

Benefit or Cost? A Rookie Driver's Perception of High Cohesion

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Abstract

Cohesion is a multidimensional dynamic construct incorporating both task and social elements of a team: how members come together and remain unified in pursuit of team goals. Cohesion is vital for team harmony and the many advantages have been extensively studied. Some other research has evidenced the disadvantages of high team cohesion. Cohesion's impact on performance is unclear. Cohesion can impact performance both positively and negatively. High cohesion contributes to harmful group processes such as deindividuation and group think: this could negatively affect performance. The purpose of this investigation was to develop understanding of how the important psychological costs of high cohesion in motorsport impacts performance. This was a mixed method case study of a World Rally Championship team across an entire competitive season. Narrative theory framed the case study process with the main qualitative data derived from interviews with the motorsport driver after each competition of the season and at the end of the season. 7.5 hours of data were thematically analyzed. Performance and cohesion were measured by self-rating across the season. Cohesion was consistently high, but performance wasn't reciprocated accordingly. High cohesion produced 4 psychological costs: pressure to conform with normative influence, rigid demands and methods with narrow goal focus, communication issues and pressure to perform. This case study supports previous literature that proposes that high cohesion potentially negatively impacts performance through these psychological costs which can work to disrupt effective communication. A new model is offered to minimize the detrimental impact on performance produced through the psychological costs of high team cohesion.

Keywords

Case study, communication, conflict, elite, motorsport

Introduction

Cohesion as a multi-dimensional dynamic construct, incorporating task and social cohesion occurring at both the group and personal levels, has been supported in the literature over the last 25 years (Carron, Brawley, & Widmeyer, 1998; Carron, Widmeyer, & Brawley, 1985, 1988; Carron, Coleman, Wheeler, & Stevens, 2002). Although each of these four dimensions are conceptually different,

in real sport situations task and social cohesion are not clearly distinct entities. It is usually through teams coming together to achieve a task goal that social cohesion develops and increases (Rovio, Eskola, Kozub, Duda, & Lintunen, 2009; Vincer & Loughhead, 2010).

Research evidence has demonstrated that cohesion has a multitude of positive benefits to teams: cohesion is desirable and crucial for success in sport teams. However, Buys (1978) proposed that high group cohesion contribut-

ed to harmful group processes such as deindividuation and group think. Carron, Prapavessis, & Grove (1994), in their research on self-handicapping, suggested that team members viewed high cohesion either as a benefit or cost. This was supported by Prapavessis & Carron (1996). More recent research has shown that high cohesion brings psychological costs which are experienced by team members and the team, itself. Hardy and colleagues (2005) demonstrated that athlete generated costs were extensive for both social and task at both individual and group levels. This was supported by Milne and colleagues (under review) in the specific domain of high-performance motorsport.

Motorsport is significantly under-researched in the literature compared to other traditional sports (Filho, Tenenbaum, & Yang, 2015). This research addresses a significant gap in the literature in the representation of elite sport (Benson, Siska, Eys, Priklerova, & Slepicka, 2016). This research presents a case study of a high performing motor sport team across an entire season.

The relationship between cohesion and performance is complex. A meta-analysis found a small to moderate positive relationship between cohesion and performance in sport; this was for both social and task cohesion, in co-acting and interactive sports, across competitive levels, age and gender levels (Carron et al., 2002). A more recent meta-analysis showed a significant moderate relationship between cohesion and performance with the relationship stronger for task than social (Filho et al., 2015). High cohesion and performance are considered to have a reciprocal positive relationship with performance having a stronger influence on cohesion than that of cohesion on performance (Carron, Eys, & Burke, 2007; Carron et al., 2002; Senecal, Loughhead, & Bloom, 2008; Williams & Widmeyer, 1991). However, various specific studies have contradicted these general findings with an experimental study in 2000 demonstrating that cohesion had no impact on performance (Grieve, Whelan, & Meyers, 2000), a case-study in 2009 demonstrating social cohesion impacting negatively on performance (Rovio et al., 2009), and a recent study in elite youth sport reporting that cohesion was not a predictor of performance (Benson et al., 2016). A recent meta-analysis also found that the task cohesion and performance relationship in sport had a much weaker relationship than in a business setting (Castano, Watts, & Tekleab, 2013). This meta-analysis supported earlier significant meta-analyses across group settings indicating both social and task cohesion are significantly related to performance (Beal, Cohen, Burke, & McLendon, 2003;

