COMMUNICATION RESEARCH TRENDS

IN THIS ISSUE

Communication in Sports Teams
A Review

Andrew W. Ishak
Santa Clara University

A QUARTERLY REVIEW OF COMMUNICATION RESEARCH

Table of Contents

Communication and Sports

Editor's Introduction

Though not studied in any great detail until recently, sports has a long association with communication. Perhaps most obviously, one thinks of the coverage of sports in the various communication media. Many 19th century newspapers reported sporting results, partly as way to increase readership; later, with the advent of radio, baseball became one of the key content areas for that new medium. Stations broadcast baseball games with commentary or, as in the case of Ronald Reagan's early career, re-created ball games with sound effects and commentary based on telegraphic reports of the action. Each new technology found a different association with sporting in general or, perhaps, with a specific sport. Television quickly found that it did a superb job in broadcasting football games. It also highlighted basketball, golf, and tennis in its early years. With the rise of cable television sports has its own channels—either channels dedicated to reporting on sports like the ESPN network, or channels that broadcast sporting events. One can find specific channels for football, baseball, basketball, tennis, golf, and even contests like pool or poker. The newer digital media also have a great number of websites and apps dedicated to reporting on sports or allowing fans to follow many games at once. Others promote varieties of sports game-playing like fantasy football.

However, the coverage of sports and sporting events does not exhaust the connection with communication. Each sport also involves some level of internal communication. at least at the level of verbal and nonverbal behaviors. Teammates or rivals and competitors communicate with each other as well as with referees. Various sports elaborate the kind of symbolic communication that players will use, often to maintain he privacy of their signals and plans. Driven by media coverage, many sports also promote interpersonal communication with reporters and fans, making players and coaches available for interviews and promotions.

In the communication world, then, researchers can study sports from a variety of perspectives. They can view sports as content for programming, subject to all of the kinds of communication research that focuses on content. Sport can also provide material for inter-personal communication, both verbal and nonverbal.

Sports can offer a way of more deeply understanding symbolic communication. Cultural studies examines sports according to the role that sport takes in helping define a culture and to express the culture's values and activities. Another approach looks at the fan interaction, as a different way of considering mass audiences. Sporting events themselves gather mass audiences, not as large as those of television or radio (except of course for broadcast sports themselves). But the fans witnessing a sporting match at a stadium provide an opportunity for greater audience understanding. Almost every aspect of communication appears in one way or another in sporting events or in the sports themselves

In this issue of COMMUNICATION RESEARCH TRENDS, Andrew Ishak reviews some of the more recent but under-reported research on sports and communication. He acknowledges that he will not consider the classic areas of communication and sports, such as are reported on in the journal, *Communication and Sport*, or the volumes, *Communication and Sport: Surveying the Field* and *Defining Sport Communication*. These works focus on sports media and sports and rhetoric. Instead in this review Ishak focuses on the interpersonal and group dynamics of sports and sports teams. Surprisingly, he notes that these areas appear under-researched. The more recent work, which Isaac cites, has expanded attention greatly, as is seen in the 12-page bibliography which Professor Ishak has assembled. His review examines sports and teams in group communication under several headings: message-based constructs, team-level constructs, and integral topics in sports. He concludes with an assessment of the area and a set of lessons from team sports that apply to other team-based activities.

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Andrew W. Ishak teaches in the Communication Department at Santa Clara University in California. He researches communication in team sports and other high-pressure environments, such as firefighting, law enforcement, and emergency medicine. His work focuses on training, improvisation, and chronemics.

For additional information, please visit the website, andrewishak.com/research/

Communication in Sports Teams: A Review

Andrew W. Ishak

aishak@scu.edu

1. Introduction

In 2007, I was a sports-loving grad student in the first semester of my doctoral program in communication studies at the University of Texas at Austin. No one in my department studied sports, but they were encouraging about pointing me in the right directions. I remember looking up "sports"and related terms in the National Communication Association (NCA) online program that November; trying to find any and all articles about sports teams in communication journals; and inquiring with faculty members and peers to see if they knew about people studying sports in our field. I found some meaningful articles, attended insightful presentations, and met some wonderful people. But I still felt that there should have been more.

Since then, the field has changed dramatically, and the visibility of (and outlets for) research on communication and sport has burgeoned. In the past decade, the International Communication Association formed the Sports Communication Interest Group, followed by the Communication and Sport Division established in NCA in 2015. The semi-annual Communication and Sport Summit (later renamed the International Association for Communication and Sport) started in 2002 and has become a more regular event now held every March, bringing together scholars from across the country and world. On top of all this, Sage published the first four issues of *Communication and Sport* in 2013, and expanded to six issues per year in 2017, under the editorship of Lawrence A. Wenner, in addition to two other publications, the *International Journal of Sport Communication* and the *Journal of Sports Media.* These new outlets for research on sports and communication are invaluable for sport communication scholars and reflect the impressive recent expansion of the field.

Much of the research in the aforementioned sport communication outlets has focused on two main areas. First, the study of sports and mass communication, which has been led by scholars like Andy Billings at the University of Alabama, examines how different forms of media, such as television, Twitter, and traditional journalism communicates sports. The communication at play in these studies forms the method in which consumers view and interact with spectator sports. Second, sports provides a site for studying rhetoric and spectacle. This area uses sports as a lens through which to view society, and has seen groundbreaking work led by scholars like Michael Butterworth at the University of Texas.

Wenner (2015) also sees a similar distinction between these areas, and his praise and criticism of these areas is worth reading. In short, Wenner believes that both of these areas fall under the heading of Media, Sports, and Society, and they would each do well to pay attention to the methods, goals, and findings of the other. Still, a healthy interest marks out both areas, and interested parties can get a general sense of them by exploring the most widely read textbook, *Communication and Sport: Surveying the Field* (Billings, Butterworth, & Turman, 2015) or the most comprehensive edited book, *Defining Sport Communication* (Billings, 2017).

The growth of research in media, sports, and society had led to what Wenner (2015) refers to as the "snowballing"of interest in making sports an official emphasis in communication and media studies programs, even though "such programs had been, up until recently, notably resistant to legitimizing sport in their stables" (p. 249). Wenner adds that, in the last decade, sport communication and media programs have popped up at schools like Penn State, Texas, Southern

California, Alabama, Clemson, Georgia, Maryland, Bradley, and Marist.

Still, one particular subsection of communication and sport remains under-cultivated. A surprisingly small percentage of the sports communication literature has addressed team dynamics in sports, even within outlets that are specifically dedicated to communication and sport. A review of the 22 issues of *Communication and Sport* from 2013 to 2017 shows that the overwhelming majority of articles fit within the two aforementioned areas of sports media: 51% of the articles published in *Communication and Sport* deal with mass communication, and 33% focus on the area of sports and rhetoric. The remaining articles somewhat evenly divide among public relations/crisis communication, organizational communication, and team communication.

An examination of the indispensable book, *Defining Sport Communication*, edited by Billings (2017), mirrors this breakdown. This book takes the approach of compiling 22 perspectives on sport. The first eight chapters (36%) take rhetorical perspectives and come under the heading "Humanistic Approaches to Sport." This section, anchored by an excellent chapter authored by Butterworth, bears the title "Sport as Rhetorical Artifact." The final nine chapters (41%) form part of "Mediated Approaches to Sport" and take perspectives based in mass communication and public relations. This arrangement resembles the percentage breakdown in *Communication and Sport* (33 and 51%, respectively).

In the middle of *Defining Sport Communication* come five chapters that take organizational and relational approaches to sport. One chapter, "Sports as Interpersonal Communication" by Paul Turman, focuses on coach-athlete relationships, parent-athlete communication, and future directions, which overlaps somewhat with team communication. However, it is interesting that even the premier edited book on sport communication does not take a team or small-group approach to studying sports. Simply put, the field is understudied.

Communication in sports teams deserves more attention and research for a number of reasons. First, **team sports are incredibly popular** as a participative activity. In fact, sport is the most popular structured activity for youth participation in the United States (Mahoney, Larson, Eccles, & Lord, 2005), with over 22 million children participating in some form of organized sports according to Kelley and Carchia

(2013). In addition, amateur, professional and collegiate sports leagues—for which teamwork constitutes a salient feature of efficacy and media presentation—were valued at up to $620 billion worldwide in 2011 (Collignon, Sullivan, & Santander 2011). Second, **communication forms a critical component of sports**. Not only does interpersonal communication offer a necessary component for team success, sports also offers a setting to improve communication efficacy. An explicit focus on interpersonal communication skills in team sports improves player communication competencies (Sullivan, 1993); an Iranian study found that athletes demonstrate better listening, feedback, and communication skills than non-athletes (Nikbakhsh, Alipor, Mosavi, & Abdi, 2013). However, the effects of teammate-to-teammate communication on individual and team outcomes remains vastly understudied, and deserves more research (Duarte, Araújo, Correia, & Davids, 2012). Third, **how team members communicate may reflect truths in non-sports settings**. Wolfe and colleagues (2005) review the rationale for studying organizational phenomena in sports and posit that researchers can view sports as a microcosm of society and that the world of sport often mirrors the world of work.

Fourth, **sports serve as a rich site for data.** Goff and Tollison (1990) have pointed out three advantages that a sports setting provides for organizational scholars with regards to data. First, there is an abundance of data available in sports because of clarity in processes and outcomes, which allows researchers to observe, measure and compare variables over time. Second, because sports leagues collect a prolific amount of data, researchers may have access to more accurate measures instead of proxies for particular variables. Third, sports research can allow for testing of hypotheses in controlled environments, similar to a laboratory. Therefore, sports provide opportunities to observe, measure, and compare variables of interest over time (Wolfe et al., 2005).

Fifth, **sports are engaging.** The way we researchers talk about sports is, on the whole, more engaging than how we talk about other organizations. Wolfe and colleagues (2005) argue that sports thrives on verbs and images. They are inherently exciting because many teams and players live on the edge of competition, and there are winners and losers, and there are clear moments and turning points that help us understand what led to particular outcomes. Along with fields like emergency medicine and firefighting, team

sports in particular require people to coordinate action and communicate in ways often more intriguing and more complex—yet at the same time, more transparent—than in other fields.

Most of this review will focus on research that attempts to answer the question: **How do people communicate within sports teams?** This article offers a review of the literature on a number of constructs in this area, detailed at the end of the next section. Many of these studies come from communication outlets. However, following Wenner's (2015) guidelines for those who take a "persons" centered approach to sport communication, much of the research also comes from sociology of sport as well as sport psychology. Integrating research from communication, sociology, psychology, and other fields provides an appropriate strategy because it reflects the intricacy of communication processes in sports teams, as well as the attempts to manage them. The next section explores the interrelatedness of complexity and communication management in sports teams, leading to a preview of the remainder of the article.

2. Managing Communication in Sports Teams

Even though sports often appear "neatly circumscribed," as Margolis argues, an inherent complexity forms from the structure of and relationships within a sports team. This includes interpersonal relationships, such as player-to-player and player-to-coach. But it also includes how certain variables, such as cohesion, goal setting, motivation, and others affect team effectiveness. Ramos-Villagrasa, Navarro, and Garcia-Izquierdo (2012) view teams as complex adaptive systems (CAS): They form a set of independent agents (such as players and coaches) who act in parallel, develop models of how things function, and then refine their models through a process of learning and adaptation (Gell-Mann, 1994). Viewing sports teams as CAS implies that they interact with other systems, including members of the team, other teams, larger organizations, and their context for playing (Arrow et al., 2004). In addition, interdependence, interaction, uncertainty, and chaos define their work (Nowak & Vallacher, 1998). This last variable, chaos, occurs when certain time-based processes appear to be random, but actually somewhat emerge as rule-guided and predictable. In sports, this applies not only to the play on the field but to processes such as player acquisition and so on. Similarly, Bowes and Jones (2006) describe that coaching as working near or on "the edge of chaos" (p. 235).

Ramos-Villagrasa and colleagues (2012) studied chaos in basketball teams over a 12 year period. Using the differentiation between low-dimensional (somewhat predictable) and high-dimensional chaos (not as predictable), they found that all teams had some level of chaos, and teams with low-dimensional patterns tended to have more success. With so many variables and relationships to consider in a sports team, one cannot possibly rigidly control all aspects of the team effectively. This is consistent with Ceja and Navarro (2011) who found that the presence of some variability is healthy for teams.

Indeed, effective team leadership in a sports setting focuses more on managing variable uncertainty than trying to control it (Bourbousson, Poizat, Saury, & Sève, 2011; Ramos-Villagrasa, Navarro, & García-Izquierdo, 2012). And the content of much of the research on communication in team sports reflects this sentiment.

This review categorizes constructs by their relationship to how a team leader or member might manage them. First, this review will examine **message-based constructs of sports team communication**. This includes goal setting, motivation, social support, regret messaging, knowledge sharing, decision making, and roles and role ambiguity. The next section of this review focuses on **team-level constructs of sports communication**. This section mainly focuses on complexity in coaching as well as cohesion and also looks at culture, power, and conflict. Though these constructs address communication, they appear less "manageable"—or ways of managing them may be less obvious for coaches and team leaders. And these topics all have an effect on team success, but coaches and players do not always explicitly form them through talk. Lastly, the third major section of this review explores **integral topics in sports team communication** that may have remained understud-

ied, such as emotion, failure, nonverbal behaviors, time, coordination, networks, and gender.

The review concludes with two brief sections. The first provides an examination of the **challenges in sports team communication research**. The second reviews the ways in which the findings within team sports may serve as **lessons for work units and other teams**.

