrated that the strength of ties influences students' perception of support in the classroom.

Benigni, Cheng, and Cameron (2004) alluded to the numerous elements necessary for completing a public relations campaigns course that can overwhelm students. Students are tasked in campaigns courses to assemble a product that demonstrates their knowledge and skills are ready for the profession. This situation poses a unique opportunity for educators to allow students to use their connections to aid in formulating a campaign. Dawson's (2008) found students depend on support networks to complete classes. Public relations educators should highlight students support networks that can help execute a campaign. Instructors should consider having students list the resources their support networks have in the planning stages of a campaign. A student on the team might have a connection to a skilled graphic designer. This connection could aid the campaign in presenting a well-designed campaign plan book. This exercise can make students cognizant of their connections—strong

and weak—and understand the necessity of connections. Public relations professionals depend on their connections with the media, teams within an agency, or departments within an organization to carry out a campaign.

The strength of weak ties theory illustrates the significance of relationships in a learning network. Public relations students and educators can benefit from knowing how students use their relationships for learning and completing courses. The literature suggests that within the classroom, students can build strong relationships that lead to more academic and social support (Dawson, 2008). Moreover, using their "weak ties," students may be able to access resources necessary to complete intensive course such as public relations campaigns. The following proposition is posed to begin an exploration into understanding the influence of public relations students' strong and weak ties:

*Proposition 1:* Public relations students who use their strong ties within the learning network to will have greater indications of social and academic support. Public relations students who use their weak ties can gain access to information and resources not directly found in the classroom that can improve course assignments.

The previous section explained that relational ties—both strong and weak—form networks. The section that follows elaborates on how students' relationships with others position them at different points in a network, which can have significant effects.

### **Centrality and Prestige in Class**

Public relations students—future boundary spanners—must understand the classroom setting shares many similarities with their future work setting. They will be required to share and obtain resources and information through their connections within an agency or organization.

The classroom—or department—can serve as a metaphor for conceptualizing the importance of centrality and boundary spanning. A specific activity for an introductory course could have students write journals throughout the semester about their relationships with classmates or other students in the department. The instructor could pose questions to prompt students to consider how they serve as “boundary spanners” when working on group projects or studying for exams. Such an exercise demonstrates that public relations professionals need to be well connected and at the center of networks.

A network forms from the ties that connect individuals. In a classroom network, students have connections with other students and the instructor. The network method measures the number of ties that people send to and receive from other network actors. Centrality was one of the earliest network concepts and is used to identify “popular” actors in networks (Scott, 2000). Knoke and Yang (2008) offered a more precise conceptual definition for centrality and prestige: “centrality, where a prominent actor has high involvement in many relations, regardless of whether sending or receiving ties; and prestige, where a prominent actor initiates few relations but receives many direct ties” (p. 62). Here, both measures are contingent upon the direction of ties: A indicates a connection to B but B does not reciprocate the connection (asymmetrical), or both C and D indicate a connection to one another (symmetrical). A number of computations can measure these concepts (for further review see Freeman, 1977, 1979).

The concepts of centrality and prestige explain that an actor’s access to information or resources is determined by his or her structural position in a network. Put more descriptively, a student at the center of a learning network will have connections to more information and resources while a student on the periphery of a learning network will have fewer connections to the same information or resources. In the classroom, Dawson’s (2008) study revealed that students who

were most central in the classroom network had a higher sense of community, more support from their peers, and greater access to course related information. Being positioned at central points in a network can affect the information a student receives; thus, a student’s network position affects their perceptions, attitudes and actions.

Centrality in a network has applications to public relations practice. The public relations department in Sommerfeldt and Taylor’s (2011) study was not centrally positioned nor was the department characterized for having a prestigious network position. The researchers suggested that the lack of centrality constrained the departments’ practitioners’ ability to act as boundary spanners. Public relations students will be boundary spanners in their future career. Public relations educators should challenge students to consider their positions in networks. An instructor might ask students to reflect on their connections by asking: How have your relationships with other students improved or hindered your studying?

The literature establishes that when students take on central points in a learning network they have a strong sense of community and greater access to information (Dawson, 2008). A central network position is significant to public relations students. Take, for example, a public relations writing class where students are assigned to one of three client teams. Each client team has an account-lead student who is charged with serving as the point of contact with the client, the instructor, and the other students in the class. The account-lead students facilitate information between many different people. The literature suggests that the account-lead student must take on a central role in the network to effectively facilitate information. In return, those students should have a strong sense of community within the classroom network. Knowing how students’ network positions influence their classroom performance can be informative to instructors. The available research forms the following proposition on student centrality in a learning network:

*Proposition 2:* Students positioned at central points in a learning network will be identified by their peers and others as able to facilitate necessary information, and will perceive having a strong sense of community.