Mullen & Copper, 1994). However, importantly social cohesion in sport had a weaker influence than task (Filho, Dobersek, Gershoren, Becker, & Tenenbaum, 2014). Cohesion may impact performance both positively and negatively.

The purpose of this study was to examine the relationship between some of the most important psychological costs of high team cohesion and performance in motorsport. Some studies have indicated that high cohesion may not always improve performance (Prapavessis & Carron, 1997; Rovio et al., 2009). Milne and colleagues (under review) and Hardy et al.'s (2005) study indicated that a high number of athletes do experience the costs of high team cohesion. This could have negative repercussions for them personally and for the team itself. Some athletes will not perceive that they experience the costs but may be subject to the implicit and subtle group processes that result as a cost of high team cohesion. Other athletes may not experience the costs of high team cohesion. Others may not experience these costs all the time but only at certain points. Milne and colleagues (under review) identified significant costs for motor sport competitors to be perceived pressures and rigid demands and methods. This supports the previous research (Carron, Prapavessis, & Grove, 1994; Hardy et al., 2005; Prapavessis and Carron, 1996; Rovio et al., 2009). This evidence has suggested that high social cohesion produces more group level costs and high task cohesion produces more individual level: this supports high social cohesion producing costs that have a more direct negative impact on performance than high task cohesion. However, high performance motorsport athletes were found to experience rigid demands and methods as a high cost of task cohesion, and this is related to and overlaps with pressure to conform which is a mechanism for disrupting communication. This offers a different mechanism for potentially hampering performance.

Purpose

The study aims to provide an in-depth understanding of how one elite team motorsport performer experienced the costs of high team cohesion over the course of an entire season and how these costs influenced performance. The research questions were:

- (1) What were the costs of high team cohesion experienced?
- (2) When did these costs of high team cohesion impact performance? And,
- (3) How did these costs of high team cohesion impact performance?

Method

Previous cohesion-performance research has called for longitudinal real-life qualitative studies (Hoigaard, Safvenbom, & Tonneston, 2006; Rovio et al., 2009). In-depth case-study design was most helpful in developing understanding of the complex and unique nature of the phenomena (cohesion, costs and performance) by examining one motor sport athlete's real-life experiences of the team processes across an actual season (Flyvbjerg, 2006; Hodge, Henry and Smith, 2014). Multiple sources were utilized for data gathering (Hodge et al, 2014). A narrative methodology framed the case study and data analysis (Lieblich, Tuval-Mashiach and Zilber, 1998; Riessman, 2008). A narrative methodology allowed exploration of the costs experienced by the athlete and a deeper understanding of when and how they impacted performance (Carless & Douglas, 2012). This is an approach which has been used successfully in similar case-study and cohesion-performance research (e.g. Collins & Durand-Bush, 2010; Hodge & Smith, 2014).

Recruitment and Participant

Due to the nature of the study, the sporting context and challenges of recruiting and working with elite sport performers, and gaining access to elite teams competing in championships, purposeful sampling was used to recruit a participant. The study identified and recruited a current elite motorsport team who would be available and willing to share information on team dynamics and performance across the course of an entire season. Full ethical approval was obtained. A pseudonym of Michael is used hereafter to ensure confidentiality. Michael is the driver of the number 2 car in his co-acting motorsport team. He works closely with his co-driver, engineer, mechanics, and the team manager. The number one car is given more of the time and budget: Michael is expected to support them. This was Michael's first competitive season with the team.