3. Message-Based Constructs

While communication in team sports involves aspects of coordination that are either implicit or not apparent at first glance, many of the efforts to manage teams are delivered through spoken messages. This review will first examine message-based constructs of sports team communication, or the explicit, "out loud" forms of team interaction. This includes goal setting, motivation, social support, regret messaging, knowledge sharing, decision making, and roles and role ambiguity. This list partially follows the coaching schematic developed by Abraham, Collins, and Martindale (2006), who found six general categories of coaching processes: roles, goals, typical actions, required knowledge, support for the schematic, and factors influencing development.

A. Goal setting

While the scoreboard may not measure how a team communicates, many of the antecedents of effective performance are communicatively constructed. This is certainly true for goal setting. Having clear, specific purposes that challenge the team to come together and deliver an elevated performance marked high-performance teams (Katzenbach & Smith, 1993).

The original work on goal setting in organizational contexts (Locke & Latham, 1985) argues that goal-setting effects should transfer to sports for numerous reasons: the desire to achieve end results, similar contexts, and similar cognitive processes. In addition, because researchers can more easily measure outcomes in sports, the effects of goal setting should be more pronounced. However, a set of "anomalous" studies that did not confirm the efficacy of goal setting followed these claims. Locke (1991) and others (Hall & Byrne, 1988) argued back for the clear value of goal setting in sports . Then came the counter-response (Weinberg & Weigand, 1993), which questioned the internal validity of certain researchers. This debate continued for a few years, and then research on goal setting in sports waned over the next two decades. Kingston and Wilson (2009) indirectly review these claims through explorations of goal setting variables at an individual level, including goal difficulty, goal specificity, goal proximity, and goal focus. They also reviewed aspects of goal setting in a team environment, such as coordination, goal sharing, and competition effects.

More recently, Williams (2013) has an effective overview of goal setting in sports, following the work of Hall and Kerr (2001) and Burton and Naylor (2002). These researchers examine the differences between outcome, performance, and process goals; training and competition goals; and individual and team goals. They also view the effects of goal setting on skill acquisition, as well as self-regulation abilities on goal setting attainment. Williams also examines how athletes balance goals with different time scales (proximal vs. distal) as well as the ego-threatening phenomenon of failure to reach goals. Williams (2013) concludes by finding that while athletes use goals to motivate themselves, they appear to prioritize improving performance over attaining goals.

As for goal type, Burton and Weiss (2008) argue that a process basis forms the key to goal setting: "The fundamental goal concept that emphasizes process and performance over outcome goals plays the biggest role in determining goal-setting effectiveness in sports" (p. 340). A study of participants in a six-week exercise program determined that those who had process goals reported higher enjoyment and perceived choice, as well as lower tension and greater adherence to the plan (Wilson & Brookfield, 2009). However, other researchers have argued that outcome goals may hold greater importance (Hardy, 1997) or play an important role along with process goals (Filby, Maynard, & Graydon, 1999). Wilson and Mellalieu (2007) found that successful elite rugby union coaches only used outcome for long-term goals at the start of the season, whereas they used process goals closer to match time.

An examination of the relationship between female field hockey team goal characteristics and performance by Lee (1989) showed that perceived team goal clarity served as a predictor of winning. However, the study of elite rugby union coaches showed that the relationship may require more nuance, as coaches believed that goals should move from detailed to general as the team approached match time (Wilson & Mellalieu, 2007).

The presence of team goals correlated with satisfaction, cohesion, and perceived performance in a study of 145 adult athletes on community teams (Brawley, Carron, & Widmeyer, 1993). Virtually all collegiate athletes engage in some sort of goal setting, mostly related to improving overall performance, winning, and having fun, though women set more performance goals, and men set more outcome goals (Weinberg, Burton, Yukelson, & Weigand, 1993).

B. Motivation

Goal setting aims, among other things, to motivate teams and improve performance. But one of the challenges of motivation in team sports is that different types of goals will result in different levels of motivation effectiveness. In a review of motivation in sports settings, Duda and Balaguer (2007) found that task-mastery (process) goals, as opposed to outcome goals, resulted in intrinsic motivation and satisfaction. Self-determination theory (SDT) provides the basis for many motivational studies in sports that argue for the value of an intrinsic, or autonomous style of motivation. SDT posits that athletes (and non-athletes) produce the best results when learning itself motivates them (Deci & Ryan, 2011; Hagger & Chatzisarantis, 2007). Therefore, coaches should create an "autonomy-supportive environment," where coaches support their athletes' intrinsic motivations to learn and develop.

However, Bartholomew and colleagues (2009, 2011) presented work showing that social conditions, such as coaching style and team culture, can have a negative effect on intrinsic motivation. Specifically, a coach who attempts to exhibit controlling behaviors (such as pressure, coercive demands, and rewards) can negatively affect an athlete's satisfaction and motivation, even if that coach is well-meaning. Key controlling strategies include: tangible rewards, control-centered feedback, excessive personal control, intimidation, promotion of ego involvement, and conditional regard (Bartholomew, Ntoumanis, & Thøgersen-Ntoumani, 2009, Occhino, Mallett, Rynne, & Carlisle, 2014).

Mageau and Vallerand (2003) describe seven strategies a coach can use to encourage an autonomy-supportive environment: (1) provide choice within boundaries; (2) provide a rationale for tasks; (3) acknowledge feelings, perspectives, and input; (4) provide opportunities for athletes to take initiative; (5) avoid controlling statements and behaviors; and (6) reduce perception of ego-involvement. These strategies help athletes to take a more proactive role in their own development, which leads to a higher level of satisfaction and intrinsic motivation. However, focusing on task mastery does not mean that athletes should focus on being perfect, as Hall, Kerr, and Matthews (1998) indicated that perfectionism formed a significant predictor of cognitive anxiety in high school runners.

But some athletes may not prefer an autonomy-supportive environment, as individual psychological characteristics may affect desired coaching behaviors. Collegiate athletes who had high levels of intrinsic motivation preferred democratic leadership and high amounts of social support, training, positive language, and informational feedback, while athletes high in amotivation preferred autocratic leadership and punishment-oriented feedback (Horn, Bloom, Berglund, & Packard, 2011). So coaches may need to be more granular in their approach to motivation or help certain players adopt a different motivational profile.

Occhino and colleagues (2014) point out that while quality research exists on coaches, athletes, and motivation, they found a dearth of research on how coaches arrive at particular pedagogical behaviors. They point out some of the challenges to coaches adopting autonomy supportive behaviors. For example, teachers tend to display more controlling behaviors when they perceive their students as disengaged or unmotivated (Reeve, 2009). And perceptions of their coaching styles may also affect coaches; parents watching a practice or game may regard a lack of directive coaching as laissez-faire or simply lazy, which in turn makes coaches turn away from such a style (Mageau & Vallerand, 2003). Another challenge arises from the lack of research on how to best turn theory into practice (Ahlberg, Mallett, & Tinning, 2007). These challenges all make for promising lines of future research.

The literature also shows several other approaches to studying motivation. One line of research has examined parental influences on youth involvement in sports (e.g., Fredricks & Eccles, 2004) and self-efficacy of college athletes (Erdner & Wright, 2017).

Another has looked at motivation type as a source of perceived competence (Weigand & Broadhurst, 1998). The researchers discovered that experience, intrinsic motivation, and internal perceptions of control provided the best predictors of perceived competence among teenaged British soccer players.

C. Motivational climate

Most research on motivation in sports has examined the concept of coach-initiated motivational climate using achievement goal theories (Ames, 1992; Duda & Balaguer, 2007). Essentially, coaches have an effect on two aspects of the motivational climate. First, coaches can create a mastery-oriented climate, also known as "task-involving," that follows these principles: (1) Success is defined by skill development; (2) process is more important than outcome; (3) all players should be valued; (4) cooperative learning is useful; and (5) mistakes should be viewed as opportunities for learning. Second, a performance-oriented, or "ego-involving" climate does the following: (1) places teammates in competition against each other; (2) punishes athletes for mistakes; and (3) ignores less-skilled players to focus on stars (Horn, Byrd, Martin, & Young, 2012).

Studies have shown that a task-involving climate has a number of positive effects on player attitudes, behaviors, and performance (Duda & Balaguer, 2007; Barić & Bucik, 2009). The task-involving climate positively predicted athlete commitment in a study of adolescent basketball players (Leo et al., 2009). A study of athlete satisfaction found that task climate acted as a predictor of positive experiences, along with affiliation with peers, self-referenced competency, and effort expenditure (MacDonald, Côté, Eys, & Deakin, 2011).

Some studies of motivational climate have looked at its effect on team variables. Generally, results show that task-involving climate has a number of positive effects on player attitudes, behaviors, and performance (Duda & Balaguer, 2007). For example, Horn and colleagues'(2012) studied the link between perceived motivational climate and perceived cohesion. They separated athletes into four groups: Low Task/Low Ego, Low Task/High Ego, High Task/Low Ego, and High Task/High Ego. Athletes who perceived high task motivation also reported high levels of group cohesion. Their analysis also revealed some positive aspects of an ego-oriented climate, as long as a mastery climate accompanies it. Another study, Magyar, Feltz, and Simpson (2004) examines adolescent rowers. They

found that crews performed better when individual athletes perceived a mastery-oriented climate. A study of youth athletes in Greece examined the effects of motivational climate and coaches' verbal aggression (Bekiari & Syrmpas, 2015). Ego climate and verbal aggression both negatively predicted athletes' satisfaction. In addition, athletes in non-contact sports perceived more verbally aggressive behavior and more ego-orientation. Further, perceived verbal aggressiveness predicted a drop in intrinsic motivation in youth basketball players (Alexandra, Stefanos, & Vassilis, 2015), competitive high school athletes (Martin, Rocca, Cayanus, & Weber, 2009), and college athletes (Mazer, Barnes, Grevious, & Boger, 2013). And, in the latter study, athletes perceived verbally aggressive coaches as less credible, less competent, less trustworthy, and less caring.

Positive feedback from coaches positively predicted satisfaction, vitality, and intention to participate (Mouratidis, Vansteenkiste, Lens, & Sideridis, 2008). Cranmer, Brann, and Weber (2017b) found that athletes reported more satisfaction and higher motivation when their coaches challenge them through constructive criticism and a focus on development.

But motivational climate comes not just from coaches. Parents can also provide support and facilitation, and peers can affect motivation through competitive behaviors, collaborative behaviors, evaluative communications, and social relationships (Keegan, Spray, Harwood, & Lavallee, 2010).

Kingston and Wilson (2009) offer eight potential future lines of research in the area of motivation and goal setting. These include examining the impact of personal goal sharing and inter-team member goal agreement on coordination/communication and performance; examining whether the alignment of team and individual goals increases motivation to coordinate among team members; examining which types of personal goals allow team players to focus on individual process without compromising team goals; and identifying the extent to which cooperative strategies, such as communication plans, facilitate goal achievement in teams.

D. Social support

Chelladurai and Saleh (1978) proposed the multidimensional leadership theory (MLT) to explain effective coaching behaviors. The researchers examined how coaches understood member characteristics, situational characteristics, and required leader behavior to come up with a five-dimensional model of coaching

communication strategies. These five dimensions are autocratic behaviors, democratic behaviors, training/instruction, positive feedback, and social support. These final two dimensions describe how coaches motivate athletes through appreciation and how they satisfy interpersonal needs, respectively; these form the basis of this section.

The Positive Coaching movement has become especially popular in the last two decades (Thompson, 2003; Denison & Avner, 2011). Research has shown that positive feedback enhances intrinsic motivation (Mouratidis, Vansteenkiste, Lens, & Sideridis, 2008), and that social support from head coaches predicted positive athlete satisfaction with both their coaches and their sports experiences (Cranmer & Sollitto, 2015). Cranmer, Anzur, and Sollitto (2017) recently explored the types of positive messaging that former high school athletes found memorable and influential. Athletes recalled a number of message types: (1) informational support messages designed to tell them how to play, how to be successful, and how to relate to others; (2) esteem support messages that focus on abilities, encourage intangibles, and reinforce relationships; and (3) emotional support messages that enhance well-being, offer praise, help improve performance, and help deal with poor performance. In a similar study, Kassing and Pappas (2007) found that the most popular themes of memorable messages from coaches included challenge/motivation, life lessons, responsibility, physical toughness, regret/reflection, work ethic and sacrifice, and instruction.

Jowett (2009) argues that people can view the coach-athlete relationship through four interrelated, positively-valenced constructs: (1) Closeness: the ties that form between player and coach through liking and respect; (2) Commitment: a form of cohesion that grows when the player and coach develop a long-term attachment towards each other; (3) Complementarity: when the coach and athlete interact with cooperation in mind; and (4) Co-orientation: a feeling of similarity and empathetic understanding, while still recognizing the superior-subordinate relationship. A number of research studies based on this framework (e.g., Hampson & Jowett, 2014; Lafrenière, Jowett, Vallerand, & Carboneau, 2011; Wachsmuth, Jowett, & Harwood, 2017) have explored how these four constructs relate to various behaviors associated with the behavioral dimensions of MLT.

Studies of coach confirmation help to align social support research with research on motivational climate.

Confirmation refers to communication that helps individuals feel valued, supported, and connected (Cranmer, Brann, & Weber, 2017a). It forms a "multi-faceted construct that allows coaches to accept athletes in their current state while also challenging them to refine their skills" (Cranmer, Brann, & Anzur, 2016, p. 26). In this way, confirmation helps to create a task/mastery climate (Cranmer, Brann, & Weber, 2017b) that prior research has shown to result in high athlete and coach satisfaction (Cranmer, Brann, & Weber, 2017a).