The next section introduces the concept of social capital by drawing on the strength of weak ties theory and the concepts of centrality and prestige.

### **Social Capital and the Student**

To this point, students' relationships have been considered based on their strength of ties and how such ties position them within a larger relational network. Much like practitioners depend on relationships with media and other groups, students also depend on relationships. The research presented thus far demonstrates that students' relationships give them access to resources. This section takes students' relationships a step further and considers the value of student-to-student relationships. In many public relations undergraduate programs, students move through the course sequences as a cohort. The students in a cohort take many of the same classes together working on class assignments, exams, and eventually working together on a capstone campaign. Some may even participate in an internship together. Such relationships establish social capital. Social capital is emerging as a new framework for thinking about public relations practice (Heath, 2013; Sommerfeldt, 2013; Willis, 2012). This paper argues social capital has application to public relations pedagogy.

Social capital is a concept that gives value to the benefits social relations provide to individuals and communities (Bourdieu, 1986; Coleman, 1988; Putnam, 1995, 2000). In theory, social capital provides individuals access to resources through their relationships with other community members, which affects their ability to achieve objectives (Lin, 1999). In practice,

social capital allows individuals to call on their social connections for information or assistance.

The case of studying students' social capital presents an opportunity to researchers. Students are transitory. At one point they are students—dependent on educators for knowledge and guidance. Then they mature to become professional contacts at a later time. Some may even return to the university to be colleagues or clients. Social network analysis affords researchers the ability to study the evolution of networks over time (Monge & Contractor, 2003; Yang & Taylor, 2015). A potential longitudinal study might measure the relationships of a cohort as they transition through a program and on into their careers. Are students able to maintain their social capital? Some research suggests the current generation of college students is well suited to maintain their social capital with geographically diverse contacts online (Ellison, Steinfield, & Lampe, 2007). We should study this question.

SNP allows researchers to begin exploring ways in which social capital transcends academic and professional networks. SNP can study how the social capital students build with other students in their cohort or through Public Relations Student Society of America (PRSSA). Likewise, using SNP to explore how the social capital educators build in the classroom translates into social capital with public relations practitioners as their students become professionals. The culmination of the research presents the following proposition:

*Proposition 3:* Students' social capital strengthens their ability to achieve objectives in the classroom and in their professional careers.

To this point in the essay, SNP has been applied to the students' roles in the classroom and in learning networks by looking at the strength of weak tie theory, the concepts of centrality and prestige, and the theory of social capital. Now,

the essay explores how SNP can inform public relations pedagogy understanding of educators’

### THE SOCIAL NETWORK PERSPECTIVE AND THE EDUCATOR

Educators have long been characterized as coaches, guides, or facilitators of knowledge. Their role in the learning network is significant. Today, however, the traditional role of the educator is in question (Mehaffy, 2012). Pompper (2011) noted that academic public relations departments have tried to stay at the forefront of changes by relying on adjunct or “professional” faculty to instruct courses. Professional faculty provide connections between the classroom and the profession. SNP can empirically analyze how educators use their professional connections with practitioners to gather knowledge and skills that will prepare students for entry into the field. Structural holes theory (Burt, 1992, 2001) is discussed in this section for how it can study educators’ relationships to different networks (academic and professional) and how such relationships can impact a learning network.

#### Filling the Structural Holes of a Learning Network

Individuals’ webs of social relations are the foundation of social networks. Individuals vary in their relationships with others. Some individuals have ties with many of the same people while others have relationships with many different people (Burt, 1992). Within a network, individuals who share the same contacts form clusters that are called sub networks or sub groups. Sub networks may have few relationships to other sub networks in the larger network. The separation between sub networks is what Burt (1992) called a structural hole. A “hole” exists in a network because the sub networks are not well connected.

Indeed, educators broker the flow of information between the classroom and other networks on campus. In campus networks, educators often cluster into different groups (sub networks) around the department or college. Educators

who have relationships in two or more departments can be characterized as “bridgers” for their ability to connect people from two different departments. According to Burt (1992), bridgers sit at influential positions in networks for the ability to broker the information between groups and facilitate new relationships. Public relations educators can be seen as bridgers between many groups, clusters, and networks. Figure 2 illustrates the concept of structural holes and the bridging role of educators.

