



Student brigade staff members, Maj. Kyle Stillwell (left), Maj. Jon Macrae, and Maj. Nate Dams (right) gather around a map to analyze combat reports before making a tactical decision 14 May 2019 during a classroom exercise at the Command and General Staff School, Fort Leavenworth, Kansas. Strong relationships developed during the school can be leveraged at the tactical and operational levels by cohort staffing. (Photo by Shane Perkins, Command and General Staff School)

A Value Proposition

Cohort Staff

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It became apparent that an effective network involves much more than relaying data. A true network starts with robust communications connectivity, but also leverages physical and cultural proximity, shared purpose, established decision-making processes, personal relationships, and trust.

Ultimately, a network is defined by how well it allows its members to see, decide, and effectively act. But transforming a traditional military structure into a truly flexible, empowered network is a difficult process.

—Gen. Stanley McChrystal

The Army can improve the effectiveness of its field grade officers and the organizations they work for by changing how it builds seminars at Command and General Staff College (CGSC). The *cohort staff* concept would build CGSC seminars based on unit of next assignment and then deliver the seminar to a single corps or division. It capitalizes on the relationships developed over the course of ten months and prolongs them for use at the tactical and operational levels. Large organizations such as corps and divisions face many issues, but good team dynamics and external networks can address those issues, and cohort staffing meets those needs.

The Trouble with Large Organizations

Gen. Stanley McChrystal observed that the strength of a network is the strength of an organization. A network is “a usually informally interconnected group or association of persons.”¹ Networks are a means to leverage individual relationships toward a common end. Teams, by contrast, are built on formal relationships and are often obligatory. You may not get to decide who is on your team, but you do get to decide who is in your network.

This distinction between a team and a network is important when dealing with large organizations. Large organizations are those in which individuals infrequently interact with each other because they are rarely involved in joint production.² Those organizations are measured more by their structure than the number of people assigned. Large organizations merit increased scrutiny because they have several correlated issues such as degradation of communication, degradation of trust, and degradation of efficiency.³ Teams and networks can help mitigate these problems.

Part of managing large organizations

with diverse requirements is the formation of teams that can manage the work.⁴ However, the creation of teams alone does not solve the communication, trust, and efficiency gaps common in large organizations. Teams can develop poor internal relationships and will usually underperform unless a team leader takes corrective actions such as setting a positive example or enforcing collaboration.⁵ The interaction between multiple teams confounds the issue. Just as one team has its own dynamics, teams that interact with each other may compete for resources, the boss’s attention, prestige, or any number of perceived benefits. Intermediate leaders, those responsible for multiple teams, balance out these issues and can even improve the individual efficiency of those teams.⁶

Commanders Need Better Teams

Corps and divisions need strong teams. A fiscal year 2020 Mission Command Training Program report cites several reasons that high-level staffs fail. Prominent among these is a struggle to create shared understanding that stems from a lack of practice working together.⁷

The Army defines shared understanding as “a common approach to the conduct of operations, a common professional language, and a common understanding of the principles of mission command.”⁸ Commanders and their staffs establish a common understanding by working through the operations process and training their staff. However, it is difficult to assess a staff outside of a full-scale exercise. A company commander might take his or her soldiers to a range to gauge rifle marksmanship, but divisions and corps find it much harder to execute realistic collective training. These staff training opportunities are scarce at corps and division levels because they require significant effort across the organization. Simulated operations require the use of a tactical battle rhythm, an opposing force, a response cell, a planning cycle, and an execution. Often, the first time many staffs fully simulate operations is during a Warfighter exercise. This places commanders in a highly visible, and expensive, exercise with relatively little understanding of where their organization stands. Division and corps commanders must fight for those touchpoints to assess their organizations.