In addition, coaches who help athletes get involved in their own training are seen as more effective. Felton & Jowett (2013) found that athletes are more satisfied with their experience when they feel a part of making decisions about practice and training. And Stewart & Owens (2011) shows that making their own choices empowers athletes, which leads to more skill development and decision making ability.

E. Negative messaging

While currently in vogue, positive coaching does not mean that coaches rely on positive messaging all the time. Many coaches use negative messages regularly. Sometimes this messaging occurs without strategy, and sometimes coaches use it with a purpose. Walters and colleagues' (2012) study of youth rugby, netball, soccer, and touch coaches in New Zealand found that 35.4% of comments were positive in nature and 21.6% were negative. Negative comments included scolding, contradicting, ridicule, and correcting without supporting. Male coaches used more negative comments.

One type of messaging often considered negative is the invocation of regret. Coaches often use regret messaging in order to push athletes towards a stronger performance or victory (Turman, 2005). Landman (1993) defines regret as a "painful judgment and a state of feeling sorry about misfortunes, limitations, losses, shortcomings, transgressions or mistakes" (p.4). Athletes can experience either counterfactual regret, which comes after an event, or anticipatory regret as they think through an event beforehand (Turman, 2005; Niedenthal, Tangney, & Gavanski, 1994; Gavanski & Wells, 1989). And regret messages can come in upward ("if you do this, you'll be successful" or downward ("if you don't, you won't" forms.

Coaches and players can use a number of types of regret messaging (Turman, 2005). Accountability regret occurs when a coach assigns blame or praise for

actions. Individual performance regret takes place when a coach attempts to magnify self-regret felt by athletes. Coaches use collective failure regret to focus players on the approval of the teammates and the necessity of teamwork. Social significance regret occurs when coaches assign a greater significance than winning to the game, such as a game's being against a rival, or of the town's needing to be proud of their team. Coaches use future regret to amplify attention on how players will feel in the future about an event. Lastly, regret reduction happens when a coach tries to reduce the amount of regret that their players face. A follow-up study by Turman (2007) found that girls' and boys' coaches use regret messages in a similar amount but in different contexts.

F. Knowledge sharing and decision making

Knowledge sharing and shared decision making are interrelated aspects of team communication that involve combining information and strategies to best achieve team outcomes. Knowledge in teams is often dispersed among players and coaches. Jones, Armour, and Potrac (2003) approach knowledge from an interesting angle: They use a "life-story" perspective to explicate how a successful elite soccer coach has constructed his professional knowledge. Gréhaigne and Godbout (1995) look at player knowledge, specifically tactical knowledge, or "knowledge in action" (p. 495). They argue that the traditional model of teaching team sports has focused first on mastery of motor skills prior to real game involvement, which they say emphasizes the physical component over an understanding of game play. Gréhaigne and Godbout take a systemic view of sports to put forth three categories, validated by sports experts and physical educators, of team knowledge:

- **Action rules**: conditions and elements players should consider for peak efficiency of action. In one sense, these answer problems, and are technically principles, not rules. An example from soccer clarifies this: "find open space when your teammate has the ball." Gréhaigne & Godbout include a substantial list of 54 action rules in invasion sports (basketball, soccer, water polo) that relate to the categories of keeping the ball, playing in movement, exploiting/creating available space, creating uncertainty, defending the target, regaining possession of the ball, and challenging the opponents' progression.
- **Organizational rules**: generally top-down guidelines that relate to the logic of the activity, the

dimensions of the play area, the distribution of players on the field, and the differentiation of roles. Coaches and players can apply organizational rules before the game ("identify one's strengths and weaknesses before the game" as well as during the game ("coordinate and connect various actions of the team").
- **Motor capacities**: these relate strongly to the previous two categories, as players must develop motor capacities to effectively follow certain rules. For example, a player must develop footwork, and her teammate must develop the ability to identify and move into passing lanes, for an effective pass into space.

Gréhaigne and Godbout (1995) argue that players generally learn these three forms of knowledge in interactive processes, in which players interact with their own bodies, physical objects, other people, and language itself.

But knowledge does not remain static. Sometimes, knowledge changes in the middle of a game. Bourbousson and colleagues (2011) examined ways in which the elements of a basketball team's shared knowledge changed during a game. The types of change identified were (a) reinforcement of a previous element, (b) invalidation of an element, (c) fragmentation of an element, and (d) creation of a new element. They also explored the temporal aspect of cognition, finding that convergence on a shared process can happen simultaneously (all together) or progressively (one at a time). Given that a team may achieve shared cognition progressively during a game, it also stands to reason that it can happen progressively on a larger time scale, like over the course of a season.

Studies of team cognition have examined how knowledge similarity between members affects performance. Rentsch and Davenport (2006) examine how one measure of shared cognition, team member schema similarity (TMSS), applies to sports teams. This model explores the degree to which team members' knowledge structures for understanding phenomena are similar and/or compatible, and argues that schema similarity has indirect links to team effectiveness (Rentsch & Hall, 1994).

Team knowledge and shared cognition offer critical antecedents to decision making, which relies on effective incorporation and fusion of individual mental processes. According to Gréhaigne, Godbout, & Bouthier (2001): "In team sports, playing well means choosing the right course of action at the right moment

and performing that course of action efficiently and consistently throughout the match" (p. 59). To add to the complexity, researchers often see decision making in team sports as more successful when the process is interactive. For example, they view observation and verbalization as important strategies for developing better decision-making processes (Gréhaigne, Godbout, & Bouthier, 2001).

Researchers have examined decision making in numerous sports and contexts. How does the reward structure of the game affect a handball coach's decisions (Debanne, Angel, & Fontayne, 2014)? Does a rugby coach's communicative decision making style correlate to team success (Sullivan, 2015)? Decision making also matters when it comes to a burgeoning topic in kinesiology research known as pacing. Pacing describes the goal-directed regulation of exercise intensity, and Smits, Pepping, & Hettinga (2014) argue that people should view pacing as a "behavioral expression of continuous decision making" (p. 763).

How teams train can affect their ability to make decisions, because training will structure what members learn and how they interact. The use of small-sided and conditioned games (SSCG), for example, appears as a highly valuable tool in team training. SSCG are smaller and modified versions of full-team, full-field training; imagine a 2-on-2 soccer game in which players must knock down cones to win points. Due to its more immediate constraints, SSCG can help encourage continuous interpersonal coordination for use in game situations (Davids, Araújo, Correia, & Vilar, 2013). In addition, constant coach encouragement can increase training intensity, which leads to be better aerobic fitness in game situations (Halouani et al., 2014).

Lastly, Light, Harvey, and Mouchet (2014) argue that most research on team sports views decision making as a linear process of conscious thinking, and they push for a more holistic view of decision making though complex learning theory (CLT). And Denison and Avner (2011) call for coaches to think deeply about the ethical ramifications of their decision making strategies. They argue that coaches need to consider the effects produced by how they solve problems in order for "coaching to become a respected profession worthy of deep and intelligent thought" (p. 209).

G. Roles and role ambiguity

In a study of a 12-month team building program of a junior ice hockey team in Finland, Rovio and col-

leagues (2012) found that performance profiling, goal setting (individual and group), and role clarification emerged as some of the most effective parts of the program. Indeed, clear communication about roles forms a critical component of success in sports teams.

Scholars define a role as a set of behaviors expected from a person who occupies a particular position; and proper role communication takes on an especially important position in a sports setting (Eys, Schinke, Surya, & Benson, 2014). A number of communication events occur in the process of determining and fulfilling roles. For example, the role sender (such as the coach) must first determine which player will fill which role, then communicate certain expectations for each focal person, and then each focal person must respond with acceptance or negotiation (Eys, Carron, Beauchamp, & Brays, 2005). In a perfect setting, the focal person would find their role expectations clear and fair, and the team as a whole would find all roles acceptable. One qualitative study of intercollegiate athletes explored antecedents to role acceptance, finding that perceptions of leadership, team cohesion, and intra-team communication related to role acceptance by players (Benson et al., 2013). Bray, Brawley, and Carron's (2002a) study of intercollegiate basketball players found that players who perceived more role clarity also reported higher role efficacy and performed better than players who perceived lower role clarity.

However, team settings go beyond individual efficacy. Bray, Brawley, and Carron (2002b) also investigated the interdependent functions of team efficacy, and found that players considered individual and collective efficacy distinct. Starters reported greater role efficacy than nonstarters, but they reported collective efficacy as the same regardless of playing status.

Unclear roles can prove detrimental to team success. Role ambiguity describes the perception of a lack of clear information about the expectations associated with a person's position in a team (Kahn et al., 1964). A "role sender" refers to the person who develops and communicates a role expectation to another person. In a sports setting, the head coach usually takes on that role, with the person receiving the information usually the athlete (Cunningham & Eys, 2007). A coach's training and instruction behaviors most commonly deliver role expectation, but players can also perceive them through informal interactions with other athletes (Eys, Carron, Beauchamp, & Brays, 2005). Role ambiguity occurs when role expectations are not expressed and understood effec-

tively and consistently. However, this may not relate to team confidence (Leo et al., 2016).

Role ambiguity does highly relate to perceptions of cohesion. Elite college basketball players who perceived higher ambiguity also perceived lower levels of task cohesion (Eys & Carron, 2001). A multi- sport study found that athletes who better understood their role in the team more likely perceived higher task cohesion (Bosselut, Heuzé, & Sarrazin, 2010). And Bosselut, Heuzé, Eys, & Bouthier's (2010) examination of rugby teams in France found players reported higher task cohesion when they perceived lower ambiguity with regards to their role and responsibilities on both offense and defense. Though none of these studies shows a causal relationship, the findings are consistent in terms of describing these two variables.

Bosselut, McLaren, Eys, and Heuzé (2012) found that midseason perceptions of group cohesion resulted in changes to the perception of role ambiguity between midseason and season's end. And role ambiguity in an intercollegiate men's basketball team ended up reinforcing some of the undesirable factors that led to role ambiguity in the first place (Kang & Seibold, 2017).

Role ambiguity relates to intra-team communication as well. First, Eys and colleagues (2005) looked at quantity of intra-team communication as one factor in better understanding role expectations. Further, Cunningham and Eys (2007) found that men and women who play intercollegiate sports use different types of communication to facilitate better understanding, as men were more likely to use negative conflict communication, such as arguing or competitive banter, and women were more likely to use acceptance communication. They also noted a stronger relationship between intra-team communication and role clarity for men than for women, and they hypothesize that women may more likely go to their coaches to better understand role expectations than to other members of the team..

Lastly, a study of college athletes at an "athletically-and-academically elite" U.S. university showed that role uncertainty rears it head off the field as well, and that athletes attempt to manage it using communication strategies such as seeking social support, not disclosing their athlete status, or relying on prayer (Romo, Davis, & Fea, 2015).

4. Team-Level Constructs

Message-based constructs may be the most visible forms of communication in sports teams, but there are a number of ways that communication plays a more latent role in team dynamics. For example, the complexity involved in proper coaching, while important to understand, is not easy to correct simply with changes in message delivery. Cohesion, culture, power, and conflict are undeniably part of team process, yet a team may never consider them explicitly as aspects of their work. This points to the challenge of viewing communication as a superficial topic in team sports.

A. Coaching and complexity

Coaching forms a complex, multifaceted, dynamic aspect of team communication. Coaches must think about how to motivate players and best set the team up for success while also navigating ethical and interpersonal obstacles. Along with the standard day-to-day aspects of coaching, the job includes special aspects, such as identifying talent (Gee, Marshall, & King, 2010), informing potential players of nonselection after tryouts (Capstick & Trudel, 2010), and

communicating with parents of players (Mullem & Cole, 2015).

Bowes and Jones (2006) describe coaching as working near "the edge of chaos" due to its complexity and dynamism (p. 235), and Cushion (2007) argues that the inherent complexity in the coaching process requires more comprehensive study. To this end, Cushion, Armour, and Jones (2006) outline five features of the coaching process. It is (1) continuous and interdependent, not necessarily cyclical; (2) continually constrained by a range of objectives from the club, coach, and athletes; (3) a constantly dynamic set of intra- and inter-group relationships; (4) embedded within external constraints, only some of which are controllable; and (5) infused by a pervasive cultural dimension through the coach, club, players, and their interactions. With all these issues of complexity, coaches must pay attention to their individual relationships with athletes and other team members, as coaching behaviors affect athlete satisfaction. Baker, Yardley, and Côté (2003) found that the presence of each of the following seven coaching behaviors pre-

dicted satisfaction: mental preparation, technical skills, goal settings, physical training, competition strategies, personal rapport, and negative personal rapport. Colvin, Blom, and Bastin (2012), examining the coach-athlete relationship in successful and non-successful collegiate teams, expected to find that relationships would improve in successful teams over the course of the season. However, they found that relationships in non-successful teams deteriorated instead, in measures of closeness and commitment.

Just as teams have unsuccessful seasons, many teams also have poor coaches. And while the two may not correlate directly, both can have negative effects on athletes. Gearity and Murray (2011) provide a thematic analysis of athletes who have experienced poor coaching and how they have coped with its psychological effects.

So how do coaches learn to be coaches? Lemyre, Trudel, and Durand-Bush (2007) interviewed 36 youth coaches in ice hockey, soccer, and baseball, finding a few themes about how coaches learn. First, the coaches' prior experiences as players or assistants provide them with sport-specific knowledge. Second, coaches learn through formal programs as well as informal methods, such as Internet research, discussion with players, and observation of other coaches. Third, coaches do not interact often with rival coaches directly. And fourth, learning situations differ between sports. In another study of coaching experience, Blackett, Evans, and Piggott (2017) found that soccer coaches in England and Wales were often "fast-tracked" based on their ability to gain player respect, which clubs often based on playing experience of head coaching candidates. They examine this practice to show how it may exclude certain groups from the coaching arena.

