**Team Sky: Competing Paradigms of Shared Leadership**

**ABSTRACT**

Forms of shared and collective leadership have gained increasing traction within the leadership and management literatures, but disagreement remains regarding their effectiveness. Using case study methodology (Yin, 2013), we examine the shared leadership structure of Team Sky during the 2012 Tour de France. Findings are discussed relative to the effectiveness of shared leadership duties within team competitions, and we introduce an additional co-leadership motivation, *calculator*, to the extant typology from Heenan and Bennis (1999). We conclude by discussing organizational and team structures that are necessary for successful implementation of shared leadership and identify factors that can undermine its implementation.

**Key Words:** Shared Leadership, Teams, Sports

**Team Sky: A cautionary case of co-leadership**

The notion of shared leadership (Pearce & Sims, 2000) has received growing attention within the general leadership literature. Shared leadership, sometimes referred to as distributed or collective leadership, refers to situations in which “leadership is broadly distributed among a set of individuals instead of centralized in the hands of a single individual who acts in the role of superior,” (Pearce & Conger, 2003, p. 1). Likewise, co-leadership (Bales, 1954; House & Aditya, 1997) is a special case of shared leadership that involves the enactment of leadership roles by two individuals of relatively equal standing.  These forms of shared leadership translate well to professional sports teams where leadership is domain specific starting with off-the-field leaders such as front office and general management for professional teams, but on game day power is transferred to on-field leaders such as coaches and coordinators, and is subsequently distributed to multiple athlete-leaders who are responsible for directing team actions during matches (Dupuis, Bloom & Loughead, 2006; Grandzol, Perlis & Draina, 2010; Fransen et al., 2015).

Whereas the role of coaches as defined leaders who direct team performance has been the norm, scholars have identified a need for more comprehensive leadership research in sport settings (Fransen et al., 2015; Welty Peachey et al., 2015). To that end, research has started to focus on the athlete-leader (Fransen et al., 2014). Identifying formal leaders (i.e., team captains) is fairly easy, but when coaches and participants were asked to identify the *best* leader the formalized institutionalization of the “captain” presented problems (Fransen et al., 2015; 2014). These studies suggest that more informal leaders emerged and were preferred by their peers than formal leaders. To the extent that multiple athletes are concurrently regarded as leaders, the form of on-field leadership being enacted falls within the domain of shared leadership.

Our study applies a shared leadership model to a professional sports team to assess its applicability within this realm.  Specifically, we chose Team Sky and their 2012 Tour de France (TDF) campaign to understand the dynamics of shared and co-leadership. This examination of Team Sky will facilitate the identification of critical factors for success for forms of shared and co-leadership within sports teams while also identifying common pitfalls that should be avoided. By way of contribution to the extant literature on forms of shared leadership, we develop the idea of a “calculator” co-leader. We propose this classification as an addition to the three motivational categories established by Heenan and Bennis (1999). Additionally, we explicate specific factors that undermine the successful implementation of co-leadership. We group these factors into two categories: interpersonal relations, and strategic concerns and discuss their potential negative impact along with ways to overcome potential problems.

**THE EMERGENCE OF SHARED LEADERSHIP**

Pearce and Sims (2000) introduced the concept of shared leadership as a shared group-level phenomenon encompassing shared influence among multiple individuals within an operating unit. The introduction of this concept followed contentions by House and Aditya (1997) that the traditional, single leader chain of command was not optimal for contemporary task environments which necessitate collaborative relationships, collective action, and shared goals and values. Instead, they advocated for group leadership as a collective social influence process in which multiple individuals enact leader-like behaviors as necessary to complete team objectives. Due to the diverse skills and different forms of expertise that each individual brings to the team, the use of shared leadership has seen increased use in settings based around knowledge-based teams (Barry, 1991; Day, Gronn & Salas, 2004, 2006; Denis, Langley & Sergi, 2012; Pearce, 2004).

Shared leadership is an applied extension of functional leadership theory (Hackman & Walton, 1986) in which the primary responsibility of the leader is to assess which necessary task-related functions are not being handled adequately and provide necessary resources to get them accomplished. In the case of shared leadership, however, the responsibility for providing necessary direction to accomplish task objectives and team goals is provided via a shared, or collective, process that is distributed across multiple individuals. As such, shared leadership can be differentiated from other group processes like cooperation or helping behaviors which, although they promote efficiency and group effectiveness, do not involve the social influence process of shared leadership (Carson, Tesluk & Marrone, 2007).

Within teams, the development of shared leadership invokes the frameworks of role theory (i.e., role-making and role-taking) and social exchange theory. Roles constitute patterns of behavior among members of a social unit that are established over time, and the role-making process allows individuals to know what is expected of them, and what to expect from others (Katz & Kahn, 1978). Along with these expectations, patterns of exchange and norms of reciprocity are typically established (Emerson, 1976; Homans, 1961). Often times, the ability to exert influence over others within the group hinges on the quality of exchange that certain individuals are able to offer, and ultimately those with more influence come to be recognized as the emergent leaders within the group (Seers, Keller, & Wilkerson, 2003). As the concept of shared leadership has gained acceptance within scholarly team-based research (Avolio, Sosik, Jung & Berson, 2003), several studies have noted the potential benefits of multiple leaders. A general theme of these studies is that having a set of individuals rotating through leadership at specific junctions most applicable to their specific expertise had positive effects on team and firm performance (cf. Boone & Hendricks, 2009; Carmeli & Schaubroek, 2006; Hauschildt and Kirchmann, 2001; Howell & Boies, 2004).

**THE SPECIAL CASE OF CO-LEADERSHIP**

While the work of Pearce and Sims (2000) sparked a renewed interest in the idea of collective leadership, versions of the concept had existed for much longer and variation exists in how different scholars theorize about, describe, and measure the construct of shared leadership. In fact, multiple forms of shared leadership exist under that common header. For example, collective, shared, and plural are often used interchangeably with little regard for distinctions between them. Fortunately, more recent work has attempted to codify these forms and classify extant work into four identifiable paradigms (Denis et al., 2012).

Among those paradigms, is a form labeled *pooling leadership at the top to lead others*. This form of shared leadership is based on dyads or triads that are of elevated importance or stature within the group. These leadership constellations function to bridge the gap between areas of expertise in settings requiring multiple forms of role specialization or differentiation, such as knowledge-based teams. Based on this description, pooled leadership seems to correspond to a concept originally introduced over five decades ago. Bales (1954) coined the idea of co-leadership which is a special case of shared leadership in which leadership is jointly held by two individuals rather than being distributed broadly across group members. His assertion was that these divergent forms of social influence may be best served by assigning them to two different individuals. In recent years, businesses have turned to co-leaders to effectively address the increasingly complex demands of contemporary organizations.

According to Heenan and Bennis (1999), co-leadership represents an alliance between two equally influential individuals within the team. In essence, these two individuals are not different *orders* of leader, but instead are complements to one another. In fact, the co-leader dyad is essentially “a small group in its own right” that evolves through its own role-making development stage (Winter, 1976, p. 349). While each co-leader is an exceptionally talented individual who is worthy of leader-like influence, there is typically one who is more often called upon to play a supporting role, in which s/he does the work, but forgoes the credit which is heaped upon the other member of the leader dyad (Heenan & Bennis, 1999).