The frequency of turnover compounds the difficulties in building shared understanding. The shelf life on shared understanding is short. Units that conduct

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Warfighter exercises in September and October (immediately after the summer turnover) tend to underperform those who have worked together longer because the teams are constantly in flux.⁹ Teams struggle to learn their group dynamics after the summer move cycle, when the teaching and learning process begins anew.

to address the training needs of all their teams, much less collective training of the organization writ large. Cohort staffing provides a COS with a team that has already walked through Bruce Tuckman's forming, storming, norming, and performing model of group development.¹¹ Though this team is relatively

“The Army calls members of networks by many names: mentor, battle buddy, friend, connection, classmate, etc. The usefulness of a network is in leveraging those relationships for the good of the organization.”

These two challenges are interrelated. Staffs struggle to have shared understanding because they struggle to practice together. Their practice exercises are not always as effective as desired because the gain in shared understanding does not last very long. The current method is not producing the desired results. The Army needs better teams on staff, and it needs to generate them in a different way.

Cohort Staffing Builds Better Teams

CGSC builds seminars of sixteen individuals. Over the course of ten months, the groups learn how to participate in planning and execute nine military decision-making process exercises. CGSC balances each seminar to include individuals from many different branches. This balance injects expertise, showcases branch relationships in planning, and exposes students to alternative points of view. The groups learn to communicate, build trust, and increase both individual and group efficiency through these military decision-making process cycles. However, upon graduation, the Army breaks up the teams, dispersing the individuals to different posts and gaining commands. There is an opportunity for change.

Individuals are not as important as teams in terms of organizational effectiveness. A team of individual high performers will not necessarily be as useful as a team of average performers who have developed good team dynamics.¹⁰ The Army recognizes the importance of team dynamics; much of a division chief of staff's (COS) duties consist of training his or her subordinate teams. However, the chiefs are challenged

small compared to the rest of the staff, it represents a positive step toward shared understanding and group practice. Cohort staffing provides a team that is performing and battle ready—a team immediately useful to the COS and to the commander.

Good Networks Improve Organizations

The difference between a team and a network is the degree of obligation. Teams are formal structures, often purpose built to solve problems. Networks are voluntary by nature and often cross formal boundaries set by organizations. The Army calls members of networks by many names: mentor, battle buddy, friend, connection, classmate, etc. The usefulness of a network is in leveraging those relationships for the good of the organization. To add value, networks must combat the flaws of large organizations, namely poor communication, flagging trust, and inefficiency.

Networks improve communication. As an organization grows, the quality of information transfer degrades.¹² Larger organizations struggle to communicate relevant information, and cooperative communication generally decreases.¹³ This degradation is why commanders craft vision statements, hold formations, and talk directly to soldiers. It is also the reason a phone call is better than an email and why counseling is most effective when done face-to-face. Personal networks that operate alongside official channels increase the quality of communications for two reasons. First, shared relationships increase the willingness to share information.¹⁴ This does not mean that people are deliberately holding information back,



only that they will be more talkative with people they are comfortable with. Second, the communication that occurs supplements official channels and therefore broadens the situational understanding that the organization possesses.¹⁵ By getting high-quality information to a broad audience, effective networks assist the organization in achieving shared understanding.

Networks improve trust. The Army identifies trust at the heart of the profession of arms.¹⁶ Trust is the perception that others will not take advantage of a person's vulnerability.¹⁷ There exists a professional trust that all men and women in service to the Army have the best interests of the organization at heart. However, there is a difference in vertical trust in a leader and horizontal trust in a peer. Hierarchical organizations such as the Army place great emphasis on vertical trust, and this can sometimes degrade horizontal trust.¹⁸ Networks, by contrast, are neither horizontal nor vertical because individual relationships determine their character regardless of formal boundaries. Trust is generally higher in small groups.¹⁹ Therefore, those things that soldiers regulate in their formal relationships can find resolution with the informal ones in their networks.²⁰ Research has yet to identify a concrete link between individual trust and organizational-level trust. However, evidence exists that

Leaders of the 42nd Infantry Division, New York Army National Guard, conduct a rehearsal of concept drill 4 October 2017 during a Warfighter exercise at Fort Indiantown Gap, Pennsylvania. Cohort staffing can improve a unit's communication, trust, and efficiency at the tactical and operational levels. (Photo by Capt. Jean Marie Kratzer, U.S. Army National Guard)

people who have learned to trust each other are more apt to cooperate in general.²¹ In this way, soldiers with supportive networks will tend to support others in the organization and benefit the team.