A number of studies rely on the Leadership Scale for Sports (LSS, Chelladurai, 2007) to measure different aspects of leader behavior (multidimensional leadership theory also relies on LSS). The 40 items in this scale measure five dimensions of leader behavior: training and instruction, democratic behavior, autocratic behavior, social support, and positive feedback. A study of 307 high school and junior college baseball and softball players found that coaches whose teams perceived them as rating highly in training and instruction, democratic behavior, social support, and positive feedback—and whom they rated as low in autocratic behavior—had more cohesive teams (Gardner, Shields, Bredemeier, & Bostrom, 1996).

This also holds true for athlete leadership behaviors: Individual perceptions of training and instruction, as well as social support, positively influenced all four dimensions of cohesion, while there was a negative association with autocratic behavior (Vincer & Loughead, 2010). In another study, intra-team communication partially mediated the relationship of transformational leadership to cohesion in college-level ultimate frisbee players (Smith et al., 2013).

Coaches' immediacy behaviors can also serve as predictors of team cohesion levels, as well as athlete satisfaction. Immediacy behaviors, namely those used to signal warmth and closeness among other positive aspects of communication, significantly predicted satisfaction and perception of cohesion for both male and female high school athletes (Turman, 2008). For more information about leadership, coaching, and communication in sports, see Horn (2008) and Chelladurai (2007).

B. Cohesion

In a special issue of *Small Group Research*, Carron and Brawley (2012) examined operational definitions of cohesion. Based on a review of group studies, they argue that cohesion forms a multidimensional construct made up two sets of beliefs: group integration beliefs, which reflect a member's perceptions about what the group believes about its closeness and similarity, and individual attractions to the group beliefs, which reflect a member's personal motivations to remain in the group. Each of these two sets of beliefs has both task and social emphases. Using these sets, they reach the following definition of cohesion, from Carron, Brawley, and Widmeyer (1998): "a dynamic process that is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs" (p. 213). This certainly applies to sports teams.

Cohesion is inherently a communicative construct. Heath's (1991) study of the language used by little league coaches showed that team cohesion often occurred within the frame of collective knowledge held by the team, including items such as "special cheers, idiosyncratic terms, and hand and verbal signals" (p. 105) that were known by coaches and players, but kept secret from parents.

Numerous studies have aimed at developing an instrument for group cohesion. Results from a 41-item sport cohesion study of 196 intercollegiate basketball

players helped Yukelson, Weinberg, and Jackson (1984) to focus on four factors that accounted for 80% of total variance: attraction to the group, unity of purpose, quality of teamwork, and valued roles. And many other studies use the Youth Sport Environment Questionnaire, which has been designed for 13–17 year-olds and has 18 items to measure task and social cohesion (Eys, Loughead, Bray, & Carron, 2009).

One of the seemingly commonsense thoughts about cohesion holds that athletes who perceive high team cohesion will more likely stay with the team. A study from Canada about recreational female players of ringette (a sport similar to ice hockey) showed that players who planned to return for the next season viewed social cohesion as significantly higher than those who did not plan to return; and a follow-up study with elite players of the same sport supported the findings of the first study (Spink, 1995). Adult soccer players who perceived either high cohesion or high groupness (i.e., the feeling that the collection of players forms a single unit) were more likely to intend to return, and were especially likely to return if they perceived both aspects in their team (Spink et al., 2015).

Another seemingly commonsense idea about cohesion holds that it leads to team success. While it is hard to establish the dependent variable and the independent variable in these studies, a number of the studies have supported the idea that perceived cohesion and team success are correlated. For example, results from a study of 27 elite university soccer and basketball teams not only found that cohesiveness exists as a shared perception, but also that a strong correlation exists between cohesion and a team's win-loss record (Carron, Bray, & Eys, 2002). Another study of professional soccer players in Spain supported this finding as well (Leo et al., 2016).

A recent meta-analysis found that cohesive groups perform 18 percentage points better than the average noncohesive group (Evans & Dion, 2012). However, the authors caution that these do not constitute bona fide groups, and thus that researchers should generalize these results to real work groups only with caution. Another meta-analysis found that a larger cohesion-performance effect existed for female teams (Carron, Bray, & Eys, 2002).

Kim, Magnusen, and Andrew (2016) used cohesion as a moderating variable to find that intra-team communication has an indirect effect on team commitment via both types of cohesion—task and social. This study of 340 intercollegiate athletes in Hong Kong found that the acceptance dimension of intra-team communication had a positive effect on cohesion, while the negative conflict dimension had a negative effect. Similarly, a study of 139 youth soccer players found that both positive and negative conflict communication served as strong predictors of both task and social cohesion (McLaren & Spink, 2017). In addition, acceptance predicted task cohesion, and distinctiveness predicted social cohesion.

Elite amateur cricket players in India more likely predicted that they would remain committed to the sport when they perceived higher levels of internal communication (Mishra, Sharma, & Kamalanabhan, 2016). Interestingly, associations with communication training and internal public relations training led to higher predictions of commitment than coach-player communication and peer communication, though all aspects did positively correlate with predicted commitment.

Motivational climate also has an effect on perceived cohesion. Researchers have found two different types of motivational climates. Task-involving climates encourage self-improvement, support all members, encourage learning from mistakes, and reward effort; ego climates encourage being the best, focus on star members, discourage mistakes, and reward success (Miulli & Nordin-Bates, 2011). These motivational climates have an effect on perceived cohesion in team sports. High school athletes who perceive a team motivational climate as highly task-oriented will perceive higher group cohesion than those who perceive an ego-based climate (Horn, Byrd, Martin, & Young, 2012). This also holds true if the athletes believe that their peers initiated the type of climate (McLaren, Newland, Eys, & Newton, 2017). An ego-related climate relates to high task cohesion only if it pairs with a focus on skill mastery, in which mistakes are encouraged and coaches are process focused (Horn et al., 2012).

Certain coaching interaction techniques can have strong effects on team cohesion levels (Turman, 2003). Some of the techniques that have a positive effect on team cohesion include:

1. Sarcasm and teasing: Players indicated that this type of behavior showed a more personal, humorous side to the coach.
2. Motivational speeches: These speeches often include idioms and concepts that teams can focus on, such as unity and being a good teammate.
3. Quality of opponent: A higher quality, more respected opponent leads team members to desire

to rise to the challenge, in part by focusing on more on their team as a unit. A quality opponent also creates an us vs. them mentality.

4. Athlete-directed techniques: These involve athletes themselves leading aspects of the team, such as creating team goals and planning team events.
5. Team prayer: This strategy helped athletes to focus less on conflicts and more on unity.
6. Dedication (Enthusiasm): "When we see one of our coaches get pumped up, it usually pumps the team up" (p. 99).

In addition, techniques that were found to decrease cohesion included inequity as well as embarrassment and ridicule.

Gammage, Carron, and Estabrooks (2001) examined the moderating effects of productivity norms and on the relationship between cohesion and perceived future performance by using a scenario paradigm regarding training for a competition. While low-cohesion conditions led to no difference in the probability of off season training between groups with high and low productivity norms, a difference between those groups appeared when part of a high-cohesion condition. This study also supported the idea that high cohesion and low productivity norms led to lower probability of off season training than even those groups with low cohesion and low productivity norms. The authors argue that cohesion has this kind of effect because high cohesion leads to increased perceptions of responsibility to the team.

A strong connection appears between leadership behavior and cohesion. High school baseball and soccer coaches whose athletes reported higher levels of cohesion—both task and social—were highly rated in both positive feedback and training instruction (Murray, 2006). Interestingly, one way that findings in the two sports differed had to do with differing levels of interdependence. Soccer is a highly interdependent sport, and successful soccer teams showed more task cohesiveness, whereas baseball is much less interdependent than soccer, and successful baseball teams tended to be less task cohesive.

Cohesion may not affect success in coacting sports (such as golf, bowling, and tennis) as much as in highly interdependent sports. However, it may still have an effect. A study of 83 female collegiate golfers showed that cohesion did predict performance outcomes (Williams & Widmeyer, 1991). Another angle of the same study attempted to identify variables that predict cohesion within coacting

teams (Widmeyer & Williams, 1991), arguing that some variables relate more to task cohesion, and some more to social cohesion.

Perceived cohesion of one's team can also affect how high school athletes view the quality of their personal development. Higher perceptions of task cohesion predicted higher perceptions of personal and social skills, initiative, and goal setting within the sport, as well as experiences that were less negative (Bruner, Eys, Wilson, & Côté, 2014). Social cohesion was similar in its correlation to personal development, with the inclusion of perceived improvement of cognitive skills.

Lastly, the same special issue of *Small Group Research* mentioned at the start of this section contains a review of cohesion and sports teams by Pescosolido and Saavedra (2012). They argue that sports teams may more easily achieve cohesion because many of the standard forms of conflict that can inhibit cohesion in organizations—issues regarding goals, roles, membership, and procedures—appear less frequently in sports teams, which are generally more highly structured. They also argue that cohesion may present a more valid construct for sports teams than for those with more ambiguous contexts. However, findings in the sports arena may apply to teams with similar structures, such as those involved with the military, fire suppression, and emergency medicine.

C. Culture

Understanding how people create and change culture provides an important direction for sports communication researchers (Fletcher & Arnold, 2011). Sports organizations generally strive for a culture of openness, empowerment, and sensitivity (Fletcher & Arnold, 2011), but the process necessary to achieve this type of culture remains understudied. Cruickshank and Collins (2012a, 2012b) have devoted numerous studies to defining where research on change management and culture change in elite sports team should go, and they have followed up these calls with studies of culture change in elite sports. They found the culture of Olympic sports teams optimally changed by having an evaluating and planning phase immediately followed by "enduring management of a multi-directional perception- and power-based social system" (Cruickshank, Collins, & Minten, 2014, p. 107). And in the case of a high-level English rugby team, team officials successfully managed culture change by (a) subtly and covertly shaping the various contexts (physical, structural, and psychoso-

cial) in which both players and staff made choices that impacted performance, and (b) regulating how power was negotiated (Cruickshank, Collins, & Minten, 2013).

D. Power

A coach's effectiveness depends not only on the success on the field, but also on the success of their interactions with other coaches, athletes, and owners. One aspect of these interactions is negotiating power (Potrac & Jones, 2009), a construct granted through communication (McCroskey & Richmond, 1983). While people assume that coaches have a certain type of power over their players, coaching is complex and involves obtaining buy-in from others who may have power in their own ways. Therefore, the various individuals and groups constantly negotiate power through interactions with the coaches.

Power comes in many types, first described by French and Raven (1959) as social power bases (Cranmer & Goodboy, 2015). Reward power refers to a coach's ability to provide tangible or psychological benefits, whereas coercive power describes the ability to take such benefits away, potentially through a punishment. Referent power comes through interpersonal attraction to a coach. Expert power relies on an athlete's perceiving that the coach has expertise in a subject. And legitimate power is given to a coach through formal authority or a title.

Cranmer and Goodboy (2015) found that Division I athletes are more satisfied with their coaches when they perceive more reward, referent, and expert power. They also perceived communication symmetry and felt more comfortable communicating with their coaches. Conversely, players who perceived more coercive power use appeared more sensitive to feedback, which Cranmer and Goodboy (2015) argue can impede learning by associating negative emotions with the learning process.

Other studies of power and coaching have taken unique approaches to the intersection of these concepts. Turman (2006) used playing status as a variable to find that starters in high school football and basketball perceived higher levels of reward power than players who saw the field less. Rylander (2015) found support for the idea that a coach's legitimate and expert power were most effective at gaining compliance. And Purdy, Potrac, and Jones (2008) explored power and resistance through an autoethnography about a coxswain and her rowing coach, describing the ways in which conflict over power struggles led to inefficiency and an inability to achieve the team's full potential.

E. Conflict

Conflict forms an inevitable part of long-term teamwork, so how a team manages conflict may matter more than its ability to avoid it. A study of Greek sports coaches found that the most effective styles of conflict resolution consisted of the collaborating style, compromising style, and avoiding style, while the least effective were the competing style and the accommodating style (Laios & Tsetzis, 2005).

Wachsmuth and colleagues (2017) provide a meta-analysis of conflict in the coach-athlete relationship. They review articles that examine sources of conflict; the conflict process, conflict prevention and management; and conflict outcomes. They identify one interesting finding about sources of conflict: Conflict may arise due to a non-established relationship, which results from a lack of communication from coach to player.

The concept of dissent also relates to conflict. Dissent does have value because it may lead to the better practice of team members to express their disagreements productively through collaboration. Two important questions about dissent ask what triggers it and what makes it effective. The context of team sports offers a unique perspective because of the necessity of interdependence as well as the high level of respect for authority. A recent study identifies four categories of triggers: (a) performance issues, (b) power and influence, (c) logistics, and (d) communicative climate and culture (Cranmer, Buckner, Pham, & Jordan, 2017). The same study found that effective expressions of dissent included presentation of potential solutions, direct-factual appeals, and an absence of humor.

Another question asks what makes for effective dissent. Athletes who spend time in the starting lineup and who perceived their coach's feedback style as open more likely expressed dissent towards their coach, whereas non-regular starters and athletes who perceived a closed feedback style from their coach more likely expressed lateral dissent (that is, to their teammates) (Kassing & Anderson, 2014).