This willingness to put aside individual accolades in pursuit of the collective good parallels the experience of being a member of a competitive sports team in which the perpetual message is that team goals and interests are always superordinate to individual awards and accomplishments (Arnone & Stumpf, 2010). Much of the extant work in the area of pooled, or co-leadership, involves knowledge-based teams that are typically structured around cognitive, rather than physical forms of work. Similarly, sports teams have a corresponding pattern of diverse skills sets that each team member brings to bear for competition. This is most notable in teams with specific positions in which the players at each position display expertise related to their specific role playing the sport (e.g., center versus guard in basketball). It is fitting that Miles and Kivlighan (2010) found that the effectiveness of co-leadership is associated with individuals who are dissimilar in their skill sets, like position players in sports, but who share similar cognitions about group goals and expectations about group norms, such as winning championships and putting the team before individuals.

**OUR INVESTIGATIVE APPROACH**

We combined a case study design (Yin, 2013) with narrative analysis (Czarniawska, 2004) to examine the functioning of shared leadership within Team Sky in their quest to win the 2012 TDF. The case study technique is one of the most commonly used for studying management within a sports setting (Andrew, Pedersen & McEvoy, 2011). At the same time, because it aids in understanding the latent meanings embodied in the text, interviews, or other records while accounting for the context in which the identified case occurred narrative analysis, has been suggested as a complement to popular leadership research techniques which focus on either quantitative performance or survey-driven investigations (Novicevic, Humphreys, Buckley, Cagle & Roberts, 2011; Shamir, Dayan-Horesh & Adler, 2005).

Using multiple forms of archival data we examined the impact of co-leadership as manifested during the 2012 TDF race. In terms of objective data, the authors examined team race data including stage times and finish orders as proxies of performance. Leadership behaviors and interactions of the co-leader triad were examined via published interviews with the participants along with publicly available team-sponsored videos that describe the team’s competitive and motivational approach. Secondary accounts of the TDF and the competing teams were consulted as well. After consulting various sources of data and information related to the setting of the study, the authors jointly applied applicable theoretical lenses to interpret the data in relation to the shared leadership framework presented above.

Team Sky’s 2012 TDF campaign was chosen as the case to better understand co-leadership for numerous reasons. First, scholars have noted that cycling is a particularly useful sport for understanding the dynamics of team leadership (Rodríguez-Gutiérrez, 2014; Rogge, Van Reeth, & Van Puyenbroeck, 2013). Second, the preeminence of the TDF within cycling has made it a popular choice for scholars (Bhurruth, 2008; Fink & Smith, 2012; Mourao, 2014; Rogge et al., 2013). In direct relation to studying dynamics of shared leadership forms, the multiple classifications (i.e., types of competitions) within cycling reflect team member specialization which facilitates the emergence of multiple leaders (Rodríguez-Gutiérrez, 2014).

Further, the specific make-up of Team Sky facilitates an examination of the classification system developed by Heenan and Bennis (1999) to describe what motivates individuals to serve as co-leaders (see Table 1). To start, a Crusader is someone who becomes a co-leader in the service of a noble cause. The explicit goal of Team Sky to produce the first British TDF winner would seem consistent with this motivation. Next, Confederates become co-leaders because they believe they are serving an exceptional organization or enterprise. The combination of management style, reputation, and the racers that Team Sky employed created an exceptional organization aligns with this motivation. The last type originally identified are Consorts, who believe they are serving as second-in-command to an extraordinary person. The individual favored to win the TDF would certainly be viewed as an extraordinary individual, and the opportunity to help him win the TDF could be motivation for a Consort. In addition to these, we propose a fourth motivation which we are calling the Calculator. Calculators are willing to serve the organization or another leader with an awareness of potential future benefits for having accepted, or been relegated to, this role temporarily.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Insert Table 1 about here

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**TEAM SKY: AN APPLIED EXAMPLE OF CO-LEADERSHIP**

The presentation of the case will be divided into three subsections. First, additional information about cycling will be presented to provide needed context. Second, there will be a general discussion of Team Sky’s culture and key incidents that bear on the team’s performance in the TDF. Finally, the case will focus on the pivotal stages and results of the 2012 TDF.

**Cycling background.** Within cycling the TDF is known as one of the grand tours, which are the most prestigious races. Even among this rarified group, the TDF is generally considered the preeminent race. Although the TDF is one race and the goal for the top teams is to be the overall winner, there are many discrete stages and competitions within it. Traditionally, and the case in 2012, each TDF team is composed of nine riders. The nine riders on each team represent a mixture of positions and specializations which promotes shared leadership (see Table 2).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Insert Table 2 about here

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The main competition in the TDF is the yellow jersey/GC (General Classification). During each stage of the race, this jersey is worn by the current overall race leader, and at the conclusion of the race it is awarded to the cyclist with the fastest combined time across all stages. The other key type of rider and classification to know are the sprinters who seek the green jersey. Unlike the yellow jersey/GC which is based on time, the green jersey/sprint the winner of this competition is determined on points awarded on each stage rather than time. However, the main contenders for each of these classifications serve as leaders on a team. Specifically, the yellow jersey/GC is the overall team leader while green jersey/sprint contenders exert leadership over the riders designated to support him (i.e., the lead-out train).

The actual composition of a team will depend on its strategy. Teams need to balance aspirations for the GC, Mountains, and Sprint competitions so that they also have enough *domestiques* to be successful. *Domestiques* are riders whose sole purpose is to support their leaders. Teams that aspire to sprint wins in addition to the yellow jersey/GC will have riders designated to support their sprint leader.

**Team Sky.** Although our analysis will primarily focus on three individuals on the team who assumed leadership roles during the race, a distinguishing characteristic of Team Sky is its organizational management philosophy. Team Sky was managed by the concepts of CORE and Marginal Gains (Brailsford, 2015). The description of this philosophy serves as both a preface to our analysis of team dynamics and will be revisited later as a potential confounding component of the team context that impacted the ability of individuals to utilize shared leadership.

CORE is an acronym representing Commitment, Ownership, Responsibility, and Excellence. Commitment is an intrinsic element that is deeper and more consistent than just motivation. Next, Ownership is the process of involving individuals in decision making, as it pertains to individual goals and development. While Responsibility involves accountability it also seems to include role clarification. Finally, all these elements drive Excellence. In addition, Marginal Gains is about how small changes add up. For example, Team Sky brings customized bedding to host hotels to ensure that its riders sleep well. Underlying these concepts and tactics are dedication to the team and consistency.

Despite these managerial efforts, Team Sky still needed a talented set of riders to achieve its aspirations. Further, we contend that it competed using a form of co-leadership, in which leadership duties and roles were enacted by multiple members. The clearest leader of Team Sky was Bradley Wiggins. Wiggins wore #101 which identified him as the team’s main yellow jersey/GC contender and by extension leader. In addition, the team had a contender for the sprint competition, Mark Cavendish. On stages emphasizing sprint finishes, his leadership came to the forefront. Thus, Team Sky exemplified Barry’s (1991, p. 34) description of shared leadership as “a collection of roles and behaviors that can be split apart, shared, rotated, and used sequentially or concomitantly,” which in turn implies that multiple leaders, playing complementary leadership roles, can exist at any given time within a single team.