Networks improve efficiency. Larger organizations enable people to sink into the background and not contribute as much as they otherwise would in a more visible setting.²² The term for this behavior is "social loafing." This means that the quality of individuals in active roles must increase, and savvy leaders will accrue connections up and down the chain of command to get the support they need to be successful. If leaders can get those people "in the circle," then those active relationships can do work for the organization. The adage that you are only as good as who you know is a tired one, but there is no denying that well-connected people can boost productivity.²³ At battalion level and above, officer effectiveness is based on the

ability to create relationships and leverage them to solve problems.²⁴ When people commit to working together, regardless of the organizational chart, their activity increases. They can circumvent loafing behavior and decrease the inefficiency inherent in large organizations.

None of this is to say that teams do not achieve these objectives. A good team has open communication, members trust and benefit from each other, and they bolster each other's efficiency by focusing on the problems at hand.²⁵ Networks do not have a monopoly on organizational effectiveness. However, networks are important pieces of large organizations because the combination of multiple teams produces a complexity that is difficult to manage. Cross-team relationships become just as important as team-internal relationships and, when working for the good of the organization, aid the efforts of team leaders and commanders alike.

Cohort Staff Builds Better Networks

Networks and teamwork can be transformative, but the truth is that some team dynamics are poor. Some teams will have high performance, others relatively less, and often it takes an external presence to modify poor team dynamics.²⁶ The bonds of professionalism will keep a dysfunctional team together, but no one wants to be a part of a struggling group for long. There is certainly evidence that working with people you dislike negatively impacts performance, especially in hierarchical organizations where it is hard to avoid those people.²⁷ However, cohort staffing mitigates the probability of poor group dynamics because it builds relationships differently than those built in the operational force. The difference is the effect of psychological safety.

Most people understand the concept of trust, but psychological safety is a longer view of teamwork and network building. Psychological safety is the ability to act in a certain way without perceived blows to status, self-image, or career.²⁸ Where trust is the feeling that *others* will not take advantage of *an individual's* vulnerability, psychological safety is the feeling that *a person* does not need to regulate *his or her* vulnerability. Psychological safety is a group dynamic and develops through shared learning experiences. Said differently, trust is about others doing the right thing, and safety is about learning to let one's guard down. Any environment can generate psychological safety,

but learning environments are especially good at it. Part of the reason is the mediating effect of the instructor. Properly trained, instructors can improve student-to-student relationships and mitigate poor social behaviors.²⁹ This is not to say that all instructors mediate relationships well nor that non-instructors cannot do so. But consider that instructors have fewer competing priorities than commanders and that the academic setting is much more malleable than the operational environment. Consider also that one of the best ways to increase psychological safety is through the small-group dynamic.³⁰

The Army is moving to small-group instruction wherever it can. Smaller groups enable people to communicate with fewer inhibitions, and they are generally more psychologically safe—a big deal when it comes to collaboration and learning together.³¹ The idea that people who put themselves “out there” learn more has considerable face value and bears out in the research. Communicating with openness, without fear of moderating oneself, is a contributor to team success.³² A high level of psychological safety may not equal success, but it is an indicator of a good relationship. Good relationships, in turn, increase the probability that individuals will continue to work together even if they are no longer on the same team.

Small-group learning environments build effective teams and develop the relationships that lead to networks. The Army has invested in face-to-face CGSC, even during the COVID pandemic, because there is something valuable in getting a few people in the same room to wrestle with education. The Army diminishes that value by dispersing the students at the end of CGSC when it might preserve or prolong that value by sending those seminars to the same organization.