A study of 273 high school athletes in which only athletes'relationships with their coaches predicted lateral dissent, not team role or perception of feedback style, slightly contradicted these results (Cranmer & Buckner, 2017). Overall results regarding upward dissent appeared more complex: starting status and relationships with teammates directly and athlete-coach relationships predicted upward dissent.

5. Integral Topics in Sports Teams

The previous two sections explored message-based constructs and team-level constructs of team communication in sports. Message-based constructs are explicit in their communication; they usually necessitate attention of teams and team leaders, and are shaped through talk and interaction. Team-level constructs may not be as apparent to observe, but they are also present in teams as aspects of communication that receive a lot of attention from team leaders.

The following topics, while integral to the success of sports teams, may go under the radar for most coaches. These topics, including emotion, failure, nonverbal communication, time, team coordination, and gender are likely understudies as critical components of how sports teams function.

A. Emotion

A soccer player feeding off the energy of 80,000 supporters. A basketball player getting shoved in the back by a rival and deciding how to react. A softball player who knows that the next pitch could be the difference between winning a championship and being branded as a "choker." These describe just some of the ways in which emotion plays a role in team sports.

By examining emotion in professional men's rugby, Campo and colleagues (2012) argue that certain feelings can affect performance. High anxiety and anger in moments of competition were associated with poor performance. This is consistent with Campo and colleagues' (2012) review of emotion in team contact sports, which found that anxiety and anger remained the most studied emotions in that context. While the researchers first argued that they did not know whether "they are the most popular emotions investigated, or whether they are central to player performance experiences" (p. 90), Campo and colleagues now believe that the latter holds, and that the detrimental effects of an emotion like anxiety may come into play because of a decrease in emotional regulation (Martinent et al., 2015). This ends up affecting the ability of individuals to work effectively as a team and may contribute to individualistic play as an anxiety regulator (Campo et al., 2012).

Therefore, athletes often look to regulate their emotions. Some forms of self-regulation include changes in body language and self-censorship, and some forms of interpersonal regulation.

So how do athletes regulate emotion, and how are their coaches and teammates involved in the processes of emotional regulation? Table tennis players used a number of emotion-regulating strategies, including attention deployment, physiological regulation, and social support; the emotions hardest to regulate included discouragement and anxiety (Martinent et al., 2015). From a study on curling, other forms of self regulation include changes in body language and self-censorship (Tamminen & Crocker, 2013).

When one views the strategies together with the challenging emotions, one can see how a coach or teammate could positively or negatively affect emotion regulation, either before or during an emotion experienced during competition. Forms of interpersonal emotional regulation include providing positive and/or technical feedback, humor, asking teammates about their emotions, and other actions (Tamminen & Crocker, 2013). In addition, intercollegiate athletes also relied on their teammates to help them deal with the challenges of being a student-athlete in the public world; fans and teachers expect university athletes to show mental toughness, gratitude, and civility, even though the athletes often feel powerless, frustrated, and nervous about academic and athletic demands (Romo, 2017). These athletes relied on social support to help them negotiate emotional labor.

B. Failure

While most variables in the study of sport team communication directly connect with team success as a dependent variable, failure has a more complex connection. Failure is both the literal opposite of success and also an experience that many consider valuable for future performance. A study of work teams found that stories of managerial failure generated more conversation and elaboration than stories about success, especially for people who viewed failure as a learning opportunity (Bledow, Carette, Kühnel, & Bister, 2017). In a similar vein, researchers at the intersection of youth sports and development have argued that an athlete's orientation towards failure holds critical importance to the effect that mistakes and losing (both

inevitable) will have on their lives (Dweck, 2006; Martin-Krumm, Sarrazin, Peterson, & Famose, 2003; Brady, 2004).

Athletes who view failure as a learning opportunity will often find more success than those who view it as a threat to their identity. And coaches can use positive or negative communicative acts after a loss or when an athlete makes a mistake in training (Sagar & Jowett, 2012). In addition, formal processes exist through which coaches and teams can review failure. For example, youth football players often receive weekly feedback in the film room, which can have an effect on player psychology (Middlemas & Harwood, 2017).

Scholars, announcers, athletes and Monday-morning quarterbacks use the term "choking" to describe one construct of failure unique to performance-based processes, like sporting events. They define choking as a significant reduction in athletic performance under pressure (Hill, Hanton, Fleming, & Matthews, 2009, Hill, Hanton, Matthews, & Fleming, 2011). While not entirely clear why athletes choke, observers generally consider it the result of either self-focus or distraction. One example of self-focus, the Explicit Monitoring Hypothesis posited by Beilock & Carr (2001), argues that athletes decline in performance by consciously monitoring a process that they usually perform automatically, leading to inefficiency and inefficacy. A study of intercollegiate athletes that indicated that movement self-consciousness predicted athletes' perception of choking support this view (Iwatsuki & Wright, 2016). Distraction models argue that choking occurs when an athlete tries to process task-relevant and task-irrelevant information, the latter of which could include something like self-doubt or fear of judgement (Gucciardi, Longbottom, Jackson, & Dimmock, 2010).

Hill and Shaw (2013) provide a qualitative review of choking in team sport as well as a study of team sports athletes in the South West region of England who felt they had regularly choked in a performance setting. They point out that most studies of choking focus on athletes in individual sports. This focus may result from the fact that people find it simpler to study individual sports because output in team sports involves complexities of interactions between teammates. But individual and team athletes differ; for example, Iwatsuki and Wright (2016) found that individual sport athletes had a higher perception of choking under pressure.

Hill and Shaw (2013) also provide valuable summaries of perceived antecedents, mechanisms, moderators, and consequences of choking. The most commonly perceived antecedents include important games, expectations, individual responsibility, presence of an audience, and physical/mental errors. The rest of the antecedents included actions of opponents. The most commonly perceived mechanisms here include debilitative anxiety (cognitive and somatic), distraction, and decrease in perceived control. Self-focus did not appear as a common mechanism, though this study had a small sample size (n=8). Team cohesion, motivational climate, and coping style formed the most common moderators. The most common consequences were negative affect and a significant drop in performance. In addition, Owens, Stewart, and Huebner (2017) argue that personality—individual differences in patterns of thinking, feeling, and behavior—may be the biggest factor in the ability to be "clutch" or to be predisposed to choking.

Those who study team communication may want to examine the most common moderators of choking. Motivational climate and team cohesion are decidedly interactive variables. A coach who encourages a mastery training/performance climate will likely help alleviate choking (Hill & Shaw, 2013). This supports the self-presentation model of choking, which argues that an ego/outcome-focused climate encourages choking (Hill, Hanton, Matthews, & Fleming, 2011). And one additional strategy to overcome distraction-based choking is to respond with increased effort (Wilson, 2008).

C. Nonverbal communication

The sports arena offers a fascinating site for studying nonverbal communication because teams engage in unique types of signs and actions during a game. Teams create secret signals to communicate in plain sight in front of the other team. Players act in such close proximity that they regularly have full body contact with their opponents in numerous sports. And informal rules about making physical contact with teammates differ greatly from an office setting, where only a handshake may appear acceptable. Nonverbal behaviors can include eye behavior, facial expressions, posture, body language, gestures, proxemics, touch, paralanguage, and silence (Renz & Greg, 2000). These behaviors occur commonly in team sports for the purposes of coordination and communication.

Moesch, Kenttä, and Mattsson (2015) developed a coding scheme for quantitative studies of nonverbal

behavior in team sports. Moesch, Kenttä, Bäckström, and Mattsson (2015) used this coding scheme to analyze nonverbal behaviors of 18 elite handball matches in Sweden. They discovered that nonverbals increased during playoff games, and also increased among winning teams. Aly (2014) looked at communication styles of college athletes to determine which methods make message interpretation more reliable. The results showed that female athletes in the study viewed visual communication and nonverbals as the fastest form of messaging, yet also indicated disagreement about special gestures and signs.

A study that has become popular in front offices across the National Basketball Association, Kraus, Huang, and Keltner (2010) explored tactile communication, or physical touch, during the 2008–09 NBA season. Early season touch predicted greater performance for individuals as well as teams, and touch in general predicted improved performance, even controlling for player status, expectations, and early season performance.

D. Time

Time plays a role in many aspects of team sports. Teams often plan their schedules thinking backwards from their next game event (Ishak & Ballard, 2012), whether it is a football team shifting their schedule to account for an extra day of practice, or a soccer team eating an early lunch because of an afternoon match. Time is also epochal, or fixed, for most sporting events, with a clear start ("it's game time!" and a clear finish (the buzzer sounding when the clock hits zero). In short, time affects how people play games (Martínková & Parry, 2011). This section looks at how teams communicate at different points in time.

i. Socialization

Socialization addresses the very beginning of athletes' time with their team and involves teaching new players the way in which the team works (Schein, 2003). In sports teams, this means helping new players understand norms, expectations, and roles, as well as ways of communicating with coaches and teammates. Socialization can be both formal (through designed communication processes) and informal (e.g., observation of the behaviors of a teammate).

In college athletics, adjustment to a team's culture and process is critical for student-athletes. Cranmer has performed a series of studies about student-athlete socialization with a number of interesting findings. Messages received before arrival on campus show an association with the roles of a student-athlete, but also highlight contradictions in the dual roles of college athletes as students and players (Cranmer & Myers, 2017). These messages also shape student-athletes'attitudes, expectations, and participative decisions, relationships, and performance; however, associations between message content and function were rare (Cranmer, 2017a). As for roles and socialization, exchanges with assistant coaches and teammates, Cranmer found these most salient in student-athletes' socialization processes (2017b).

ii. Timeouts

The timeout forms one of the most important communicative moments of the process of a sports team. This critical period of interaction, instruction, and rest offers teams an opportunity to coordinate their efforts to maximize success in the following period of play. We can view timeouts as a period of adaptation, a chance for teams to either realign members back onto a familiar trajectory or to discuss orientation onto a new path (Ishak & Ballard, 2012). These moments highlight communication because play has stopped and the rules of the game no longer govern actions (Coleman, 1969). Communication during timeouts typically takes the form of top-down for most sports teams with a hierarchical organization, though many teams may take a more distributed approach to interaction during a break in play.

Leading an effective timeout poses a challenge for coaches because not all players have the same optimal level of arousal and style of communication (Andrews, 2015). And coaches must learn to minimize distractions and focus on game tactics, which pose their own difficulties in game situations (Andrews, 2014). To best study timeouts, Hastie (1999) presented an instrument for recording coaches' interactions with players during timeouts. This instrument includes four categories of communicative statements: technical statements, relating to skill performance; tactical statements, relating to game strategy; psychological statements, relating to emotion or cognition; and other statements, which do not relate to the game or prove unhelpful to players. A study of professional Greek volleyball clubs found that half of coaches' timeout comments dealt with game tactics, and another quarter consisted of psychological statements (Zetou, Kourtessis, Giazitzi, & Michaelopoulou, 2008). However, the researchers found no connection between statement type and post-timeout performance.

Research on international team handball by researchers in Spain found that a losing team usually takes timeouts, or, conversely a team that has had a recent scoring streak against them takes the timeout (Gutiérrez-Aguilar, Montoya-Fernández, Fernández-Romero, and Saavedra-García, 2016); they also found that player substitutions had a bigger effect on post-timeout performance than defensive system changes. The study of professional Greek volleyball clubs found that coaches liked to call timeouts when the opponent had a 2-point lead (Zetou, Kourtesis, Giazitzi, & Michalopoulou, 2008). Sampaio, Lago-Peñas, and Gómez (2013) found that teams that took timeouts improved their scoring in both the short- and mid-term periods afterwards in basketball. This is consistent with a study of timeouts in professional basketball in Spain, which found that substitutions were associated with positive scoring performances by a team (Gómez et al., 2017), as well as a study of NCAA women's basketball (Roane, Kelley, Trosclair, & Hauer, 2004). However, this may not apply across all settings. A study of team handball in Iceland found that timeouts helped on defense but not in terms of scoring (Halldorsson, 2017).

Though these studies may not explicitly look at interaction during timeouts, communication during a timeout and team performance seem more clearly linked in other research. A study of NCAA Division I hockey coaches explored the ways in which emotions of the coaches and players played a significant role in the decision-making processes of coaches during intermissions (Allain, 2016). A similar study of women's hockey showed that certain aspects of intermission speeches, such as genuine emotion, conciseness, and references to team values positively motivated athletes; negatively-perceived attributes included poorly-timed speeches and surprising information (Breakey, Jones, Cunningham, & Holt, 2009). In addition, quantity of communication during breaks in the action may matter as well. A study of coach's instruction before judo events provided evidence that the number of ideas communication by a coach correlated inversely with retention and coherence by athletes (Mesquita, Rosado, Januário, & Barroja, 2008). Clearly, what happens during a timeout affects performance in a meaningful way.

More recent studies have examined communicative content during timeouts. Lorenzo, Navarro, Rivilla, & Lorenzo (2013) explored how the content of coaches' talk during timeouts in Spanish professional basketball differed from in-game talk, finding that coaches use brief statements during play (e.g. motivating statements, technical instructions) and more elaborated information during timeouts. Wilson (2017) took an ethnographic approach to analyze ritual interactions of a New Zealand male rugby team in the visiting locker room, arguing that the team used spatial and linguistic practice to reconstruct the unfamiliar space as "home."