Team Sky also had Christopher Froome, who arguably emerged as another leader.  Froome was an up-and-coming rider whose talent positioned him as an additional yellow jersey/GC contender, but still somewhat secondary to the then more established Wiggins. Froome’s emergence as a potential team leader occurred in the 2011 Vuelta, another of the grand tours. While Froome’s role at the Vuelta was to support team leader Wiggins, he wound up finishing second and ahead of Wiggins who finished third. Observers suggested that Froome could have won the Vuelta if Team Sky had been willing to change their race strategy (Froome reveals, 2014). After the Vuelta, other teams tried to sign him to be their leader (Benson, 2012) but Froome surprised many by re-signing with Team Sky. This signing consisted of what he believed at the time to be an agreement that he would be a GC contender (Froome reveals, 2014). Using the criteria set forth by Rodríguez-Gutiérrez (2014) in his study on leadership in cycling, Froome would classify as a team leader. During the 2012 TDF, Wiggins and Froome functioned essentially as a co-leadership dyad with duties shared between them, except on the designated sprint stages when Cavendish assumed a primary leadership role directing actions of the team, thus expanding the dynamic to a triad of both formally and informally recognized leaders.

**2012 TDF.** While the TDF is made up of 21 daily races (including a prologue), only a few are pivotal for the GC contenders. Because groups of riders who finish together are given the same time, GC contenders generally neither gain nor lose time on sprint stages, barring an unforeseen event like a mechanical problem or accident. Therefore, the crucial race days tend to be the time trials and mountain stages. In the interest of parsimony, this discussion of the 2012 TDF will focus on those stages that are critical to understand the dynamics of Team Sky.

The first three days were very important to establishing the hierarchy of the Team Sky triumvirate. In the prologue, Wiggins was the top finisher of Team Sky with a second overall finish. This is a particularly enviable spot as it placed him in the role as a top GC contender without the requirement of defending the yellow jersey from day one (i.e., his team could save some energy). In stage 1, Froome had the misfortune of falling and lost a minute and 25 seconds on the day. Team Sky did send back a single rider to assist Froome, but Froome would later contend that if the team viewed him as a true GC contender then the team should have, and could have afforded to, send back more riders so he would have lost less time.

Cavendish would also claim a similar lack of riders to support his efforts in the green jersey/points competition. Although he did win the sprint on stage 2, that win was more opportunistic than a traditional set-up. He would not win another sprint until stage 18 when two things became clear. First, Team Sky would likely hold on to the yellow jersey, which Wiggins had earned in, and retained since, stage 7. Second, it was now obvious that Cavendish would not repeat his 2011 victory in the sprint competition. Thus, the team’s commitment to Cavendish’s concurrent success with Wiggins could be called into question. The necessary strategy to render success for Cavendish was in a subordinate position until Wiggins’s overall win was secured.

Wiggins and Froome achieved personal wins on stages 7, 9, and 19. The first victory went to Froome on stage 7. Although there was not a long-terms strategy in place for Froome to win Stage 7, the conditions were such that an agreement was reached within Team Sky for Froome to get this win if possible. Referring to the agreement for Froome to win Stage 7, Wiggins would later say, “He got his stage win now and that’s good since he’s going to be working for me in the next two weeks,” (Cycling Weekly, 2012). This quote indicates that Wiggins held a view in which Froome’s success on this stage was a way to pacify Froome to comply with an upcoming stretch of stages in which he would play a supporting, rather than leading, role to Wiggins. Additionally, it was clear that Froome’s individual success would be subordinate to Wiggins’s pursuit of the overall win.

In the world of what ifs, the big question for the 2012 TDF centered on what would have happened if Froome was not required to suborn his performance to Wiggins. It is interesting to note that stages 9 and 19 were both individual time trials, as was the prologue where Wiggins established his second place in the race. It was on those days that he distanced himself from the field and then relied on his team to protect him from the other racers. While Wiggins clearly out-performed him on the time trials, Froome was the stronger cyclist in the mountains. In addition to his stage victory, two other mountain stages, 11 and 17, raise more questions than answers.

The established plan for the stage 11 allowed Froome to go on his own in the last 500m, meaning he was free to ride at his own pace rather than pacing himself with Wiggins. Instead of waiting until the final stretch, he made his move quite a bit earlier. With 4km left in the race, Froome made his move, and Wiggins was not able to keep up. Froome claims he got the okay from Wiggins, but recorded audio from Team Sky’s race radios contradicts that account. Race radios enable riders to stay in communication with their team’s managemer who travels alongside the race in the team car. Race radio audio caught an emphatic “No!”, and Froome was ordered to wait for, and support, Wiggins. Froome appears to have disregarded this and made his move earlier. Then, towards the end of the stage, Froome would sprint for the finish line within the pre-approved 500m further separating himself from Wiggins (Gallagher, 2012).

That performance cemented the race order with Wiggins first and Froome second, but all was not right with Team Sky. As Gallagher (2012) would write, “The Sky team meeting last night will have been interesting, but if nothing else the confusion on the mountain on Thursday underlines a real quandary, namely that they now clearly have two riders capable of winning this year’s race. It can be a strong tactical card to play but does not come without its own problems.” One of those problems, according to Sean Yates, Sky’s sport director, was that Wiggins threatened to quit the race (Herman, 2013). Also, prior to stage 11, and perhaps the impetus for Froome to attack when he did was an “interesting anecdote [that] involves then Sky team-mate Mark Cavendish, who was also unhappy during the 2012 Tour after it became clear the team would prioritise the general classification rather than the sprints. Froome says that Cavendish effectively encouraged him to pursue his own goals,” (Cary 2014).

The encouragement from Cavendish to Froome to pursue his personal goals, would seem to be related to Denis et al.’s (2012) description of the fragility of co-leadership. Fragility involves a shifting of leadership as the actions of the various leaders are evaluated by team members, or others of influence within the organization. Here it appears that Cavendish had evaluated the actions and statements of Wiggins as failing to uphold role assumptions and that this caused disillusionment between Cavendish and the team, which he shared with Froome. The antagonism between Wiggins and Froome would rise to the surface again on stage 17. In a repeat of stage 11, Froome wanted to race ahead on a mountain stage but was told to stay and Wiggins. While fulfilling that role, Froome kept looking back and gesturing for Wiggins to hurry up. Many observers and competitors interpreted that action as Froome visibly demonstrating his own prowess, and superior ability, at the expense of Wiggins (Petrequin, 2012).

If one just looks at the race results for Team Sky, they had a very successful 2012 TDF. Wiggins won the yellow jersey, representing the first GC win for a British rider at the TDF, winning two individual stages in the process. Froome stood next to him on the podium in second place, having won an individual stage himself. Cavendish would equal their stage performances winning three sprints, including the coveted stage 20 in Paris. However, there was clear tension and disagreement among this triumvirate.

Such difficulties are not uncommon in situations of co-leadership. While numerous benefits have been posited for forms of shared leadership, there is disagreement about its actual efficacy. Locke (2003, p. 278) notes that it “does not work for a ship to have two—or more—captains” and that vision and core values must be pushed down from the top in a singular voice. Seibert, Sparrowe, and Liden (2003) also note that shared leadership will only benefit group performance in certain circumstances (e.g., shared goals and a high level of cohesion among team members). Information presented above from personal accounts and interviews, would seem to indicate that cohesion among the leaders was lacking along with a less than ideal degree of agreement on the role of attaining of personal goals within the team environment. Although during the race, most post-race interviews were marked by mostly positive and team oriented statements that acknowledged Wiggins as the team leader.