Not every relationship carries the same weight. There is no requirement to like the people in a network, though friendship tends to increase communication quality.³³ Leaders would be foolish to burn bridges with each other when those relationships might be useful. Ten months of practicing staff work, regardless of personal feelings, can serve individuals and organizations well.

Why the Division and Corps?

So, what organization is right? CGSC balances seminar composition by bringing together the

different branches of the Army. This balance is important, but it also limits what organizations could benefit. Under certain circumstances, a brigade might be able to receive sixteen personnel of different branches at once. However, consistency of personnel requirements suggests that divisions or corps are more appropriate. Divisions and corps are also appropriate given the Army's refocus on the division and corps as tactical organizations. Finally, divisions and corps have the advantage of size. The gaining unit has the flexibility to disperse the group to the subordinate battalions and brigades; the Army needs majors at many levels. A corps or division would still reap the benefits of the network because networks are all about external and informal relationships that endure across organizational lines.

Have We Done This Before?

The concept of packaging teams is not new, and academia has experimented with the concept for decades. The "house," or more modern "pod" system, is a regular construct where students stay generally with the same class throughout their education. The effect is that students feel less isolated and produce better quality results.³⁴ Even students that are not traditionally "cohortian," such as those writing PhD dissertations, have benefitted from the model with an increase in learning and completion rates.³⁵ Many civilian academic organizations have embraced the cohort system, and it remains a viable choice today.

Military experiences with cohorts are infrequent, and the British are responsible for what little experimentation there is. In 1914, the standing British



Army was filled out with “Pals battalions” that enabled recruits to serve in locally formed units. Potential officers received commissions, and the battalions trained together prior to deployment to Europe. The organizations were not entirely local, and the War Department directed many of the men who volunteered and received commissions to fill out other units.³⁶ The impact of these cohorts will never be understood because a majority served in the Somme. This concentrated the catastrophic losses in the towns from which these battalions hailed, and the War Department transitioned to conscription for the remainder of the war.

A second, different British experiment was less intentional. The “Travelling Circus” describes a habit used in their army up through the twentieth century. When commanders received a promotion, they had

the option of bringing their staff with them to the next level.³⁷ This preserved the group dynamic, but it ruined the organization that the commander had just left. It also often meant pushing out staff officers at the next higher level to make room.

Cohorts bear some resemblance to the Revolutionary War through the Civil War practice of recruiting forces

Infantrymen of the 10th Battalion, East Yorkshire Regiment, march 28 June 1916 near Doullens, France, three days before the start of the Battle of the Somme. The heavy losses sustained by the “Pals battalions,” had significant effects on the British towns in which they were formed, and the British Army ended the practice of using cohort units with the beginning of conscription. (Photo from the Imperial War Museum © IWM Q 743)





from particular regions. However, the resemblance ends there. Standing armies did not receive deliberately trained cohorts of officers. Commanders were either local elite who had handpicked their staff or those who had experience in the Army. The Revolutionary and Civil Wars were both times of crisis, making officer development and the battlefield one and the same.

Cohorts already exist in the Army, though they serve a different function. Human Resources Command (HRC) uses the cohort model to manage officers by year group, but the size of the cohort means that very little, if any, relationships develop because of year group cohort. It remains an administrative and statistical tool, not a developmental one. The truth of the matter is that there is not enough data. Cohort staffing is most like the Pals battalions of World War I, whose primary purpose was recruitment, not combat effectiveness. The lives lost at the Somme and subsequent dilution of the officer and enlisted teams counterbalanced any positive inertia to have come from it. The Army has not done this before, but innovation is fundamental to war, and innovators seize opportunity.

Students plan for a division-level defense in a contested region 5 February 2019 during the Advanced Operations Course at the Command and General Staff College (CGSC), Fort Leavenworth, Kansas. The cohort staff concept would build CGSC seminars based on unit of next assignment and then deliver the seminar to a single corps or division. (Photo by Danielle Powell, Army University Press)

Recognizing an Opportunity

There is a direct correlation between strong relationships and performance, and those relationships provide a clear return on investment. However, it is not economical to stand up an organization that develops three-person teams with salient learning experiences that feature shared goals, shared knowledge, and shared respect mediated by a socially nuanced instructor. Perhaps command teams are worth that investment, but the Army at large must work within existing means. Good stewardship means making the most of available resources, and CGSC is a partially tapped resource. The following steps provide a broad scheme to test cohort staffing.