Andrews (2015) recommends that coaches split timeouts into three distinct phases to maximize effectiveness. In each of these phases, coaches assign all members of the team specific roles and behaviors to make the timeout as useful as possible. For example, in Phase 2, a coach should use eye contact and a calm demeanor to deliver three key points with illustrations if possible. The first point should highlight a positive aspect of the game so far, and the second and third points should provide corrective feedback. For the end of Phase 3, Andrews (2015) uses the work of Gould (1986) to argue that the timeout should conclude with a collective chant about process, such as "Execute!" or "Focus!"

iii. Debriefs

Like timeouts, debriefs—temporal phases in sports team process—are primarily communicative. A debrief refers to a team process that comes after an event in which team members and others discuss what happened, why it happened, and what they might learn from it for the next event. McArdle, Martin, Lennon, and Moore (2010) explored debriefing through a qualitative study of coaches and players from a cross-section of sports settings, finding that power differentials in the coach-athlete relationship can hinder debriefing efficacy. They argue for a general need for an increase in athletes' active participation in debriefing, as well as for a better understanding of the psychological benefits of the process. This remains consistent with the work of Macquet, Ferrand, and Stanton (2015), who argue that elite coaches understood how to divide the "work" of a debriefing process with other staff and team members.

E. Team coordination

The importance of communication in sport appears most strongly in the study of coordination between players, their teammates, and their coaches. Researchers can study coordination using first- and/or third-person methodologies (Poizat, Bourbousson, Saury, & Sève, 2012). They can operationalize it in a

number of ways, but it always includes an element of communication. One example comes from the LeCouter and Feo (2011) study of mutual orientation of netball teammates during defensive moments in play, and another comes from Passos, Araújo, and Davids (2013) who examined how teams self-organized in field invasion sports. LeCouter and Feo (2011) define mutual orientation as coordinated focus of activities while "making ongoing reference to a complex, constantly changing field of information" (p. 126). These references can come through explicit verbal messages, bodily orientation, or gestures. They found two-word directives, such as "Go left!" less effective in coordinating between players than more specific instructions. This occurs because the two-word directives often did not take teammates' current orientation into account.

Research can also operationalize coordination physically, as interpersonal coordination in a field or court space, with many of these studies coming from Human Kinetics and Kinesiology. These studies examine particular subphases of a game by looking at distance, centrality, and synchronization between teammates, opponents, and the ball. Some examples include studies of 3-on-3 attacking and defensive teams in soccer (Duarte, Araújo, Correia, & Davids, 2012); 6-on-5 play in futsal (Travassos, Araújo, Vilar, & McGarry, 2011); movement stability between two teams in basketball (Bourbousson, Sève, & McGarry, 2010); effects of fatigue and timeouts on spatial organization in basketball (Leite, Coutinho, & Sampaio, 2013); and interpersonal distance in kendo matches (Okumura et al., 2012). Communication scholars may benefit from examination of these studies because they include implicit aspects of nonverbal interaction.

Eccles and Tenenbaum (2004) argue that studies of team coordination remain critical in the field of Sports Psychology because most research in the field focuses on the individual, even though many sports involve teams. They view coordination as timely team integration to operate effectively for satisfactory performance, or arranging team members' actions in a way that leads to effective functioning (Eccles, 2010; Eccles & Tran, 2012). Eccles and Tenenbaum (2004) also argue that "no consideration has been given to the role communication plays in achieving team coordination" (p. 544). While this may not be true in Communication Studies anymore, one can argue that communication as a component of coordination—however defined—deserves more research.

F. Networks

One example of the burgeoning interest in the connection between communication and coordination comes from the proliferation of network studies. Network studies help to understand field dynamics in professional soccer (Clemente, Couceiro, Martins, & Mendes, 2014; Cotta, Mora, Merelo, & Merelo-Molina, 2013, Vilar, Araújo, Davids, & Bar-Yam, 2013), complex system in sport (Balague et al., 2013), and more qualitative topics such as subgroups and cliques (Martin, Evans, & Spink, 2016; Martin, Wilson, Evans, & Spink, 2015). For example, these latter studies have explored the potentially positive role that subgroups may play on teams, coaches'awareness of these groups, their effects on team/individual outcomes, as well as the distinction between subgroups and cliques.

Duarte and colleagues (2012) offer that a biological approach to sports teams may hold value for explaining how repeated interactions may scale to social collective behaviors. This "super- organism" approach relies on taking a networks perspective to sports teams, and explores features of highly coordinated grouping organisms, such as communication systems, functional integration, and altruistic cooperation between teammates. Passos and colleagues (2011) take a neurobiological approach in a study of a water polo team's interpersonal network.

G. Gender

A unique aspect about a sports team setting comes from the fact that it remains one of the few observable settings which regularly segregate participants by gender. From the youth level up to professional leagues, there are men's and women's soccer leagues, men's and women's basketball, and men's and women's hockey. There are also sports that are more "naturally" segregated, such as baseball for men and softball for women. Even though some men play fastpitch softball, and some female athletes play baseball (including my daughter at the time of this writing), the majority of boys and girls are pushed into their respective youth sports leagues from the time they are five years old. For this reason, there are cultural and performance aspects that can be observed in single-gender settings in team sports that researchers may not manage to observe in other settings such as business.

Many of the constructs listed in this review have already examined gender as a variable. This section highlights some of the recent studies of gen-

der differences or female-only populations in communication research:

1. Communication styles. A sample of 299 athletes revealed no difference with respect to gender in the categories of distinctiveness, acceptance, positive conflict, and negative conflict (Sullivan, 2004). Studies like this one that found no differences between male and female styles remain uncommon, although this may result from a bias against unsupported hypotheses in academic research.

2. Cohesion. Members of the Spanish Women's Soccer League who perceived greater role ambiguity perceived less task cohesion with their teams, like many studies of men's teams (Leo et al., 2016). But coaches who have led teams of both genders posit differences between them when it comes to the cohesion-performance relationship (Eys et al., 2015). While the relationship is vital for both genders, it may be stronger for female athletes, therefore making cohesion more important for coaches of women's teams. Social cohesion may also receive more of a focus in women's teams, and may also have more of an effect on performance than for men. Lastly, in the same study, Eys and colleagues suggest that the cohesion-to-performance link has more salience for females, whereas the performance-to-cohesion link has more for males. This means that men's teams may need to achieve success early on to be cohesive, whereas women's teams may need to focus more on both social and task cohesion to be successful.

3. Leadership styles. Female athletes from 12 NAIA schools appeared open to a variety of leadership styles, though, like men, they prefer teaching and instruction as well as supportive communication and do not prefer autocratic methods (Stammers, 2016).

4. Coach-athlete interaction. Female cross country runners prefer to talk to the coaches more about personal topics than male runners do (Childs, 2010). And female judo athletes tended to retain more of their coaches' instructions than their male counterparts (Mesquita, Rosado, Januário, & Barroja, 2008).

5. Game play. Momentum has less of an effect in women's college basketball than men's (Roane, Kelley, Trosclair, & Hauer, 2004). This may have to do with a different style of play—women's basketball tends more to a perimeter-oriented style, at least at the time of this study. Or, it may have to do with coaching or communicative differences.

In addition, gender norms still play a part in how college students perceive sports. Hardin and Greer (2009) found that youth still rate most sports as masculine even though Title IX has increased women's access to sports. We have seen changes in the way that parents and coaches socialize children into sports, but "traditional gender-typing of sports is resilient" (p. 207). An interesting line of research may look at how gender-typing of certain sports affects the culture of teams in those sports, and vice versa.

6. Assessment and Research Challenges

Teams may set goals, motivate players, create a cohesive culture, and use mistakes as learning opportunities, but researchers still find it challenging to assess team performance accurately. Performance assessment in team sports can pose a challenge because of the intricacy of variables that lead to team success. For example, Gréhaigne, Godbout, and Bouthier (1997) delivered two indexes to value performance based on observation of players' actions during matches: the "efficiency index" and volume of play. But even with measures such as these, "authentic" formative assessment remains a challenge for those involved in sports research (Gréhaigne & Godbout, 1998). Tactical assess-

ment has grown considerably in the last two decades, but a sound assessment of team sports must involve variables such as psychological, social-emotional, physical, and tactical, among others (González-Víllora, Serra-Olivares, Pastor-Vicedo, & da Costa, 2015). In addition, some aspects of these variables are challenging to assess, such as creativity (see Memmert, 2015 for an overview of teaching tactical creativity in sport). Garganta (2009) argues for the inclusion of technology into the assessment of tactical behavior to further this area of research.

The number of assessment tools in team sports leads to a muddled field. González-Víllora and col-

leagues (2015) examined seven tools to assess the so-called "invasion" sports—that is, sports in which the object involves moving into your opponent's territory in order to score a goal. Their review contains a multitude of studies that have used these tools. But these tools have limitations. One review focused on two instruments—the Game Performance Assessment Instrument (GPAI) and the Team Sport Assessment Procedure (TSAP)—and found that research has not used either one frequently (Arias-Estero & Castejón, 2014). This may result in part from the complexity of accurately implementing such tools into training. Another limitation stems from the fact that most of these studies focus on soccer.

Sullivan and Feltz (2003) developed the Scale for Effective Communication in Team Sports (SECTS) to operationalize team communication within the sports psychology literature, and Sullivan and Short (2011) further developed the scale with SECTS-2. This scale includes assessment of verbal and nonverbal communication. The four emergent factors of this scale are distinctiveness, acceptance, positive conflict, and negative conflict. The researchers defined distinctiveness as "the exchange of shared, inclusive identity through nonverbal and verbal messages" (Sullivan & Feltz, 2003, p. 14). Their research found that male athletes exchanged more distinctiveness and negative conflict than female athletes, and that close bonds between athletes may predict success.

Communication researchers find a difficulty in that research on communication in sports teams often appears in sports science journals and may focus less specifically on communication. Day, Gordon, and Fink (2012) reviewed some of the literature from organizational behavior and sports science, which includes topics like motivation and difficult career transitions. Overall, they argue for more integration between social science and sports science.

Crown's (2000) approach to using sports teams as a model for organizational work teams specifies that the researcher must note important differences between team types. Crown finds that researchers define sports teams as performance teams, meaning their performance forms the primary product of the organization (Sundstrom, 1999, refers to these as action teams). When compared to other types of teams, a researcher must consider differences in training, structure, time, and boundary conditions. For further discussion of team terminology and differences within the world of performance/action teams, see Ishak and Ballard (2012), which includes a typology of teams that perform skilled, coordinated work in time-sensitive, pressure-packed environments. This includes sports teams, orchestras, military units, bomb squads, and fire crews.

7. Lessons from Sports Teams

Some research looks at how to apply results from other teams to team sports (Cannon-Bowers & Bowers, 2006), but even more so explores the validity of taking sports-specific findings and applying them to teams and organizations in other fields that employ teamwork.

In some cases, these cross-field transfers move to fields very similar to sports in terms of structure and performance, such as medicine. Dutka (2016) and others advocate for the promotion of the "huddle" to improve healthcare outcomes. A huddle in football refers to a short gathering used to ensure that every player knows the plan for the upcoming play. It generally occurs in a tight circular formation that prevents the distraction of participants as they communicate strategies and plans (Glymph et al., 2015). Dutka argues that huddles work well in all contexts because they "create a pattern of practice-level thinking" (Dutka, 2016, p. 161). In addition, they help a staff learn to think like a team, which Stewart & Johnson (2007) holds out as a lesson that physicians can learn from football players.

Furthering the connection between healthcare and sports, Fiscella, Fogarty, and Salas (2016) use sports teams to illuminate lessons for primary care teams from team science research. The most notable lessons include continuous team learning based on pre and post-event discussions, real-world team training focusing on identified teamwork needs, and on-site team coaching.

Many studies that take place in the sports context point to the transferability of their findings to non-athletic settings. Kassing and Anderson's (2014) study of the coach-athlete relationship points out that dissent

functions between coaches and athletes much as it does within a superior-subordinate/organizational context.

This same point appears even in popular press books, such as *Game Plans: Sports Strategies for Business* (Keidel, 1985). Keidel points out something that I myself have noticed in my short career in communication: whether in an auditorium of business school students or as a consultant with business managers, many people become highly engaged when a presenter uses sports teams as a model for business teams. However, Katz (2001) argues that the use of sports language may exclude some members of a non-sports team because not everyone is well versed in all sports. She recommends that those who want to use sports should find examples from both men's and women's teams and should use international sports as well, in addition to making sure to explain the example more completely so it does not appear as being intentionally exclusionary.

Still, people can often visualize teamwork and communication more easily in a sports setting than in business. One example comes in answering the question: What kind of teamwork does this situation or problem require? Keidel (1985) and Katz (2001) both answer the question by looking at the structural differences between baseball, football, and basketball:

• Baseball teams use situational teamwork, according to Keidel. In this sense, they are similar to a business's sales force, or what Keidel calls "high-performing soloists" (p. 7). Players are relatively independent, spatially distant at times, and generally take turns producing value. It's rare that more than three or four players are directly involved in a given play. Katz refers to this as pooled interdependence because overall performance of a team is approximately the sum of individual performance throughout the season. Scoring occurs in spurts, and one player may have an outsized effect on the game.

• Football teams use systematic teamwork, working in platoons and small groups to act as machinelike as possible. Businesses which have production processes involving linked, discrete steps, like a construction company or a fast food restaurant, are analogous here. Coordination occurs through planning and hierarchical direction from staff (Keidel, 1987). Katz refers to this as sequential interdependence because the work of one person or team generally relies on the completion of the work of a teammate or partner group. Production

happens generally by linking together lots of small productive plays.

• Basketball teams appear as reciprocally interdependent in Katz and demand the highest degree of teamwork, according to Keidel, who argues that basketball requires spontaneous teamwork. The teams achieve coordination through "mutual adjustment by the players themselves" (p. 5), not precise direction from the coaches. Analogies from the business field include consulting firms, ad agencies, and task forces. Teams only succeed in basketball if everyone contributes, as only five players complete on the court at a time.