The fallout for Team Sky did not fully manifest itself until after the race. Just as only one of these individuals appeared on Team Sky in the 2011 TDF, there would once again be only one of them in the 2013 TDF. Froome would serve as the leader of Team Sky, and notably would go on to win in 2013 and as of 2018 has won a total of four TDFs. As for the other two leaders, Cavendish would switch teams and Wiggins, the eventual winner of the 2012 yellow jersey/GC, would sit out the 2013 TDF. Officially, a combination no of illness and injury kept Wiggins out, but even before that, Wiggins and Froome only raced together once since the TDF. Further, Team Sky had indicated that it would select Froome as its 2013 leader and Wiggins raised questions as to whether he would serve in the role of *domestique* (Scott-Elliot, 2013). It is also interesting to note that Wiggins would again not be selected for the 2014 TDF, but this time the reason seemed to be the strained relationship with Froome (Lindsey, 2014).

**LESSONS LEARNED**

As part of our narrative analysis, we identified five contextual variables that together could be applied across the three leaders of Team Sky via a comparative configuration approach. This allowed us to examine how different combinations of instrumental variables within each configuration influenced the outcomes of each Team Sky leader. Although causal connections can be difficult to establish; the richness of case study allows for a certain level of inductive reasoning to explicate theory. The results of this analysis are presented visually in Table 3 and essentially show that there were competing conceptualizations of leadership commiserate with personal goals, motivations, and resource expectations. While these will be discussed in greater detail in the sections that follow, they created the foundation for team dysfunction.

As we have noted, while Team Sky achieved a favorable outcome in the 2012 TDF, the path to that victory was tenuous. Moving beyond the 2012 race, the team composition for future races changed dramatically which is indicative of problematic internal relationships among the Team Sky racers. Based on our investigation of this case, we assert that the difficulty Team Sky faced in relation to coordinating their leadership efforts across multiple members, may have been created by different views of how shared leadership duties would be utilized during the race.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Insert Table 3 about here

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Leadership Paradigms.** The leadership paradigms listed in Table 3 reflect both conceptual and practical differences manifested among the leaders on Team Sky. Conceptually, Denis et al. (2012) identified four team or group structures that are conducive to each form of shared leadership. Different communication patterns, hierarchical relationships, and reporting networks are necessitated by different forms of shared leadership. In *pooled leadership*, dyads, triads, and or other small constellations of designated leaders direct the work of a larger group or team. In addition, Denis et al. (2012) describe *spreading leadership* in which leadership duties are relayed or transferred between different individuals, and often across operational levels, to achieve results. Those authors also identify *producing leadership* in which leadership is an emergent property of the team based on relational interactions, influence, and alliances. Finally, they describe a more traditional form of *shared leadership* in which mutual leadership and influence is shared among all group members with everyone serving relatively egalitarian roles.

The starkest contrast among the riders is the leadership paradigm that appears to have been held by Wiggins. The paradigm that seems to best describe Wiggins’ conceptualization is unitary, which it should be noted is not one of the types identified by Denis et al. (2012). His actions during the race, as well as post-race comments, show that he did not willingly apportion influence over the team, nor was he agreeable to sharing team resources and support. Instead, Wiggins viewed the purpose of the team as being to fully support his quest for the yellow jersey. This reflects a more traditional, single-individual, view of leadership.

As for Cavendish, his approach to shared leadership responsibilities seems to align with the spreading model presented by Denis et al. (2012). As a sprinter, neither Wiggins nor Froome would have viewed him as a threat to their yellow jersey/GC aspirations. Cavendish’s leadership role was limited to sprint finishes. This is consistent with the spreading model which envisions leadership influence being dispersed over levels of organizations for operational or collaborative purposes. This is much like an upper-level firm manager designating an operational level manager to oversee a quality initiative which supports the overall goal of the firm. Likewise, Cavendish could be viewed as being designated by a higher-level organizational leader (i.e., Wiggins) to lead a specific operational initiative, with each individual recognizing that leadership of this particular initiative does not place the lower-level leader at the same status level as the higher up leader. Academic research has criticized the spreading leadership approach for creating accountability-related tension and performance pressure among the leaders dispersed among different levels (Currie, Grubnic & Hodges, 2011). While Cavendish’s spreading approach paradigm was not as much at odds with Wiggins’s unitary mindset as was Froome’s pooled approach, it is clear from Cavendish’s stated frustrations during the race that this approach suffered from the criticisms brought forth in the academic literature.

With Froome, the paradigm depends on perceived formality. To the extent that Froome believed he was a formal leader then the pooled paradigm fits best. The pooled leadership structures tend to function best when multiple individuals possess different knowledge, skills, or specialties necessary for effective group functioning across differentiated tasks. Unfortunately, Froome is more substitute than compliment to Wiggins. Further, with Wiggins taking a unitary view of leadership, any attempts at co-leadership or co-influence could be seen as a threat toward his own status and position within the team and any resources devoted toward assisting Froome as detracting from Wiggins’s pursuit of the overall TDF title.

But to the extent that Froome’s leadership emerged during the race, the producing paradigm would be most explanatory. Specifically, this form of leadership is based on emergence from among peers based on the quality of exchange relationships and greater amounts of functional leadership support provided by certain individuals on the team. Not having an expectation of immediately being considered an equal contender with Wiggins, Froome may have envisioned his leadership role evolving over the course of the race as his interactions with teammates along with his individual performance bolstered his standing in the group. Referring back to the conversation between Froome and Cavendish in which the latter encouraged Froome to pursue his own individual success instead of being subservient to Wiggins, it is quite likely that Froome’s pursuit of individual stage wins and bold in-race actions toward that goal may have raised his profile as an up-and-coming leader among teammates.

**Paths to Co-Leadership.** Within co-leadership, Heenan and Bennis (1999) discuss paths to, and qualifications for, co-leaders. The most recognizable co-leader path is the “fast-tracker” or an upwardly mobile individual, and this supporting leadership role represents a rite of passage. Fast-trackers understand that achievement and loyalty are paramount at this juncture, and they tend to be adept at building their own cadre of talented and supportive individuals who are loyal to them. Conversely, some co-leaders are “back-trackers” who still hold a revered status among the group, but who have relinquished the role of highest standing for personal reasons (i.e., no longer want the pressure), or because they are no longer capable of producing at the level that got them to the top. Finally, there are “on-trackers” who despite being qualified were not promoted to the top leadership position. These individuals find ways to thrive as supporting players, but would relish the chance to take top-billing.

On Team Sky, the most obvious designation of Froome would be that of a fast-tracker. He was a rising star, with the talent to contend for the general classification title. Such high-potential employees are often paired with established organizational stars (i.e., Wiggins) in order to allow the junior in the pairing the opportunity to continue to develop under the tutelage of an experienced employee with a proven track record. By comparison, Cavendish had established himself as a formidable rider making him more of an on-tracker, but being a sprinter, it was unlikely that he would be viewed as the sole leader of the team. As for Wiggins, seeing himself as the sole/primary leader of Team Sky, a co-leadership path is not applicable.