Step 1: Gather information. HRC controls the Assignment Interactive Module 2 (AIM2) and assigns

movers against units. HRC identifies two to three test divisions and one test corps and obtains their personnel requirements for the outbound resident CGSC class. HRC relays these requirements to the Combined Arms Center (CAC). The CAC generates straw-man small-group seminars that place the needs of one organization within the same seminar and communicates the numbers to HRC. All prospective students within that seminar will move to the same corps or division after CGSC.

Step 2: Generate buy-in. HRC requests volunteers for corps and divisional preferences based on the straw-man requirement. HRC selects from among the volunteers and supplies the names to the CAC to fill small groups. HRC informs the students from the outset of their participation in the pilot. In return for participation, the volunteers know their division or corps of assignment (though not necessarily the station or job) prior to arrival at CGSC. Ideally, corps and divisions can guarantee the station, but this is not required. HRC removes the selected students from the AIM2 marketplace for the post-CGSC summer move cycle.

Step 3: Let it happen. Place the volunteers into their seminars. Organize seminars as a population A, going to division; a population B, going to corps; and a population C, control with normal AIM2 participation. To control the experiment, there should be no alteration to instruction between seminars and no special training given to the instructors of the different populations.

Step 4: Follow-up. Execute surveys of the students involved, as well as the gaining organizations, over the span of several years. This research will take several pilot CGSC cycles to become statistically meaningful. Ultimately, answer the question on whether the

relationships built in CGSC translate to gains in retention, job satisfaction, and job performance.

Conclusion

Large organizations have the cards stacked against them. Their size reduces the effectiveness of communication, makes trust harder to generate, and decreases the effectiveness of many individuals. Good teamwork combats these trends in smaller organizations, but large organizations must manage multiple teams. This places a premium on good team dynamics, and the role of leaders in large organizations is to develop those teams. However, good teamwork alone does not counteract the weight of large organizations. Leaders need networks. Networks improve communication channels, foster trust, and increase the effectiveness of organizations. Networks perform outside and alongside teams to keep large organizations operating at high standards.

Cohort staffing builds good teams, and it builds good networks. CGSC is an ideal venue for cohort staffing because it trains seminars over the course of ten months in precisely the activities that corps and divisions can benefit from. It does so in a small-group format under the supervision of an instructor. This combination builds practiced teams that communicate well, trust each other, and maximize efficiency.

Therefore, it is appropriate that the Army intentionally build and then use CGSC seminars in the operational force. Cohort staffing requires no alteration to the program of instruction. It can answer relevant research questions on the nature of long-term teams and networks. It can improve the effectiveness of corps and division staffs. Implementing a trial of cohort staffing is simply good stewardship. ■

Notes

Epigraph. Stanley McChrystal, "It Takes a Network: The New Front Line of Modern Warfare," *Foreign Policy* (website), 21 February 2011, accessed 15 June 2021, <https://foreignpolicy.com/2011/02/21/it-takes-a-network/>.

1. Merriam Webster Unabridged Dictionary, s.v. "network," accessed 15 June 2021, <https://www.merriam-webster.com/dictionary/network>. A network is an interconnected group that is informally bound.

2. Rafael Laporta et al., "Trust in Large Organizations," *American Economic Review Papers and Proceedings* 87, no. 2 (1997):

333–38. The authors define large organizations as featuring infrequent or underdeveloped relationships between people who rarely work together. While a corps or division staff does work on joint products, any given individual will never personally work with all the other individuals in the organization.