Den Hartigh (2015) used sports to examine complex dynamic performance-related processes in human beings. This work consists of a collection of five chapters that examine these processes in progressively wider and longer time spans. The first chapter offers a fascinating look at how domain-specific expertise correlates to the ability to perceive and reconstruct higher levels of complexity. In this case, the researchers showed soccer players at different expertise levels videos of soccer games and asked them to describe the actions. More expert players constructed higher levels of complexity. In the final chapter, den Hartigh (2015) argues that excellence emerges from individual dynamic network-structures that include personal and environmental variables from a person's experiences, concluding that this model can predict an individual's achievement in sports.

Lastly, Katz (2001) gives some additional caveats to the use of sports teams as as model for workplace teams. Two have already been discussed, involving using the right teams as models, and making sure that any sports talk in the workplace does not seem exclusionary. The other two caveats relate to seeing the differences between sports and the workplace. First, Katz recommends that people do not confuse coaching with managing. In sports, coaching plays a critical role because many of the variables that surround each team in a given league will be relatively similar (e.g., number of players, resources, goals). Instead of focusing on these variables, a successful coach will put energy into day-to-day interactions, which can vary widely between teams. However, in the workplace, managers must make more impactful decisions in the structural arena, such as team design, resource allocation, and direction. Therefore, managers who want to allocate their time effectively will spend more on getting the team set up for success than on coaching the team

(Wageman, 1997). Second, Katz cautions managers not to assume that "winning is the only thing" (p. 66). She points out that business is more ethically complex, with higher stakes, than sports. Sports have clear boundaries and clear participants, whereas business decisions may affect unwilling participants. She includes this quote from Margolis (1999), presented at the annual meeting of the National Communication Association:

> While sports are neatly circumscribed, business is expansive. In sports the field of play is clearly marked—a visible distinction separates what is "in-bounds" from what is "out-of-bounds." Participants include only willing members of opposing sides. The outcome is clearly tabulated in terms of wins and losses. Consequences of how the game is played—injuries, rankings—

are visible, finite, and easy to record. Rarely is any one of these elements so neatly defined in the workplace. The consequences of workplace activity are far-reaching and affect a range of stakeholders—such as shareholders and customers—beyond willing contestants. (qtd, Katz, 2001, p. 66)

Therefore, not all research that takes place in a sports context will transfer neatly to other settings. When comparing how findings in one field might apply to another, it is critical that researchers recognize the ways in which the fields differ. For those interested in sports and communication, it means recognizing that the boundaries, visibility and clarity of outcomes associated with team sports may not always be present in fields such as business, medicine, and education.

8. Conclusion

The study of communication and sports has grown tremendously in the last decade. And while much of the growth has come in studies of media and society, there has also been an increase in the number of quality studies of communication in sports teams, and with good reason.

Team sports are incredibly popular, and communication is a critical component of these activities. Sport also serves as a rich site for data about team communication, and what happens in sports contexts may be of value to other teams. In addition, because sport is designed to entertain, it remains an engaging setting for audiences. For these reasons and others, the study of communication in sport deserves a great deal of attention.

As we look for interesting settings to conduct research, where stories and findings will stand out to our audiences, I implore communication scholars and practitioners to look to team sports. The research sites are all around us: People play games across the world on streets, in small city parks, at schools of all types, and in stadiums that can seat 100,000 people. There is no shortage of data and there is a surplus of interest from sports fans and team scholars. It is valuable for us to recognize the uniqueness of team sports—as well as the ways in which their popularity, interactivity, richness, and engagement make them fascinating and worthwhile sites for communication research.

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Book Reviews

Abu-Fadil, Magda, Jordi Torrent, and Alton Grizzle (Eds). *Opportunities for Media and Information Literacy in the Middle East and North Africa*. Göteborg, Sweden: The International Clearinghouse on Children, Youth, and Media, NORDICOM, 2016, Pp. 149 (English); Pp. 213 (Arabic). ISBN: 978-91-87957-33-8 (paper). 250,00 kr; €26.00. PDF download available from http://www.nordicom.gu.se/sv/system/tdf/publikation-er-hela-pdf/opportunities_for_media_and_i nformation_literacy_in_the_middle_east_and_north_africa.pd f?file=1&type=node&id=37524&f orce=0

The empowerment of citizens is at the core of Media and Information Literacy (MIL). The content in the book *Opportunities for Media and Information Literacy in the Middle East and North Africa* appears as Yearbook 2016 from the International Clearinghouse on Children, Youth and Media at NORDICOM. The Yearbook, published in cooperation with UNESCO and UNAOC "is the 17th Yearbook published by the Clearinghouse and fills a gap in the existing body of literature about the progress of media and information literacy work in different parts of the world" (p. 7). When situated within current events of UNESCO's launching five laws of media and information, the yearbook offers a timely and strong overview of MIL in the Middle East and North Africa (MENA). The editors divide the book into two parts; and present it in two languages (Arabic and English).

Part One, "General Perspectives on Media and Information Literacy in the MENA Region" has four chapters. The first, introductory, chapter by Magda Abu-Fadil successfully meets its goal to "shed light on different national, local, and individual efforts to create more awareness, show the existing shortcomings, and expand the circle of stakeholders involved in MIL" (p. 14). Chapter 2, "Preliminary Comparative Analysis of Media and Information Literacy in the MENA Region," (Alton Grizzle) offers a critical comparative analysis. The author summarizes the chapter by stating:

I first give a sketch of the media and information environment in the region. I then navigate a basic framework for a preliminary critical comparative analysis of MIL in the region using four questions: (1) How do experts in the MENA region conceptualize MIL? (2) What is the underlying rationale for MIL in the Arab State? (3) Are these countries harmonizing the field? and (4) Do they have national policies and strategies on MIL? (p. 22)

In Chapter 3, "Helping Arab Digital and Media Literacy Blossom: Three Years of the Media and Digital Media Literacy Academy of Beirut (MDLAB)," Jad Melki and Lubna Maaliki "discuss the institutional initiative called the Media and Digital Literacy Academy of Beirut (MDLAB) which first emerged as a recommendation of the 2011 conference of the Arab-US Association of Communication Educators (AUSACE) . . . and the OSF-sponsored global study on Mapping Digital Media" (p. 43). The impact of the initiative takes on added context because "three years after the launch of MDLAB, some two-dozen Arab universities teach digital and media literacy in a variety of formats based on curricula developed at the academy." (p. 43). Finally, Chapter 4, "Youth and Digital Media: Drafting a Landscape from Fez and Cairo," by Jordi Torrent, provides insight into educator workshops. Specifically, "in November 2013 and February 2014, the United Nations Alliance of Civilizations (UNAOC) organized two workshops on Media and Information Literacy (MIL) for educators in Cairo, Egypt, and Fez, Morocco. . . . The main purpose of the workshops was to introduce MIL concepts and a framework to the educators, mostly using UNESCO's Arabic version of the Media and Information Literacy Curriculum for Teacher as well as the Doha Center for Media Freedom's teacher resources on MIL" (p. 49) "At the end of the workshops, the educators were asked to distribute in their classrooms a questionnaire aimed at assessing the media habits of their students" (p. 50). Some of the results are discussed.

Part Two, "Media and Information Literacy in the MENA Region from State Policies to Action Research," has nine chapters, each of which focuses on a particular country or state entity. Chapter 5 offers "An Overview from the Occupied Palestinian Territories" (Lucy Nuseibeh and Mohammed Abu Arqoub). The chapter

gives a brief overview of the state of Media and Information Literacy (MIL) in the Occupied

Palestinian Territories (oPt), starting with a brief look at the concept, including why it has to be composite, and why the focus has be on empowerment. It focuses on MIL among the Palestinian population in the West Bank and Gaza Strip (the Occupied Palestinian Territory), including East Jerusalem, among school children, university students, and among the general public. It also examines briefly the overall media context and situation, various MIL activities, and the most urgent needs of the Palestinian population with regard to MIL. (p. 55)

The chapter ends with six viable recommendations. In Chapter 6, "An Iraqi Perspective," Abdul Ameer Al-Faisal articulates that "in a nutshell, Iraq's information technology footprint began in 2003, and has witnessed quantum leaps. It has managed to make clear change in the ITs general performance" (p. 86). Chapter 7 ("An Algerian Perspective") by Redouane Boujemaa, focuses on how "media and information literacy in Algeria never received much attention until the end of the 1990s, due to historical and structural circumstances in Algerian society" (p. 93). The chapter presents an update on literacy in general, media literacy, information and communication technology (ICT), and digitization in the schools. Chapter 8 turns to Morocco ("A Moroccan Perspective" by Abdelhamid Nfissi and Drissia Chouit). The authors present "the state of the art of MIL in Morocco, highlighting the action taken by Sidi Mohamed Ben Abdellah University in this field" (p. 95). The chapter also "addresses the following issues: (1) it shows how media and information literacy is introduced in Morocco; (2) it highlights the actions undertaken by Morocco to promote MIL to better prepare citizens for the information age; and (3) it intends to inform the national and international reader of the main action plans and initiatives which will be undertaken in the future" (p. 95–96).

In Chapter 9, "An Egyptian Perspective," Samy Tayie "admits his country is a bit of a latecomer to the world of media and information literacy despite the proliferation of news and entertainment outlets following transformative years after recent revolutions triggered by the 'Arab Spring' in 2010 and several changes of governments in Egypt" (p. 17). Chapter 10, "A Jordanian Perspective" (Yasar Durra), articulates that "in the present unsettled climate in the region where blame is laid on the failure of education systems to address the issues of pluralism, freedom of expression, and the right to information, it is imperative for the Ministry of Education to integrate MIL in the national

curriculum as a matter of priority" (p. 122). Durra recommends an action plan. Naifa Eid Saleem ("An Omani Perspective," Chapter 11) writes in reference to "the role of the Omani Ministry of Information and Ministry of Heritage and Culture, in addition to an IT body whose aim is to turn the Sultanate into a sustainable knowledge society through ICTs" (p. 18) Saleem states that "these entities' goals were to provide citizens and residents with accurate information in addition to helping people process information and develop critical and analytical thinking. She also calls for the introduction of a curriculum on media and information literacy in schools, urging the Ministry of Education to implement it, given the ministry's experience with learning resource centers that are the equivalent of school libraries" (p. 18).

Chapter 12, "A Lebanese Perspective" by Magda Abu-Fadil, answers one main question and provides the answer. Specifically, Abu-Fadil asks "How do we contribute to media and information literacy in Lebanon? Gaming is one way to channel young people's energy and is a booming industry that caters to multiple tastes" (p. 137). Finally, in Chapter 13, "Empowering Children and Youth in Tunisia," Carmilla Floyd and Gabriella Thinz discuss how they held the first of a series of media and information literacy workshops. They state that "our project, *Empowering Children and Youth Through Media and Information Literacy: Fusing Education and Media* had existed on paper since 2011. Now, in February 2014, we were about to hit the ground to try to transform ideas and concepts into practice for the first time" (p. 141). They report on the background, design, and initial results of the project.

Each chapter in this volume offers beginning insights into MIL in the MENA region. The editors clearly state that "we hope this book will inspire and become a resource for educators in the Middle East and North Africa region looking for opportunities to bring to their classrooms elements of MIL education, with the hope that it will facilitate the development of better understanding among individuals from different religious and cultural backgrounds" (p. 10).

Overall the editors are successful in shedding "light on this promising landscape with the hope that their enterprising work will provide the building blocks on which to erect a solid, yet flexible structure" (p. 14). MIL is continually linked to human rights and lifelong learning. Thus, the 2016 yearbook would serve as a good resource in international edu-

cation courses. It also provides ongoing documentation on media literacy efforts around the world and stands as a testimony to the important work of NORDICOM's International Clearinghouse on Children, Youth, and Media in bringing scholars and practitioners together from around the world.

—Jennifer F. Wood
Millersville University of Pennsylvania

Akdenizli, Banu (Ed.). *Digital Transformations in Turkey: Current Perspectives in Communication Studies*. Lanham, MD: Lexington Books, 2015, Pp. xix, 327. ISBN 978-0-7391-9118-7 (cloth) $105.00; 978-0-7391-9119-4 (eBook) $99.50.

As Turkey prepares to complete a digital transformation roadmap in line with the 2018–2020 Medium Term Program (MTP), the content of the book *Digital Transformations in Turkey: Current Perspectives in Communication Studies* is very timely. "The overarching goal of this book is to provide a multifaceted description and analysis of the role of ICTs in Turkey as well as provide an analysis and critique of the role and impact of new social networking channels and technologies (such as Facebook, YouTube, Twitter) in various communication contexts" (p. xvi). The edited book is divided into three parts.