**Co-Leader Type.** As originally shown in shown in Table 1, Heenan and Bennis (1999) identified three separate motivations for being a co-leader. Of these, only the Crusader seems to apply to Team Sky. First, Wiggins did not operate as a co-leader and so no motivation is applicable. Second, Froome doesn’t seem to fit into any of the motivations originally designated by Heenan and Bennis (1999) which is why we are amending the original three with the suggested addition of a category we call the calculator.

This makes Cavendish the Crusader on Team Sky. Having won the green jersey/points competition in 2011, Cavendish already was part of an exceptional organization which would lessen the potential of being a Confederate as his motivation. In addition, as a sprinter, Cavendish is not serving as a second-in-command, which eliminates the Consort motivation. That just leaves the Crusader (i.e., serving a noble cause) to motivate Cavendish. The national pride behind Team Sky and its connections to the national cycling team (Team GB) is consistent with this motivation. Further, to the extent that roles are useful for conveying images of oneself to the public (Biddle, 1986; Turner, 2001), the ability to become British champion on a British team would be a power motivation. In terms of theory, serving as the sprint leader for Team Sky could have fit in well with his own identity and self-image and thus would have been correspondent with the image he wished to convey to others as a representation of himself (Hogg, Terry, & White, 1995).

When looking at Froome, it appears that a new motivation is needed to explain his serving as a co-leader. To start, having bested Wiggins in the Vuelta would appear to eliminate being a Consort. There are also reasons to doubt his being a Crusader. Although Froome now races for Great Britain, he originally raced for Kenya. While he may predominantly identify as British, the reaction to his subsequent TDF win in 2013 demonstrated how people questioned the authenticity of that identity (Groves & Griggs, 2016), which would seem to undermine a Crusader’s motivation. This leaves just the Confederate motivation to explain his role as a co-leader. However, perceiving deception on the part of the team’s management (Froome reveals, 2014) and later saying that “people only remember the winner … people turn themselves inside out for each other and they don’t even get a mention” (Hill & Boulting, 2015) does not seem consistent with someone who would be classified as a Confederate.

Having eliminated the extant motivations for a co-leader, the situation for Froome with Team Sky shows that additional motivations need to be identified. That Froome stayed with Team Sky after the 2012 season and emerged as its leader for the 2013 TDF would seem to justify his supporting role. This would mean that serving as a co-leader in 2012 represented Froome paying his dues. While less grandiose than the Consort or the Crusader, it is also a more specific and self-oriented motivation than the Confederate. As such, it would seem to represent a distinct motivational category which descriptively can be referred to as a *Calculator*.

**Individual Goals.** Separate from their co-leader motivations are the individual goals that each of the leaders had for the 2012 TDF. Although it can be difficult to discern goals from secondary sources, a couple of things can be said with some level of surety. First, given their positions, the goals for Wiggins and Cavendish appear to be straightforward. Second, although it may be harder to discern Froome’s exact goals for the race, it seems clear that he had personal goals and that these were not fully congruent with the other leaders on the team.

While Wiggins and Cavendish did have distinct goals for the 2012 TDF, these goals were not inherently incompatible. As denoted in Table 3, the goal for Wiggins was to win the TDF, which was shared by Team Sky’s management. As for Cavendish, he won the sprint competition in 2011. Typically, the goal of a competitor competing the year after they won the competition is to defend it (i.e., win again). Although these are goals are distinct and personal, they are not mutually exclusive. Because of the structure of the race, GC contenders generally do not lose time on sprint stages, it is theoretically possible to accommodate the goals of both leaders.

Although not the team’s main contender, it is reasonable to surmise that Froome also had aspirations for a high, and possibly podium (i.e., top three) finish. This assessment is based on a few factors. First, he previously had appeared on the final podium after finishing second in the 2011 Vuelta. Such success in a recent Grand Tour is generally sufficient to mark someone as a GC contender. Even if Froome did not enter the race with such a lofty goal, it seems unlikely that it would not have emerged as he rose to third in the GC on stage 9 and solidified a podium position by moving up, and remaining in, second position on stage 11. However, if he nursed personal dreams of a win, the explicit team focus on Wiggins, would temper those aspirations to a more realistic goal of a podium finish. Still, placing two riders on the podium, while difficult, was far from unprecedented as that had been achieved as recently as the previous year with the Schleck brothers and Team Leopard Trek.

**Resource Expectations.** Seibert, Sparrowe & Liden (2003) acknowledge that achieving success via shared leadership is challenging, and they provide a limited set of circumstances in which shared, or co-, leadership would be effective. Within this limited set, they include groups based on restricted and generalized resource exchanges in which there are fundamentally accepted norms of high organizational performance goals. To achieve these organizational goals, individuals are often willing to sacrifice their own resources for the good of the collective, or are willing to exchange them without an expectation of immediate reciprocity. This necessary view of resources and reciprocity does not seem to have been present in Team Sky, and pre-race assumptions by each of the three co-leaders resulted in unrealistic in-race resource expectations.

In order to achieve their individual goals, Wiggins, Cavendish, and Froome would each need to rely on the support of their team (i.e., resources). Further, each had reason to believe, that Team Sky’s management would make each of their individual goals into team objectives, at least at some designated points during the race, and by extension provide the necessary resources to achieve them. Unfortunately, Team Sky only had nine riders in total, leaving just six non-leaders to support three individual goals and this would prove insufficient to meet the resource expectations of each of the leaders. The inability or unwillingness of Team Sky to devote the expected resources created conflict and resentment among the leaders.

Frustration with a lack of team resources designated to support them was readily apparent with both Froome and Cavendish. For example, Froome felt that the team both could have and should have sent back more than one rider so that he wouldn’t have lost as much time in stage 1. Cavendish also felt that the team’s management did not allocate enough riders to enable him to regularly contend for sprint victories. By comparison, Wiggins believed that he would have all of the team’s resources behind him and unlike the others, this expectation was realized. The best example of this occurred in stage 11 when Froome who was in a position to make time gains was told to wait for Wiggins and thereby subsume his personal goals to the team.

Despite these violations of resource expectations, the team was able to achieve short term success. Specifically, Wiggins would win the TDF, Froome would stand next to him on the podium, and even though Cavendish would not win the sprint competition, he would still win three individual sprint stages. While successful in 2012, there were long-term implications for withholding resources. Cavendish would leave the team and while Wiggins and Froome would both stay on Team Sky their ability to compete together was undermined, and although rationales were provided, the fact is that only Froome competed in the 2013 TDF for Team Sky.

**LESSONS FOR CO-LEADERSHIP**

When looking at Team Sky in 2012, one question that comes to mind is whether the ends justified the means? Clearly, Team Sky had a successful TDF. Not only did Wiggins win the yellow jersey/GC and secure the first British TDF victory, but Froome came in second. Although they did not win either the green jersey/points competition or the team classification, Cavendish won three stage sprints, including the prestigious final stage in Paris, and the team finished in second place. But does that mean that this is an exemplary case of co-leadership? Having looked at how the 2012 TDF unfolded and what happened to Wiggins, Froome, and Cavendish afterwards, the answer appears to be no.