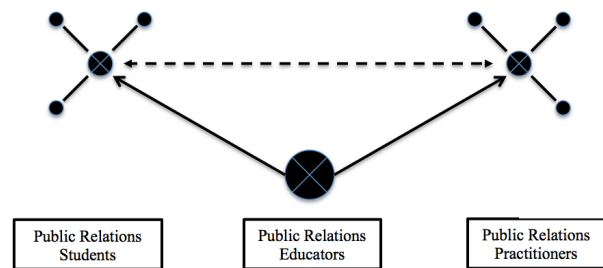


Figure 2. Educators bridging structural holes.

Professors are often asked by students if they know anyone who works at X company. Public relations educators rely on a number of connections when educating students. In the classroom, educators connect students to the university network (other professors or groups on campus) and to professional networks. Making these connections, educators are acting as bridges between the classroom and other networks. The theory of structural holes explains this particular network role of educators.

Educators must build social capital with students in the classroom and with professionals and other educators outside the classroom. Educators cannot broker structural holes if they are not aware of the needs of their students. Educators must also build social capital outside the classroom with public relations professionals and their colleagues. Building social capital with professionals can be achieved through professional associations such as PRSA, IABC and Arthur Page Society or working with local public relations agencies or companies, or attending related professional associations.

Building social capital with other educators is also a critical step in maximizing the bridging role. Penuel, Riel, Krause, and Frank (2009) found that social capital among teachers within a learning community helped increase the expertise of instructors. In the case of professors and adjunct instructors, social capital formed within a department can aid in expertise exchange. For example, an adjunct instructor might have expertise on pitching methods in public relations agencies whereas a professor might have expertise on theories of persuasion or research methods. Benefiting from social capital created among faculty, both of these professors can gain expertise that will ultimately benefit the students.

The bridging role of educators is highlighted in the mentoring program facilitated by the Public Relations Division of Association for Education in Journalism and Mass Communication (AEJMC) where graduate students are paired with a scholarly mentor who bridges the graduate student to other faculty and resources related to their research. The mentor expends his or her social capital to connect the graduate student to the appropriate contacts based on a student's interests. The social capital formed within each group—students, professionals, and colleagues—allows educators to maximize the effect of their bridging roles of sharing information, resources, and opportunities held by their social contacts.

A network perspective can be a powerful orientation for educators to stay current on changes in the field. Take, for instance, an instructor who has built social capital with members of PRSA. When a student in the instructor's class is looking for an internship or job opportunity, the instructor can expend this social capital by brokering the relationship between the student and members of the PRSA who will have access to internships and job opportunities. Face-to-face relationships are important, but public relations educators can also integrate technology as they bridge students and professions. In an introduction to public relations course, an instructor can use both social capital and technology to bring

professionals into the classroom as guest lectures via Skype.

Social capital in professional associations can also provide access to new information for educators. Nahapiet and Ghoshal (1998) found a positive correlation between social capital and intellectual capital. In the case of pedagogy, educators' social capital translates into intellectual capital that translates into students who are well prepared for the profession. Acting as a bridge over structural holes improves student learning. Take, for example, a professor who participates in a professional association like the Association for the Measurement and Evaluation of Communication (AMEC). Attending the annual conference, building relationships with other researchers and professionals, and maintaining these relationships affords the professor access to the latest information on measurement and evaluation in the field. The professor can take this intellectual capital back to the classroom and create assignments that will familiarize students with the methods they will use in their careers. Furthermore, the social capital that the professor built might also translate into bringing professionals from the conference to the classroom as guest speakers. The guest speakers then share their intellectual capital and the students benefit. In this example, the professor has exchanged her social capital into intellectual capital. Many times, the professor can also provide useful information to the guest speakers who then can take back new information to their organizations.

In short, the concept of structural holes is an approach for instructors to examine how they build and expend their social capital to improve their teaching and expose students to professionals. Understanding such role can provide value to the educator's relationships and the time they spend fostering such relationships. The following proposition is offered:

*Proposition 4:* When educators are positioned at structural holes between the networks of students, professionals, and



other educators, students' have a better understanding of the field and access to internships and job opportunities.

The discussion of structural holes theory has focused on an educator's structural position across multiple networks. The following section concludes the essay by presenting some ways public relations pedagogy can move forward with a SNP.