3. Ibid., 336–37. The authors argue that hierarchical structures can subdue trust; Andrea Bertucci et al., "The Impact of Size of Cooperative Group on Achievement, Social Support, and Self Esteem," *The Journal of General Psychology* 137, no. 3 (2010): 269–70, <https://doi.org/10.1080/00221309.2010.484448>. Bertucci et al.'s experiments with social interdependence theory show that increases to group size also increase the difficulties in coordinating behavior;

Paul Lowry et al., "The Impact of Group Size and Social Presence on Small-Group Communication," *Small Group Research* 37, no. 6 (December 2006): 657. The authors demonstrate that communication in smaller groups scores higher than large group communication in appropriateness, openness, richness, and accuracy; Dennis Devine et al., "Teams in Organizations: Prevalence, Characteristics, and Effectiveness," *Small Group Research* 30, no. 6 (December 1999): 699–703, <https://doi.org/10.1177/104649649903000602>. The authors examine the prevalence and effectiveness of different types of teams and conclude that larger teams increase conflict and reduce performance.

4. Devine et al., "Teams in Organizations," 692–93. The authors identify that the best predictor for organizations to require teams is the presence of multiple divisions and many employees. Their definition of team is more tightly structured than the Army's but is relatable by considering Army units as "project teams."

5. Jeroen de Jong, Petru Curseu, and Roger Leenders, "When Do Bad Apples Not Spoil the Barrel? Negative Relationships in Teams, Team Performance, and Buffering Mechanisms," *Journal of Applied Psychology* 99, no. 3 (March 2014): 521, <https://doi.org/10.1037/a0036284>. The authors observe that team leaders can change the conditions of the team to reduce friction between individuals or set a positive example of helpful interaction.

6. Margaret Luciano and Thomas Ruddy, "Leading Multiple Teams: Average and Relative External Leadership Influences on Team Empowerment and Effectiveness," *Journal of Applied Psychology* 99, no. 2 (November 2013): 324, <https://doi.org/10.1037/a0035025>. The authors identify individual team empowerment as a predictor of team effectiveness and assert that a team manager (one who manages many teams) has significant influence over empowering the subordinate teams.

7. Shane Morgan, *FY20 Mission Command Training in Large-Scale Combat Operations: Mission Command Training Program (MCTP) Key Observations* (Fort Leavenworth, KS: Center for Army Lessons Learned, 2020). The MCTP report highlights the difficulties faced by high-level staffs and that organizations struggle to reach shared understanding. Discussions with MCTP personnel identify part of the problem comes from staff turnover rates and relatively few repetitions of staff exercises under Warfighter-like conditions.

8. Army Doctrine Publication (ADP) 6-0, *Mission Command: Command and Control of Army Forces* (Washington, DC: U.S. Government Publishing Office, July 2019), 1-8. Shared understanding is often included alongside the concept of mutual trust and collaborative communication. It is an active effort.

9. Morgan, *FY20 Key Observations*, 34. Units have tightly compressed training timelines and some elements, such as division artillery, must condense eighteen months of training into a three-to-four-month window.

10. Charles Duhigg, "What Google Learned from its Quest to Build the Perfect Team: New Research Reveals Surprising Truths About Why Some Groups Thrive and Others Falter," *New York Times* (The Work Issue), 25 February 2016, accessed 28 June 2021, <https://www.nytimes.com/2016/02/28/magazine/what-google-learned-from-its-quest-to-build-the-perfect-team.html>.

11. Bruce W. Tuckman, "Developmental Sequence in Small Groups," *Psychological Bulletin* 63, no. 6 (1965): 384–99, <https://doi.org/10.1037/h0022100>.

12. Lowry, "The Impact of Group Size and Social Presence," 657. Smaller groups score higher on communication quality.

13. Nick Feltovich and Philip Grossman, "How Does the Effect of Communication Vary with Group Size? Experimental Evidence from the Multi-Player Stag Hunt," Monash Economics Working Papers 52-13 (Melbourne, AU: Monash University Faculty of Business and Economics, 2014), 14. The authors demonstrate a negative correlation between group size and cooperative communication; Michael Cruz et al., "The Impact of Group Size and Proportion of Shared Information on the Exchange and Integration of Information in Groups," *Communication Research* 24, no. 3 (June 1997): 291–99. The authors show that smaller group sizes increase the probability of sharing and analyzing all available information. Larger groups tend to bolster common knowledge rather than bringing fresh knowledge to light for analysis.