Part One, "Culture, Society, and the Individual" has five chapters in which researchers employ a variety of research methods including survey research, ethnography, in-depth interviews, and textual analysis. The first chapter, "A Multidimensional Privacy Orientation Scale: Development and Validation with Turkish Twitter Users," by Lemi Baruh, Haluk Mert Bal, and Zeynep Cemalcılar, presents online survey research "conducted on Twitter users from a university in Turkey, that investigates the relationship between attitudes abut privacy and Twitter usage types" (p. 4). "[W]e will introduce and provide data regarding the validity of the Turkish version of a recently developed multi-item privacy orientations scale" (p. 5). Chapter 2, "New Media, Everyday Life, and the Poor: An Ethnographic Inquiry," by Hakan Ergül, Emre Gökalp, and İncilay Cangöz, offers an ethnographic study to answer the overall question of what new media means for the urban poor (p. 21). For Chapter 3, "Online Games and the Spirit of Capitalism: An Analysis of Youngsters and *Clash of Clans*," Billur Ülger used in-depth interviews with 10 young people who frequently

engaged in playing an online game (p. 56) to investigate three hypotheses. "The current study explored young people's narratives about their perceptions on the MMOG *Clash of Clans* in order to uncover its role to the internalization of the Marxian capitalist notions" (p. 60). Chapter 4 ("To Be a Child in the 1980s in Turkey: A Construction of Generational Memory and Nostalgia Through Cyberspace") by Demet Lüküslü reports the results from a textual analysis on 1,377 entries in the online dictionary, Ekşi Sözlük. Specifically, the author analyzes a two-fold proposition: (1) the construction of collective memory through cyberspace; and (2) the double-edged nostalgia accompanying childhood memories—nostalgia over the 80s as well as nostalgia over the past/lost childhood (p. 66). Finally, Chapter 5, "cingeneyiz.blogspot.com.tr: A Case of Representing the Gypsy Identity on the Internet in Turkey," (Özlem Akkaya), uses the two approaches employed by studies on the appropriation of new media by ethnic communities—(1) treating the Internet as a "space" and (2) evaluating the Internet as a "text"—to examine (a) "how being a Gypsy is defined by the blog's discourse and whether this meaning-making practice bears any potential for resisting the dominant cultural perception of the Gypsy"; and (b) "both the interaction within the blog, among the actors from a similar ethnic background, albeit with diverse economic, social, and cultural capitals and the interaction between them and the members of the dominant culture" (p. 83).

Part Two, "Industries, Design, and Practice," has five chapters in which researchers employed blended research methods like the combination of semi-structured interviews with a literature review; conceptual analysis with autoethnography; in-depth analysis, content analysis, and feminist critique.

In Chapter 6, "Changing Power Perceptions: Public Relations Practitioners and Social Media," Ebru Uzunoğlu, Burcu Öksüz, and Merve Genç combine a literature review with semi-structured interviews with public relations professionals in Turkey in order to "increase understanding of public relations practitioners' perceptions of how, if at all, social media adoption has changed their power status within their organizations" (p. 109). Chapter 7, "Integrating New Media into Higher Education: A Turkish Case in Transmedia, Convergence, and Gamification" (Erkan Saka), focused on three concepts—transmedia, convergence, and gamification—to provide a conceptual analysis providing a series of propositions backed up from

ethnographic background from lecturing experiences (p. 123). Banu Akdenizli reports in "Every Now and Then: Journalists and Twitter Use in Turkey" a study that conducted an in-depth analysis of more than 1,700 tweets within a two week period from the 20 most followed journalists in Turkey—as compiled from TwitTurk (twitturk.com), a Turkish Twitter network project. Specifically, Akdenizli explores "what kind of information Turkish journalists share online and if and how they engage with fellow users, and how their overall Twitter practice influences and in some cases redefines their role as professional journalists" (p. 142). In Chapter 9, "Communicating Social Responsibility: A Look at Turkish Corporate Websites," A. Banu Bıçakçı uses a content analysis to examine 20 reputable corporations in Turkey—as ranked by the Turkish Reputation Index 2013—to find out (a) whether the companies disclose information about their corporate social responsibility performance online and (b) if so, what the level of interactivity is in the disclosed information (p. 167). In Chapter 10, ("Our Voices, Our Lives, Our Labors, Our Rights: The Socialist Feminist Collective and The Feminist Politics"), Berrin Yanıkkaya analyzes *The Feminist Politics* journal as a way of discussing "the feminist alternative media as a site for feminist political discussions, struggles, and action" (p. 178).

Part Three, "Institutions, Governance, and Democracy," has five chapters in which researchers employ critical analysis, discourse analysis, ethnography, and content analysis to examine various online activity in Turkey and the issues these raise.

In Chapter 11, "In Quest for Democracy: Internet Freedom and Politics in Contemporary Turkey," Aslı Tunç acknowledges that digital media have become a game changer in Turkey. The author provides a "critical framework of the contemporary politics and technological realities in Turkey" (p. 207). In addition, the (a) political implications of the Internet regulations and (b) developments related to freedom of expression in Turkey are presented. "'#WeAreErdoğan': The Justice and Development Party's Social Media Campaign during the 2011 General Elections" reports the findings of Mutlu Binark, Tuğrul Çomu, Aslı Telli Aydemir, Günseli Bayraktutan, Burak Doğu, and Gözde İslamoğlu, who used discourse analysis and interviews to examine how AKP's Twitter practices in 2011 General Elections were "deployed in order to reinforce hegemony which had been shaped within the discourse of 'National Will' and to establish an Erdoğan cult" (p.

245). Chapter 13, "The Politics of the Digital Technoscape in Turkey: Surveillance and Resistance of Kurds," by Burçe Çelik is an ethnographic study in which the data was derived from in-depth interviews. Specifically, Çelik uses "ethnographic research completed in 2012 with 40 users of communication technologies in different cities in Turkey" (p. 257). In Chapter 14, "The Revolution Will Be Hacktivated: Turkish Marxist Hacker Groups," Murat Akser, presents a discourse analysis using three points of entry to the actions of Redhacks—"an anonymous Marxist/socialist hacker group" (p. 275). The analysis focuses on "the activities of Redhack from the perspective of a soft power revolutionary NGO that hacks for social benefit and acts as an oppositional force for social change" (p. 275). "Using Social Media Dialogically? Political Parties in Turkey and the 2014 Local Elections" (Chapter 15), by Banu Akdenizli and Nazlı Çetin, offers another content analysis, this one focused on a single social media platform—Twitter—as a way to answer four research questions. In order to gain insight into dialogical communication in politics, the researchers examine five Turkish political parties—all "members of the Grand National Assembly of Turkey [which] participated in the March 2014 municipal elections" (p. 289).

Each chapter offers researched insight into the digital transformation taking place in Turkey. Overall the editors succeeded in displaying a variety of current perspectives. The editors were purposeful in achieving their aim "to analyze the genesis, dynamics, and functioning of different communication contexts in relations to digital transformations as they are experienced in Turkey" (p. ix). A major strength of the book lies in the variety of research methods used within the 15 chapters. Thus, the book would serve as an excellent book in information and technology communication, research, and international communication courses.

Each chapter has its own references; the book as a whole has an index.

—Jennifer F. Wood
Millersville University of Pennsylvania

Applegate, Edd. *The Rise of Advertising in the United States: A History of Innovation to 1960.* Lanham: Scarecrow Press, Inc. 2012. Pp. xi, 198. ISBN 978-0-8108-8406-9 (cloth) $61.00; 978-1-4422-4438-2 (paper, September 2014) $27.00; 978-0-8108-8407-6 9 (eBook) $25.50.

Eighteenth century Americans were "citizens," whose ideal worth was measured in public service. Today's Americans are "consumers," whose measure is taken—quite literally—by what they buy. Their shopping data is captured and processed by "analytics," (software that finds connections), and then sold in various configurations. All without consent. People are thus sorted into market segments or "lifestyles" and saturated with incessant "personalized" ads that tag them wherever they travel in cyberspace.

Personalized advertising, or micro-targeting, is the culmination of a "scientific" approach to selling that dates to the Gilded Age. In *The Rise of Advertising in the United State: A History of Innovation to 1960*, Edd Applegate traces the injection of "science" into advertising to the first full page ad taken out in 1879 by John Wanamaker's "New Kind of Store," the Grand Depot in Philadelphia. Department stores were at the vanguard of what William Leach called "a vast culture of consumption," which emerged as a result of the Industrial Revolution. The burgeoning abundance of commodities gave this culture foundation and advertising gave it shape (p. 71). In superseding the earlier "small, cramped dry goods shop," department stores heralded a new era with their sheer grandeur and magnitude. By "the late 19th century, these stores occupied as much space as a city block" and stood several stories tall. A decade later, "the larger department stores often had zoos, restaurants, botanical gardens, beauty and barber shops, museums, fairs, post offices, and libraries, among other attractions" (pp. 71–72). Department stores

> also emphasized decorations such as Egyptian temples, French salons, and Japanese gardens. Concurrently, these stores employed various colors and glass to highlight certain departments and commodities. The latter was also employed for displaying jewelry. Light, too, was employed for specific effects. The sales appeal of some products, for instance, was enhanced by light.
>   The department stores' show windows became a major instrument of promotion. People walking on sidewalks invariably were attracted to what was displayed in the stores' windows. In the early 20th century, windows became ministages in the sense that they were used as props to highlight one or two products. (p. 71)

These theatrical aspects of commodity display, the pageantry and lighting, created a type of alchemy that transcended the commodities themselves. In essence, the department store panorama served as an advertisement for the emerging culture of consumption that would eclipse older agrarian values such as thrift and frugality. As Lasch put it, department stores

> did not simply "sell" commodities: they intervened with advertising skills to amplify the excitement of possibility inherent in the commodity form. They attempted to endow the goods with transformative messages and associations that the goods did not objectively possess. (p. 72)

A vital element of the department store "magic" was electric lighting, which Wanamaker introduced to shoppers in 1878, one year before Thomas Edison patented the incandescent light bulb. Electric light and glass became vital components of commodity display.

Led by Wanamaker, department stores were a boon to the newspaper and advertising industries, spurring the latter to become more "scientific," or what the historian Linda Kowall called the "new 'Wanamaker Style'" of advertising. This style featured the use of consecutive full-page advertisements that mimicked news items. The Wanamaker Style marked the start of Wanamaker's "unprecedented effort to make a science of advertising" (p.77). Wanamaker began educating

> his advertising staff, sending them to visit factories, interview artists, and become familiar with quality, sources of supply, and manufacturing processes. In addition to its impact on modern advertising practices, the Wanamaker Style, soon emulated by other retailers, played a major role in the rapid rise of powerful and increasingly independent city daily newspaper by infusing them with the advertising dollars, which began to provide a substantial and reliable new revenue base. (p. 77)

Applegate traces the beginning of newspaper retail advertising to John Campbell's *Boston News-Letter*, which, in 1704, (its inaugural year), became the first newspaper to run paid advertisements, including this one, the first for a store: "'AT Mr. John Miro Merchant, his Warehouse upon the Dock in Boston, There is to be Sold good Cordage of all sizes, from Spun-yarn to Cables of 13 inches by whole-sail or Retail'" (p. 7). *The Rise of Advertising in the United States* devotes a chapter to seven people or ad agencies that shaped the profession, from P.T. Barnum to the J. Walter Thompson company. Apropos of the subject, the chapters are brisk, entertaining, and informative. Applegate provides an excellent bibliography, which

includes such finds as *The Lasker Story: As He Told It*, in which Albert Lasker, of Lord and Thomas, recounts how a brilliant copywriter, John E. Kennedy, told him all that was "wrong" with their advertisements by analyzing the company's failing "1900 Washer" campaign (the first washing machine ever made). The advertising copy, Kennedy told Lasker, commits "the worst crime of all"; it contains "no news interest." Indeed, Kennedy's copious re-written copy resembled a newspaper article and featured the riveting tag line, "Let this Machine do your Washing Free." Lasker thus credited Kennedy with a "new concept in advertising" (Lasker, 1963/1990, pp. 28–29). Decades later, as Lasker reflected on his career, he wrote: "The history of advertising could never be written without first place in it being given to John E. Kennedy, for every copywriter and every advertiser throughout the length and breadth of this land is today being guided by the principles he laid down" (p. 90).

Within a few years of Kennedy's "1900 Washer" campaign, all new hires at Lord and Thomas had to learn Kennedy's methods, (those who could not, were fired). Sadly, several years later alcohol abuse rendered Kennedy ineffectual and he left the firm in 1906. But in 1908, Lasker hired one of the country's top copywriters, Claude C. Hopkins, on the strength of copy he had written for Schlitz beer. Hopkins used Kennedy's style coupled with extensive field research. Hopkins enjoyed visiting his clients' manufacturing plants to garner ideas as to how to differentiate their brands from the competition. For example, he convinced Quaker Oats to change the name of one of their products from Wheat Berries to Puffed Wheat and created the slogan, "The cereal shot from guns" (p. 91). Hopkins also "realized the significance of conducting tests, using samples, and researching copy to determine which headline, which subhead, and which sentence of body copy attracted the most attention." Hopkins eventually became a mail-order specialist and added a wrinkle to testing by using coupons and samples through the mail (p. 91).

In 1920, market research took a scientific leap when Stanley Resor of the J. Walter Thompson Company hired the behavioral psychologist, John B. Watson, who had been fired from Johns Hopkins University because of an affair. In testing smokers to determine whether they could identify their favorite brands, Watson made a startling discovery: Consumers preferred some products, like cigarettes, for reasons not inherent in product, such as "the atmosphere in which the product had been depicted or the idea the consumer had of the product" (p. 142). Thus we see, in embryonic stage, the logic that drives modern direct marketing campaigns: Learn as much as possible about the consumer—so-called psycho-demographic research—in order to eliminate "risk," i.e., wasting advertising dollars on poor prospects.

The Rise of Advertising in the United States is by no means a complete history of innovation to 1960. One notable absence in Applegate's pages is the story of Bruce Barton and BBDO (Batten, Barton, Durstine & Osborn), who, like John Wanamaker before him, used his advertising prowess as a springboard into the political arena. But perhaps this is too much to ask of such a brief compilation. Nevertheless, in addition to its merits, the book makes a residual or between-the-lines case for the inclusion of key ad men in American history "proper." *The Rise of Advertising* depicts the vast influence such entrepreneurs of bold imagination exerted over the transformation of American culture.

The book includes a select bibliography and an index.

—Tony Osborne
Gonzaga University

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