While Team Sky may not be the poster child for co-leadership, understanding the issues that they faced will help other teams and organizations be more successful when they have co-leaders, especially in cases when they do not have the raw talent of a Team Sky. The case of Team Sky highlights four issues that impact the effectiveness of co-leadership. As shown in Table 4, these issues can be grouped into two pairings. The first pair encompasses interpersonal relations and involves leadership ambiguity and lack of managerial support. The second pairing focuses on more strategic concerns, competing goals and resource limitations.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Insert Table 4 about here

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Interpersonal relations.** Ambiguity in leadership is a factor that undermines the effectiveness of co-leadership within a team. Given the CORE principles under which Team Sky purportedly operated, this should not have been a problem. According to the principle of Responsibility, each person’s role within the team should have been clearly articulated. Of the three leaders in the present case, only Wiggins, wearing #101, was recognized by all as the team’s leader. However, both Froome and Cavendish had reasons, involving both personal ability and assurances from team management, that they would also be treated as leaders. This resulted in animosity that undermined team cohesion and retention.

Contributing to this ambiguity is the second interpersonal factor listed in Table 3, lack of managerial support. At different times, Froome and Cavendish had both reported that Team Sky had indicated to them that they would be a co-leader. However, when it came time for the TDF, they both found themselves in subservient positions to Wiggins. Further, team management appears to have taken too much of a laissez-faire approach when it came to interpersonal conflict (Lindsey, 2014). This was compounded on the resource front where both Froome and Cavendish felt that Team Sky did not provide sufficient tangible support (i.e., riders to pace/lead them).

**Strategic concerns.** This lack of support, in part, reflected strategic decisions that the team’s management had made. In the case of Cavendish, the goal of winning the green jersey/points competition was quashed when the route for the 2012 TDF was announced as the route favored Wiggins (Slater, 2012). Such favoritism for the GC over the points competition is consistent with research (Rogge et al., 2013). Problems should be expected to arise when co-leaders have conflicting goals. Although this may be the case in cycling, more generally goals do not need to be mutually exclusive. Especially if the co-leader is a specialist, the commitment to multiple and/or sub- goals should facilitate the effectiveness of the co-leader.

One reason that the GC and sprint competition can reflect conflicting goals in cycling is a resource issue. Typically, teams only have nine riders and once the race starts, new riders cannot be tapped if someone withdrawals. With three co-leaders, Team Sky was left with only six riders to support them. This number would appear insufficient, especially in the face of multiple goals. Consequently, even if there would be a desire, Team Sky arguably lacked the resources to fully support three co-leaders. This demonstrates how the availability of resources to support all co-leaders becomes a critical factor in their effectiveness.

**Generalizability.** We presented Team Sky as a cautionary tale of co-leadership, in which tensions among multiple leaders threatened to impede their pursuit of team success; however, a classic example from basketball lore depicts how co-leadership roles have been successfully adopted. During the 1979-1980 NBA season, a young rookie named Earvin (“Magic”) Johnson was just starting out with L.A. Lakers who were led by the already legendary Kareem Abdul-Jabbar. The Lakers were playing the Philadelphia 76ers in Game 6 of the NBA finals. In what would become one of the most memorable games in NBA history, Abdul-Jabbar was out due to an injury. Substituting for the veteran leader and playing out of position, Johnson led the Lakers to the championship with 42 points, 15 rebounds, and 7 assists. In his memoir, Jamaal Wilkes, another Lakers star, reminds people of an oft-forgotten fact: Johnson did not lead the team alone. Wilkes served as co-leader, while scoring 37 points and sharing the glory with Johnson (Wilkes, 2004). The aging Wilkes, as a back-tracker confederate co-leader in this game, shared the spotlight with emerging fast-tracker consort Johnson, while on-tracker Abdul-Jabbar was injured. This game marked the beginning of a period of dominant performance by this group of players, coupled with the development of enduring team success. This particular example illustrates a functional meshing of co-leaders at various stages of their careers. Moreover, this was unlike what was demonstrated by the three co-leaders of Team Sky in 2012, in which despite Wiggins winning the GC/yellow jersey, Team Sky did not set itself up for continuity of leadership in subsequent years.

Similar instances can be found in other industries. For example, Robert (Bob) Lutz was a successful automotive executive with a history of success at GM, BMW, Ford, and as the head of Chrysler’s Global Development Division (Heenan & Bennis, 1999). He, too, was an on-tracker who was steadily progressing through the executive ranks. However, in 1992, Lee Iacocca, Chrysler’s CEO stepped down and tapped a different Bob (Robert Eaton) as his successor. Although Lutz aspired to be the chief at Chrysler, he came to realize that position was not in his future. By all accounts, Lutz, a former fighter pilot, had quite an ego and a larger-than-life air about him (Heenan & Bennuis, 1999), but he subverted his ego and desire to assume the head position when he realized a partnership with the new CEO Bob Eaton was ultimately in his best professional interests. Serving in the role of COO to Eaton’s CEO role, Lutz found a tenable arrangement that allowed him to pursue his areas of specialty and develop automobiles and components that rejuvenated Chrysler.

**Going Forward.** The case method was chosen for this study because of the richness that it provides. The more qualitative approach facilitated a more exploratory approach to investigating co-leadership. However, it is also prudent to acknowledge the limitations of this approach. For example, while correlates of effective co-leadership can be discerned, it is difficult to establish causality. Related to this is the lack of control that a naturally occurring case study provides. Froome’s fall in stage 1 clarified the hierarchy of leadership on Team Sky, and a similar external event prevented Wiggins from being selected from the 2013 TDF team. It is difficult to predict how these events impacted the lessons to be drawn from this case study of co-leadership. Similarly, what lessons would have been drawn if a less contentious co-leadership arrangement had been selected?

More research needs to be conducted to determine to what extent fast-tracker and on-tracker co-leadership arrangements lead to antagonistic relationships. Are there moderators that need to be considered that impact the contentiousness of the relationship and/or the performance of the team? Similarly, this case did not involve a back-tracker. A casual observation would suggest that back-trackers, especially those who accept their role, would result in a more supportive relationship and by extension have a more positive impact on the team.

In addition to these questions about co-leadership roles there is also the question of co-leader motivation. As noted in this study, the original conceptualization of three motivations is insufficient for understanding co-leader motivation. Having said that, does the inclusion of the Calculator complete the set of motivations? More research needs to be conducted on what motivates co-leaders and how that impacts team relations and performance. One motivation that appears particularly rich to study is that of the Consort. The nature of this motivational type is such that it may represent a moderator for fast- and on- trackers.

Like many studies before it, while some of our questions have been answered, our study also raises many others. This case demonstrates that the proposed typology of three motivations is insufficient for encompassing the spectrum of co-leader motivation. Additional research will need to be conducted to flesh out the Calculator as well as determining the sufficiency of the typology. Similarly, while the case showed the importance of clearly delineating leadership roles, support from management, goal compatibility, and resource sufficiency, more work needs to be conducted to understand the dynamics of co-leadership.

**Final Thoughts.** Altogether, the case of Team Sky provides important lessons for organizations that seek to utilize a co-leader model. First, organizations should clearly identify who are its co-leaders and then provide them with support. This involves both interpersonal support as well as the provision of necessary resources. Further, complimentary, or at least non-competing, goals should lessen the need for such support while promoting the effectiveness of co-leaders.

In addition to Team Sky at the 2012 TDF there are many other instances of shared leadership within cycling, sports in general, and other industries. A few examples will be discussed below to demonstrate the utility of co-leader framework, but future leadership scholars are encouraged to consider further applications of co-leadership to additional settings both within sports and other industries.