14. Wing Chow and Lai Chan, "Social Network, Social Trust and Shared Goals in Organizational Knowledge Sharing," *Information and Management* 45 (2008): 463, <https://doi.org/10.1016/j.im.2008.06.007>. The authors show a positive correlation between the size and quality of a social network and the willingness to share information.

15. ADP 6-0, *Mission Command*, 1-8. Shared understanding is achieved through collaboration. Collaboration is multiple people and organizations working together toward a common goal. Collaboration extends beyond the Army team.

16. Charles Allen and William Braun III, "Trust: Implications for the Army Profession," *Military Review* 93, no. 5 (September 2013): 83. The authors demonstrate that the Army requires, and has generally sustained, trust at the individual and organizational level.

17. Amy Edmondson, "Psychological Safety, Trust, and Learning in Organizations: A Group-Level Lens," in *Trust and Distrust in Organizations: Dilemmas and Approaches*, ed. Roderick M. Kramer and Karen S. Cook (New York: Russell Sage Foundation, 2013), 239–72. The author defines trust as others-oriented and that it is related to feeling vulnerable to the actions of others.

18. Laporta et al., "Trust in Large Organizations," 337. The authors independently test earlier research from Fukuyama and show that vertical trust in an organization is at odds with horizontal trust between family and peer groups.

19. Roderick Kramer, "Trust and Distrust in Organizations: Emerging Perspectives, Enduring Questions," *Annual Review of Psychology* 50 (1999): 585. The author cites previous work by Kaori Sato (1988) and others that show a decline in trust as group size increases.

20. Patricia Sias and Erin Gallagher, "Developing, Maintaining, and Disengaging from Workplace Friendships," in *Friends and Enemies in Organizations: A Work Psychology Perspective*, ed. Rachel Morrison and Sarah Wright (New York: Palgrave MacMillan, 2009), 80. The authors argue that workplace friendship networks increase employee problem resolution, satisfaction, and retention.

21. Kramer, "Trust and Distrust," 582. The author conducts a literature review of trust in organizations and conclude that people who have learned to trust other individuals will become more disposed to trust people in general. This is because trust becomes a social decision heuristic that reduces the psychological cost of continued trust; Sias and Gallagher, "Workplace Friendships," 81. The authors show that friendships that arise in the organization tend to increase a person's identity with that organization. This leads people with many friends in an organization to engage in more altruistic behavior with respect to the organization.

22. Lowry, "The Impact of Group Size and Social Presence," 637. As group size increases, so does social loafing. This degrades

the effectiveness of individuals because they perceive diminished responsibility and therefore do not need to contribute as much.

23. Oriana Bandiera, Iwan Barankay, and Imran Rasul, "Social Connections and Incentives in the Workplace: Evidence from Personnel Data," *Econometrica* 77, no. 4 (July 2009): 1073, <https://doi.org/10.3982/ECTA6496>. The authors' experiments show that increased social connectivity to managers increases individual performance; Bertucci et al., "The Impact of Size on Achievement," 269. Social support, in the form of connections, increases achievement, persistence, problem-solving, and many other factors associated with high performance.

24. Terron Wharton, "How to Fail as a Major," Army.mil, 23 October 2018, accessed 15 June 2021, https://www.army.mil/article/212870/how_to_fail_as_a_major. The author argues that most problems are solved by discussion between peers and that officers must cultivate relationships to be successful.

25. Aki Aapoja et al., "The Characteristics of and Cornerstones for Creating Integrated Teams," *International Journal of Managing Projects in Business* 6, no. 4 (2013): 699, <https://doi.org/10.1108/IJMPB-09-2012-0056>. The authors develop characteristics of good project teams for the construction industry. They communicate knowledge freely, they do not take advantage of one another because they are in the "same boat," and they share individual objectives which increases the likelihood of achievement.