Design, Procedure, and Data Analysis

The data were collected over the course of an entire season from the first competition to the last competition over a ten-month period. The main data, which were qualitative, were derived from telephone interviews with the participant lasting between 20 and 40 minutes after every competitive event. There was a total of 13 interviews with the driver to establish his perception of cohesion, and the other members of the team were not interviewed. Cohesion was measured quantitatively with the participant scoring both social and task cohesion out of ten, along with a further summative score, for every com-

petitive event: thus measuring changes in cohesion across the season. The telephone interviews were semi-structured around five key areas designed to generate discussion of the participant's experiences of cohesion, performance and the team processes over the course of the season: 1) cohesion; 2) team dynamics; 3) pressures; 4) communication; and 5) wellbeing. After each competitive event the telephone interview was conducted as soon as was feasible and handwritten notes were typed up with additional commentary and links made to theory and research. The holistic content analysis conducted, focused on the important themes and issues recurring, resolved and unresolved, across the interview stories and examines their significance. This analysis of content focused on themes, types, commonalities, patterns, as well as omissions or inconsistencies to them, within the data (Lieblich et al., 1998). The holistic content or thematic analysis meant focusing purely on content and the "whats" of the story- key is that this was a within case study "By theorizing from the case rather than the component themes (categories) across cases." (Riessman, 2008, p.53). Themes are identified but not disconnected from each other or the account itself; they are analyzed as core meaning themes within the frame of and with keeping a clear sense of the entire story as related by the participant (Lieblich et al.,1998).

Subjective measures represent an athlete's performance more accurately than purely objective measures as they take into consideration environmental and situational factors such as weather, terrain, performance of competitors and injury (Filho et al., 2015). Outcome performance (results) was monitored, recorded and analysed as part of the research process but due to impact of these situational uncontrollable factors on performance results, subjective measurement and a self-performance rating, for both individual performance and team performance, was the key performance data for the study (Castano, Watts & Tekleab, 2013). The participant gave a numerical score out of ten for his own performance and a numerical score out of ten for the team's performance after every competition.

A semi-structured interview was conducted via skype after the final competition of the season. The interview guide sought clarification and elaboration on the wider context of the occurrence of the specific costs, the participant's understanding of these costs and how this affected performance. The interview began with general questions to establish a relaxed informal atmosphere and give an over-view of the season: For example, What were your personal goals and the team goals for the season? Explain how and why these changed/developed and were re-

aligned as the season progressed? How do you feel about your and team performance throughout the season? The second part of the interview was structured around the key themes identified from the telephone interview data: rigid demand and methods, conformity, communication issues, team goals and processes. The final part examined incidents from four specific competitive events in the first half of the season where there was a clear anomaly between cohesion and performance and costs of cohesion had been identified by the participant. It was designed to stimulate elaboration from the participant in order to develop a more in-depth understanding on how these costs impacted performance. The participant now had hindsight which created a wider perspective. The interview lasted approximately 60 minutes and was digitally recorded and transcribed verbatim. The analysis of this combined data produced the final themes and 4 specific costs of high team cohesion.

There was ongoing analysis of data as it emerged over the season along with the telephone interviews. Key themes were identified in context of previous research and linked to the point of the season these occurred along with discrepancies and other significant points noted (Rovio, Arvinen-Barrow, Weigand, Eskola, & Lintunen, 2012). There was a rigorous content analysis after the final event of the season and also after the final interview.

Results

What were the costs of high team cohesion experienced?

- Costs of High Team Cohesion
- Pressure to conform (with normative influence)
- Communication issues
- Rigid demands & methods with a narrow goal focus
- Pressure to perform

When did these costs of high team cohesion impact on performance?