Co-leaders need to be able to stand as leaders on their own right, in terms of talent and particular skills, the latter indeed diverse enough for the team to function competitively. Incidentally, a distinction one might draw from management literature is that co-leaders in management may merely have diverse skill sets and co-lead for optimum efficiency and effectiveness of the organization, while also relieving each other from daily stress and time-consuming routine tasks, as opposed to sports co-leaders who have to actually face the competition directly. Where contemporary industry practice, organizational behavior, theory, and co-leadership in sport settings may be exceptionally aligned, would be instances where trends, environmental factors, and competitive strategy mandate particular actions, by which certain co-leaders (such as the Cavendish sprinter skillset in the present case) with key specializations are promoted to key leadership positions.

**REFERENCES**

Andrew, D. P., Pedersen, P. M., & McEvoy, C. D. (2011). *Research methods and design in sport management*. Champaign, IL: Human Kinetics.

Arnone, M., & Stumpf, S. A. (2010). Shared leadership: from rivals to co-CEOs. *Strategy & Leadership*, *38*(2), 15-21.

Avolio, B. J., Sosik, J. J., Jung, D. I., & Berson, Y. (2003). Leadership models, methods, and applications. In I. B. Weiner, N. W. Schmitt, & S. Highhouse, *Handbook of psychology, Volume 12: Industrial and Organizational Psychology* (pp. 277-307). Hoboken, NJ: John Wiley & Sons.

Bales, R. F. (1954). In conference. *Harvard Business Review, 32, 44-50.*

Barry, D. (1991). Managing the bossless team: Lessons in distributed leadership. *Organizational dynamics*, *20*, 31-47.

Benson, D. (2012, July 16). Froome had options on the table at 2011 Vuelta. *Cycling News.* Retrieved from http://www.cyclingnews.com/news/froome-had-options-on-the-table-at-2011-vuelta/

Bhurruth, M. (2008). A group analytic understanding of the Tour de France: why the fittest rider does not necessarily win. *Group Analysis, 47*(3), 227-239. doi: 10.1177/0533316408094899

Biddle, B. J. (1986). Recent developments in role theory. *Annual Review of Sociology, 12*(1), 67-92.

Boone, C., & Hendricks, W. (2009). Top management team diversity and firm performance: Moderators of functional-background and locus-of-control diversity. *Management Science, 55,* 165-180.

Brailsford, D. (2015). *Sir David Brailsford – CORE principle and marginal gains* [Video]. Retrieved from www.youtube.com/watch?v=THNBIQenywc

Carmeli, A., & Schaubroeck, J. (2006). Top management team behavioral integration, decision quality, and organizational decline. *Leadership Quarterly*, *17*, 441-453.

Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of management Journal*, *50*, 1217-1234.

Cary, T. (2014, May 25). Chris Froome's revelations could damage Sir Bradley Wiggins's Tour de France ambitions. *The Telegraph.* Retrieved from http://www.telegraph.co.uk/sport/othersports/cycling/tour-de-france/10855850/Chris-Froomes-revelations-could-damage-Sir-Bradley-Wigginss-Tour-de-France-ambitions.html

Currie, G., Grubnic, S., & Hodges, R. (2011). Leadership in public services networks: Antecedents, process and outcome. *Public administration*, *89*, 242-264.

Cycling Weekly (2012, July 7). Froome on Tour stage win: I had the legs and went for it. Retrieved from. https://www.cyclingweekly.com/news/racing/tour-de-france/froome-on-tour-stage-win-i-had-the-legs-and-went-for-it-41383

Czarniawska, B. (2004). *Narratives in social science research*. Sage.

Day, D. V., Gronn, P., & Salas, E. (2004). Leadership capacity in teams. *Leadership Quarterly*, 15, 857-880.

Day, D. V., Gronn, P., & Salas, E. (2006). Leadership in team-based organizations: On the threshold of a new era. *The Leadership Quarterly*, 17, 211-216.

Denis, J. L., Langley, A., & Sergi, V. (2012). Leadership in the plural. *The Academy of Management Annals*, *6*(1), 211-283.

Dupuis, M., Bloom, G. A., & Loughead, T. M. (2006). Team captains' perceptions of athlete leadership. *Journal of Sport Behavior*, *29*(1), 60-78.

Emerson, R. M. (1976). Social exchange theory. *Annual review of sociology*, *2*, 335-362.

Fink, A., & Smith, D.J. (2012). Norms in sports contests: The Tour de France. *Journal of Sport Management, 26,* 43-52.

Fransen, K., Van Puyenbroeck, S., Loughead, T. M., Vanbeselaere, N., De Cuyper, B., Broek, G. V., & Boen, F. (2015). Who takes the lead? Social network analysis as a pioneering tool to investigate shared leadership within sports teams. *Social Networks*, *43*, 28-38.

Fransen, K., Vanbeselaere, N., De Cuyper, B., Vande Broek, G., Boen, F. (2014). The myth of the team captain as principal leader: extending the athlete leadership classiﬁcation within sport teams. *Journal of Sports Sciences, 32* *(14),* 1389–1397. http://dx.doi. org/10.1080/02640414.2014.891291.

Froome reveals how close he was to leaving Team Sky in 2011. (2014, May 26). *Cycling News.* Retrieved from http://www.cyclingnews.com/news/froome-reveals-how-close-he-was-to-leaving-team-sky-in-2011/

Gallagher, B. (2012, July 12). Tour de France 2012: Pierre Rolland takes stage 11 as Bradley Wiggins inches closer to overall victory. *The Telegraph.* Retrieved from http://www.telegraph.co.uk/sport/othersports/cycling/tour-de-france/9395870/Tour-de-France-2012-Pierre-Rolland-takes-stage-11-as-Bradley-Wiggins-inches-closer-to-overall-victory.html

Grandzol, C., Perlis, S., & Draina, L. (2010). Leadership development of team captains in collegiate varsity athletics. *Journal of College Student Development*, *51*(4), 403-418.

Groves, M. & Griggs, G. (2016). Riding in the shadows: The reaction of the British print media to Chris Froome’s victory in the 2013 Tour de France. *International Review for the Sociology of Sport, 51*(4), 428-445.

Hackman, J. R., & Walton, R. E. (1986). Leading groups in organizations. In P. S. Goodman (Ed.), *Designing effective work groups* (pp. 72–119). San Francisco, CA: Jossey-Bass.

Hauschildt, J., & Kirchmann, E. (2001). Teamwork for innovation–the ‘troika’of promotors. *R&D Management*, *31*, 41-49.

Heenan, D. A., & Bennis, W. (1999). *Co-leaders: The power of great partnerships*. Hoboken, NJ: John Wiley & Sons.

Herman, M. (2013, September 12). Wiggins almost quit 2012 Tour after Froome attack. *Reuters.* Retrieved from http://www.reuters.com/article/us-cycling-wiggins-tour-idUSBRE98B0C720130912

Hill, A. (Director), & Boulting, N (Director). (2015). Chris Froome [Television series episode]. In. S. Smith (Executive producer), *ITV Sports Life Stories*. United Kingdom: ITV.

Hogg, M. A., Terry, D. J., & White, K. M. (1995). A tale of two theories: A critical comparison of identity theory with social identity theory. *Social psychology quarterly*, 255-269.