### **MOVING THE SOCIAL NETWORK PERSPECTIVE FORWARD**

The network concepts reviewed above provide a framework for studying the impact students' social relations on their learning and how an educator's social connections influence students' learning. Public relations scholarship and pedagogy is positioned to benefit greatly from the social network perspective. Public relations is about understanding relationships and the social network analysis method specifically studies relationships at all levels. Yet, more research is necessary to test the theories, concepts, and propositions discussed within this essay.

#### **Directions for Future Research**

Future researchers should consider the use of social network analysis as a method to study the influence of students' and instructors' relationships on learning outcomes. Some might find other network theories and concepts useful. The most applicable concepts were explored within this essay but other theories and concepts should be considered as this line of research and teaching moves forward. For instance, researchers can explore how the strength of weak ties apply to formulating a campaign, how centrality and prestige help students understand the concept of boundary spanning, or how students' social capital evolves through their education and into their careers. Looking at educators, researchers can test the theory of structural holes as a conceptual framework for improving teacher effectiveness by giving students access to industry insights. Such

research can advance the field's understanding of relationships in the learning network, which is essential to educating the next generation of public relations professionals.

There is one important area of research that is needed, which also addresses a significant weakness of this essay—the functional nature of the network perspective. Network analysis is generally functional in looking at the exchange of information and resources among actors. However, the scholarship would be greatly improved by studies considering the role connections play in co-constructing knowledge or meaning in a learning network. The theories of social learning (Bandura, 2001) and symbolic convergence (Bormann, 2006) are relatively unexplored from the network perspective and seem fruitful for future pedagogical studies. A researcher interested in less functional, more co-creational approaches might consider whether the strength of ties among students within a classroom network assists in creating a more productive environment for co-constructed learning. Network analysis should be one layer of data that maps the connections individuals have in a learning network and be accompanied with rich data such as interviews, ethnographies, or observations.

#### **Concluding Thoughts**

This essay has asserted a number of benefits of relationships in public relations education and applied the social network perspective as a method for studying this pedagogical topic. The propositions offered are intended to invite researchers to join in the theory development of pedagogy from a network perspective. A great deal of practical application is needed to develop this perspective further within public relations pedagogy.

It is an exciting time to be in public relations and public relations education. Changes are occurring frequently. Professionals and educators are becoming increasingly aware of their networked lives and the importance of social relationships. Public relations educators must

understand more fully how networks influence education. The network theories and concepts presented here hold the potential to improve public relations pedagogy, which will ultimately improve the next generation of public relations professionals.

#### REFERENCES

1. Almack, J. C. (1922). The influence of intelligence on the selection of associates. *School and Society*, 16, 529–530.
2. Bandura, A. (2001). Social cognitive theory of mass communication. *Media Psychology*, 3(3), 265–299.
3. Barkley, E. F. (2010). *Student engagement techniques: A handbook for college faculty*. San Francisco, CA: Jossey-Bass.
4. Benigni, V., Cheng, I. H., & Cameron, G. T. (2004). The role of clients in the public relations campaigns course. *Journalism & Mass Communication Educator*, 59(3), 259–277.
5. Borgatti, S. P., Mehra, A., Brass, D. J., & Labianca, G. (2009). Network analysis in the social sciences. *Science*, 323(5916), 892–895.
6. Bormann, E. G. (2006). Symbolic convergence theory: A communication formulation. *Journal of Communication*, 35(4), 128–138.
7. Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York: Greenwood.
8. Broom, G. M., Casey, S., & Ritchey, J. (1997). Toward a concept and theory of organization–public relationships. *Journal of Public Relations Research*, 9(2), 83–98.
9. Burt, R. S. (1992). *Structural holes*. Cambridge, MA: Harvard University Press.
10. Burt, R. S. (2001). Structural holes versus network closure as social capital. In N. Lin, K. Cook, & R. S. Burt (Eds.), *Social capital: Theory and research* (pp. 31–56). New Brunswick, NJ: Transaction Publishers.
11. Carpenter, A. N., Coughlin, L., Morgan, S., & Price, C. (2010). Social capital and the campus community. *To Improve the Academy: Resources for Faculty, Instructional, and Organizational Development*, 29(1), 201–215.
12. Coleman, J. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94(1), 95–120.
13. Coombs, W. T., & Rybacki, K. (1999). Public relations education: Where is pedagogy?. *Public Relations Review*, 25(1), 55–63.
14. Dawson, S. (2008). A study of the relationship between student social networks and sense of community. *Education Technology & Society*, 11(3), 224–238.
15. Dewey, J. (1938). *Experience and education*. New York: Collier.
16. Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook “friends”: Social capital and college students’ use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143–1168.
17. Ferguson, M. A. (1984, August). Building theory in public relations: Interorganizational relationships as a public relations paradigm. Paper presented to the annual conference of the Association for Education in Journalism and Mass Communication, Gainesville, FL.
18. Freeman, L. C. (1977). A set of measure of centrality based upon betweenness. *Sociometry*, 40(1), 35–41.
19. Freeman, L. C. (1979). Centrality in social networks: I. Conceptual clarification. *Social Networks*, 1(3), 215–239.
20. Freeman, L. C. (1996). Some antecedent of social network analysis. *Connections*, 19(1), 39–42.
21. Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360–1380.
22. Granovetter, M. S. (1974). *Getting a job*. Cambridge, MA: Harvard University Press.
23. Heath, R. L. (2013). The journey to understand and champion OPR takes many roads, some not yet well traveled. *Public Relations Review*, 39(5), 426–431.
24. Neubauer, B. J., Hug, R. W., Hamon, K.