There were significant dips in performance at the four competitive events B, E, J and L when the costs of high team cohesion detrimentally impacted performance. The data are described and interpreted in the following. Cohesion started at a high level and increased over the first few competitive events (Figure 1). Cohesion was maintained at a consistently high level across the season with minimal fluctuations and ended higher than it start-

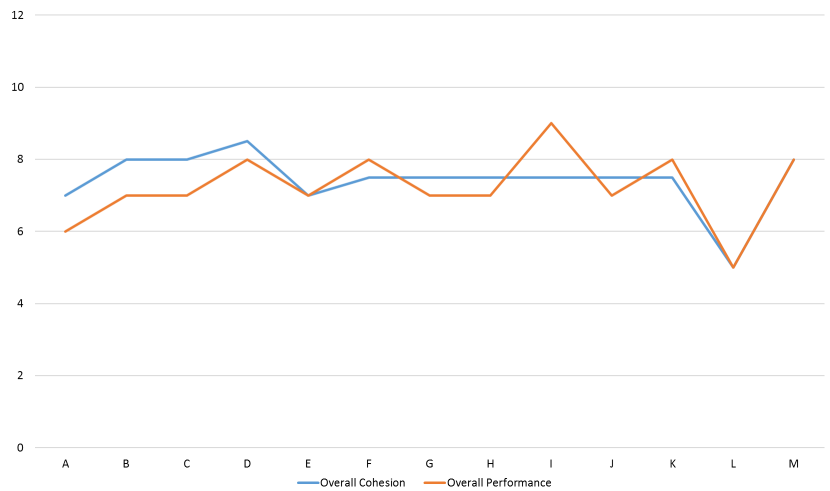


Figure 1

Overall cohesion and overall performance across the season

Note. The alphabetic letters represent each competitive event of the season in order. Michael rated scores for overall cohesion and performance at each competition on a 10 point scale.

ed. Overall performance did not match cohesion levels and fluctuated across the season. An initial rise near the start of the season was then followed by significant dips at competitive events E, J and L. Michael's individual performance fluctuated considerably and did not correspond with the stable high cohesion levels (Figure 2). There were significant dips in his performance at events B, E, J and a plummet in performance in competitive event L.

Social cohesion started high, higher than task, and remained consistently high across the season while own performance and team performance were not reciprocated (Figure 3). Performance fluctuated and dipped despite high social cohesion levels.

Task cohesion was very consistent across the season with minimal fluctuations and ended a little higher than it started (Figure 4). This consistently high level of cohesion was not matched with the fluctuations and dips in performance.

The overall performance remained higher than individual performance but showed similar slightly less dramatic fluctuations and dips as individual performance (Figure 5). Social cohesion and performance were not reciprocated. Fluctuations and dips in performance did not correspond with the high consistent task cohesion across the season (Figure 6).

How did these costs of high team cohesion impact performance?