Homans, G. C. (1961). *Social behavior: Its elementary forms*. NewYork: Harcourt Brace.

House, R. J., & Aditya, R. N. (1997). The social scientific study of leadership: Quo vadis?. *Journal of Management*, *23*, 409-473.

Howell, J. M., & Boies, K. (2004). Champions of technological innovation: The influence of contextual knowledge, role orientation, idea generation, and idea promotion on champion emergence. *Leadership Quarterly*, *15*, 123-143.

Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* *(Vol. 2)*. New York: John Wiley & Sons.

Lindsey, J. (2014, July 9). Sky’s biggest mistake. *Bicycling.* Retrieved from http://www.bicycling.com/2014-tour-de-france/2014-tour-de-france/skys-biggest-mistake

Locke, E. A. (2003). Leadership: Starting at the top. In C. L. Pearce and J. A. Conger (Eds.), *Shared leadership: Reframing the hows and whys of leadership*, 173-192. Thousand Oaks, CA: SAGE.

Miles, J. R., & Kivlighan Jr, D. M. (2010). Co-leader similarity and group climate in group interventions: Testing the co-leadership, team cognition-team diversity model. *Group dynamics: Theory, research, and practice*, *14*, 114-122.

Mourao, P. R. (2014). When a rider falls: A discussion of the economic costs and determinants for a cyclist's withdrawal.*International Journal of Sport Finance, 9*(1), 53-72. Retrieved fromhttps://ezp.slu.edu/login?url=http://search.proquest.com.ezp.slu.edu/docview/1498436984?accountid=8065

Novicevic, M. M., Humphreys, J. H., Buckley, M. R., Cagle, C., & Roberts, F. (2011). Effective leadership in unexpected places: A sociohistorical analysis of the red tops dance orchestra.*Business Horizons, 54*(6), 529-540.

Pearce, C. L. (2004). The future of leadership: Combining vertical and shared leadership to transform knowledge work. *The Academy of Management Executive*, *18*(1), 47-57.

Pearce, C. L., & Conger, J. A. (2003). All those years ago. *Shared leadership: Reframing the hows and whys of leadership* (pp. 1-18). Thousand Oaks, CA: 2003

Pearce, C. L., & Sims, H. P. (2000). Shared leadership: Toward a multi-level theory of leadership. In M. M. Beyerlein, D. A. Johnson, & S. T. Beyerlein, *Advances in interdisciplinary studies of work teams, Volume 7*: *Team Development* (pp. 115-139). Bingley, UK: Emerald Group Publishing Limited.

Petrequin, S. (2012, July 20). Christopher Froome forced to wait for Bradley Wiggins at Tour de France. *Natinal Post.* Retrieved from http://news.nationalpost.com/sports/christopher-froome-forced-to-wait-for-bradley-wiggins-at-tour-de-france

Rodríguez-Gutiérrez, C. (2014). Leadership and efficiency in professional cycling.*International Journal of Sport Finance, 9*(4), 305-330. Retrieved from https://ezp.slu.edu/login?url=http://search.proquest.com.ezp.slu.edu/docview/1625562668?accountid=8065

Rogge, N., Van Reeth, D., & Van Puyenbroeck, T. (2013). Performance evaluation of tour de france cycling teams using data envelopment analysis.*International Journal of Sport Finance, 8*(3), 236-257. Retrieved from https://ezp.slu.edu/login?url=http://search.proquest.com.ezp.slu.edu/docview/1444522044?accountid=8065

Scott-Elliot, R., (2013, May 7). Tour de France 2013: Blow for Bradley Wiggins as Chris Froome is named as Team Sky leader. *Independent.* Retrieved from http://www.independent.co.uk/sport/cycling/tour-de-france-2013-blow-for-bradley-wiggins-as-chris-froome-is-named-as-team-sky-leader-8605032.html

Seers, A., Keller, T., & Wilkerson, J. M. (2003). Can team members share leadership. In C. L. Pearce and J. A. Conger (Eds.), *Shared leadership: Reframing the hows and whys of leadership* (pp 77-102). Thousand Oaks, CA: SAGE.

Seibert, S. E., Sparrowe, R. T., & Liden, R. C. (2003). A group exchange structure approach to leadership in groups. In C. L. Pearce and J. A. Conger (Eds.), *Shared leadership: Reframing the hows and whys of leadership* (pp. 173-192.). Thousand Oaks, CA: SAGE.

Shamir, B., Dayan-Horesh, H., & Adler, D. (2005). Leading by Biography: Towards a Life-story Approach to the Study of Leadership. *Leadership*, *1*(1), 13–29.

Slater, M. (2012). *Mark Cavendish and Team Sky were too good to be true.* Retrieved from http://www.bbc.com/sport/cycling/19996601

Turner, R. H. (2001). Role theory. In J. H. Turner (Ed.), *Handbook of Sociological Theory* (pp. 233-254). New York: Springer

Welty Peachey, J., Zhou, Y., Damon, Z. J., & Burton, L. J. (2015). Forty years of leadership research in sport management: A review, synthesis, and conceptual framework. *Journal of Sport Management*, *29*, 570-587.

Wilkes, J. (2014). *Memoirs of the original smooth as silk*. 88 STR8 Enterprises: Los Angeles, CA.

Winter, S. K. (1976). Developmental stages in the roles and concerns of group co-leaders. *Small Group Behavior, 7,* 349-362.

Yin, R. K. (2013). *Case study research: Design and methods*. Thousand Oaks, CA: SAGE.

Table 1

Co-Leadership Typology and Motivation

|  |  |
| --- | --- |
| **Co-Leader Type** | **Motivating Factors** |
| Crusader | Serving a noble cause |
| Confederate | Serving exceptional organization |
| Consort | Serving as second-in-command to extraordinary leader |
| *\*\* Calculator* | *Self-oriented motivation, biding one’s time or paying dues for future payoff* |

Adapted from Heenan and Bennis (1999)

\*\* Proposed new co-leader motivation

Table 2

Tour de France Rider Types and Goals

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rider Designation | Rider Type | Focal Stages | Goal/  Classification | Main  Jersey |
| Leader | Generalist/  contender | Time trials and selected mountain | General Classification | Yellow |
| *Domestique* | Generalist/  support | Breakaways/  select | Team | Yellow (bib) |
| Sprinter | Specialist | Flats | Sprint | Green |
| Climber | Specialist | Mountains | Mountain | Polka Dot |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Wiggins** | **Froome** | **Cavendish** |
| Leadership Paradigm | Unitary | Pooled or  Producing | Spreading |
| Path to co-leadership | N/A | Fast-tracker | On-tracker |
| Co-leadership Type | N/A | Calculator | Crusader |
| Individual Goals | Yellow Jersey/  GC Winner | Podium | Green Jersey/  Sprint Winner |
| Resource Expectations | Full team support | Protected | Support for sprint stages |

Table 3

Contextual Analysis of Team Sky leaders during 2012 Tour de France

Table 4

Factors that Undermine Effective Co-Leadership

|  |  |
| --- | --- |
| Interpersonal Relations | Strategic Concerns |
|  |  |
| Leadership Ambiguity | Competing Goals |
|  |  |
| Lack of Managerial Support | Resource Limitations |
|  |  |