26. Connie Gersick and J. R. Hackman, "Habitual Routines in Task-Performing Groups," *Organizational Behavior and Human Decision Processes* 47, no. 1 (1990): 93, [https://doi.org/10.1016/0749-5978\(90\)90047-D](https://doi.org/10.1016/0749-5978(90)90047-D). The authors suggest several methods an external authority might use to intervene in struggling teams, especially those teams whose habits operate contrary to achieving the team's goal.

27. Giuseppe Labianca and Daniel Brass, "Exploring the Social Ledger: Negative Relationships and Negative Asymmetry in Social Networks in Organizations," *Academy of Management Review* 31, no. 3 (2006): 603, <https://doi.org/10.5465/amr.2006.21318920>. The authors indicate that hierarchical organizations pose their own issues with bad relationships because subordinates often cannot remove themselves from those relationships.

28. Edmondson, "Psychological Safety," 241. The author distinguishes the concept of trust from psychological safety. Psychological safety is a self-focused attribute of groups rather than an others-focused attribute.

29. Joseph Allen et al., "Observations of Effective Teacher-Student Interactions in Secondary School Classrooms: Predicting Student Achievement with the Classroom Assessment Scoring System—Secondary," *School Psychology Review* 42, no. 1 (2013): 76–98, <https://doi.org/10.1080/02796015.2013.12087492>. The authors describe the impact that instructors have on

student-student relationships in terms of fostering appropriate team development. Effective instructors improve teamwork between students, not just between the teacher and student.

30. Edmondson, "Psychological Safety," 270. The limits of psychological safety is the transition between large organizations (where people only infrequently work together) and small teams (approximately twenty for this study).

31. Ibid., 242. The author conducts a literature review and agrees with Edgar H. Schein that psychological safety thwarts learning anxiety.

32. Sehoon Kim, Heesu Lee, and Timothy Paul Connerton, "How Psychological Safety Affects Team Performance: Mediating Role of Efficacy and Learning Behavior," *Frontiers in Psychology* (July 2020), <https://doi.org/10.3389/fpsyg.2020.01581>. The authors demonstrate that psychological safety is positively correlated with learning activity. In turn, learning activity is also positively correlated with team efficacy.

33. Sias and Gallagher, "Workplace Friendships." 81. Co-workers with relationships external to a working relationship will communicate with higher quality in terms of relevant information and accuracy of transfer.

34. Michael Brennan, "Fostering Community through the House System at Most Holy Trinity Catholic School," *Journal of Catholic Education* 15, no. 2 (March 2013): 348, <http://dx.doi.org/10.15365/joce.1502112013>. Implementation of a house system resulted in an increase in the depth of student-student relationships as well as a vertical connectedness with students no longer in their class (team).

35. Paul Burnett, "The Supervision of Doctoral Dissertations Using a Collaborative Cohort Model," *Counselor Education and Supervision* 39 (September 1999): 49, <https://doi.org/10.1002/j.1556-6978.1999.tb01789.x>. The cohort model reduced isolation, improved completion rates, increased knowledge levels, and improved product (proposal and dissertation) quality.

36. Peter Simkins, "Pals Battalions," *International Encyclopedia of the First World War*, last updated 29 March 2018, accessed 15 June 2021, https://encyclopedia.1914-1918-online.net/article/pals_battalions. The War Department struggled to accommodate the influx of volunteers. Following the Somme, the losses in these units devastated the towns from which they hailed and the War Department moved to conscription only.

37. William Slim, "Higher Command in War" (April 1952), in *Military Review* 70, no. 5 (May 1990). Sir William Slim addressed the Command and General Staff College class of 1952 and asked that they always be wary of the size of their headquarters. He related the British "Flying Circus" and warned against stealing too much capability from subordinate commands.