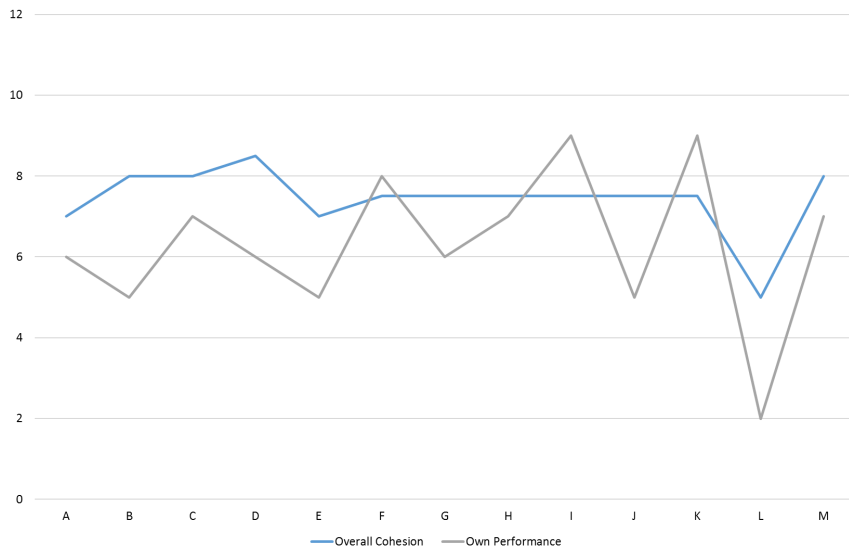


Figure 2
Overall cohesion and Michael's own performance across the season
Note. The alphabetic letters represent each competitive event of the season in order. Michael rated scores for overall cohesion and his own performance at each competition on a 10 point scale.

The pressures created around goal alignment issues and unclear communication led to “inconsistent driving” by Michael prior to the first dip in competitive performance (an accident). The participant had a clear aim “to make it to the end of the (competition) with no mistakes. We won't be paying too much attention to the result, but rather looking to learn as much as possible.” This aim became unclear when he performed better than was initially anticipated by the team and he was then given “mixed messages” and encouraged to push harder.

This affected him psychologically as he didn't want to take a too risky approach and wanted to stick to the original goal. There was pressure to conform to the management and team expectations that now differed from those the participant had initially agreed and accepted. An accident followed a pace notes error as indirect repercussions of the increased pressures.

Cohesion and particularly social cohesion then increased as the team, Michael included, pulled together to repair the car. Cohesion peaked two competitions later, despite another accident, but as cohesion increased so did pressure to perform: goals now became about stage

times rather than the over-riding learning goal for the season. After the second accident which was “just a small mistake on my part” the increased cohesion within the team was evident along with the increased pressure to perform: “I couldn't really get over how supportive everyone at (the team) was. To go out and do what the team requested was the only way to repay them properly...seeing the progress in pace.” After a good recovery there was intense pressure which is the pressure of ‘not wanting to let it slip’ which meant Michael felt that he wasn't able to relax or drive naturally. This carried through to the next competition where there was a clear dip in performance as the pressure not to have an accident and not to let the team down had a detrimental effect on the driving: “the determination not to make a mistake got in the way of the driving.”

At the third dip, outcome performance was good (8th) but pressures detrimentally impacted driving and performance. The team had achieved 4th, their best result, in the previous event but this meant Michael was now expected to perform and to finish the event. He explained that dip 2 and dip 3 came after narrow team goal focus and rigid methods added

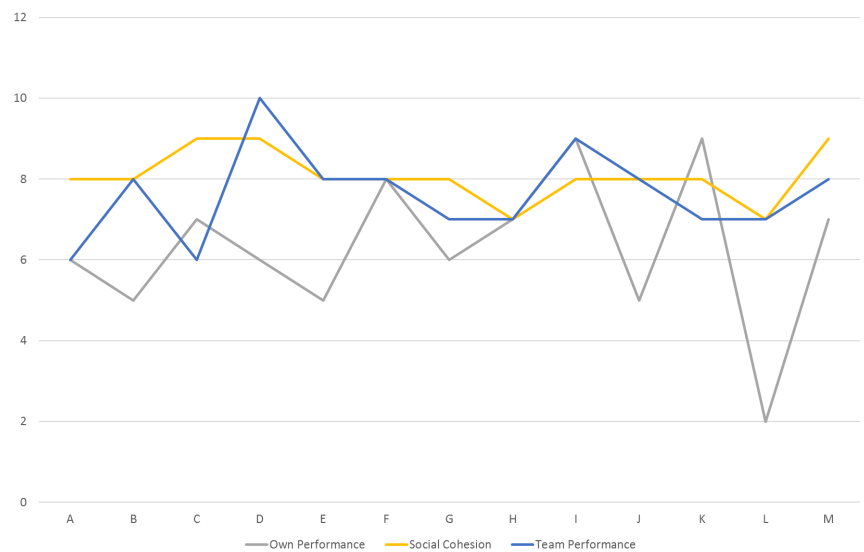


Figure 3
Social cohesion, Michael's own performance and team performance across the season
Note. The alphabetic letters represent each competitive event of the season in order. Michael rated scores for social cohesion, his own performance and team performance at each competition on a 10 point scale.