- W., & Stewart, S. K. (2011). Using personal learning networks to leverage communities of practice in public affairs education. *Journal of Public Affairs Education*, 17(1), 9–25.
25. Knoke, D., & Yang, S. (2008). *Social network analysis* (2nd ed.). Thousand Oaks, CA: Sage Publications.
  26. Lin, N. (1999). Building a network theory of social capital. *Connections*, 22(1), 28–51.
  27. Mehaffy, G. L. (2012, September 5). Challenge and change. *EDUCAUSE Review*, 25–42.
  28. Monge, P. R., & Contractor, N. (2003). *Theories of communication networks*. New York: Oxford University Press.
  29. Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2), 242–266.
  30. Penuel, W., Riel, M., Krause, A., & Frank, K. (2009). Analyzing teachers' professional interaction in a school as social capital: A social network approach. *Teachers College Record*, 111(1), 124–163.
  31. Pompper, D. (2011). "Cheap labor" speaks: PR adjuncts on pedagogy and preparing Millennials for careers. *Public Relations Review*, 37(5), 456–465.
  32. Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6(1), 65–78.
  33. Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.
  34. Sandler, B. R., & Hoffman, E. (1992). *Teaching faculty members to be better teachers. A guide to equitable and effective classroom techniques*. Washington, DC: Association of American Colleges and Universities.
  35. Scott, J. (2000). *Social network analysis: A handbook* (2nd ed.). Thousand Oaks, CA: Sage Publications.
  36. Shen, D., Nuankhieo, P., Huang, X., Amelung, C., & Laffey, J. (2008). Using social network analysis to understand sense of community in an online learning environment. *Journal of Educational Computing Research*, 39(1), 17–36.
  37. Sommerfeldt, E. J. (2013). Networks of social capital: Extending a public relations model of civil society in Peru. *Public Relations Review*, 39(1), 1–12.
  38. Sommerfeldt, E. J., & Taylor, M. (2011). A social capital approach to improving public relations' efficacy: Diagnosing internal constraints on external communication. *Public Relations Review*, 37(3), 197–206.
  39. Wang, L. (2010). How social network position relates to knowledge building in online learning communities. *Frontiers of Education in China*, 5(1), 4–25.
  40. Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications*. New York: Cambridge University Press.
  41. Waymer, D. (2012). Each one, reach one: An autobiographic account of a Black PR professor's mentor–mentee relationships with black graduate students. *Public Relations Inquiry*, 1(3), 403–419.
  42. Wellman, B. (1926). The school child's choice of companions. *Journal of Educational Research*, 14(2), 126–132.
  43. Willis, P. (2012). Engaging communities: Ostrom's economic commons, social capital and public relations. *Public Relations Review*, 38(1), 116–122.
  44. Yang, A., & Taylor, M. (2015). Looking over, looking out, and moving forward: Positioning public relations in theorizing organizational network ecologies. *Communication Theory*, 25(1), 91–115.
  45. Yang, H., & Tang, J. (2003). Effects of social network on students' performance: A web-based forum study in Taiwan. *Journal of Asynchronous Learning Networks*, 7(3), 93–107.