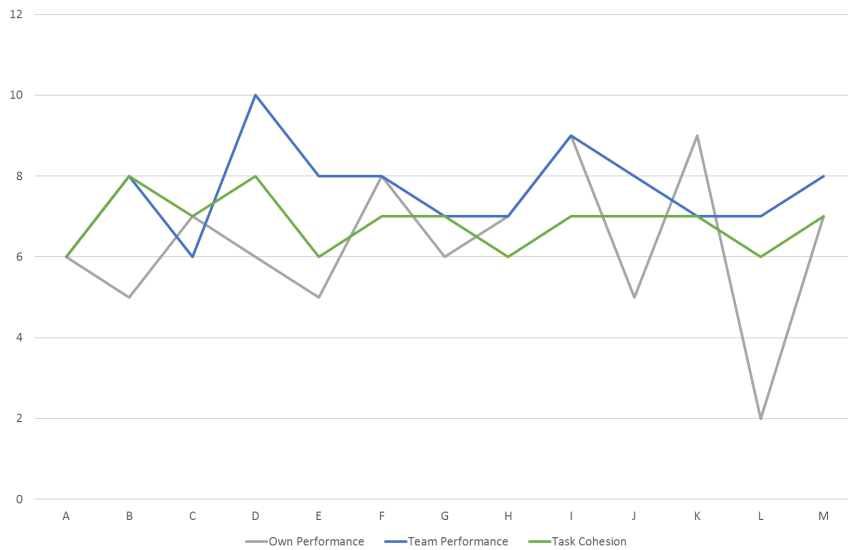


Figure 4
 Task cohesion, Michael's own performance and team performance across the season
 Note. The alphabetic letters represent each competitive event of the season in order. Michael rated scores for task cohesion, his own performance and team performance at each competition on a 10 point scale.

psychological demands and pressures: “When the goal was to be reliable and not make mistakes it quite possibly put pressure to finish events on more than one occasion and probably hampered what could have been a better result ... I would say definitely events like E and J that we were going to for the first time you know that the pace was not really what it was let's say on the previous event or the event afterwards ehm so that you knew there was more there to come, because it was a new environment and you didn't feel comfortable, the risk of an accident was high so we didn't push and the risk was probably less than what it could have been.”

The final and biggest performance dip of the season occurred when cohesion was still high, and off the back of a good performance, were he described himself as “overly keen” in the desire to prove he could repeat success on differing terrain. This dip could be explained to some extent by an over-confidence which led to unreliability in driving and a “disaster”. He felt if they had been more cautious, they could have prevented it. A communication clash at this event was because when they were in no position to fight, the driver and co-driver were instructed to make changes of position/goals

they didn't agree with. There is evidence of pressure to conform again, the team wanted to play it safe and Michael didn't feel that was necessary and neither did his engineer. In order to maintain cohesion, they went along with the majority opinion. This pressure to conform had a detrimental impact on performance.

Discussion

It is an expected and accepted part of elite level sport that athletes are not just able to perform under pressure but to excel under extreme pressure. Pressure has been described as a “double-edged sword” in that it can increase performance but also has the potential to hamper performance (Gardner, 2012). However, high cohesion adds to the pressure. Previous research (Hardy et al. 2005; Milne et al., under review) has shown that pressures are a significant cost of both task and social cohesion identified by athletes themselves. Perceived pressures incorporate a general array of pressures particularly pressure to conform and pressure

to perform in order to carry out team responsibilities and in order not to let highly valued team members down. In this case study, in the second dip of the season, pressure to perform had a detrimental impact on performance. Mi-

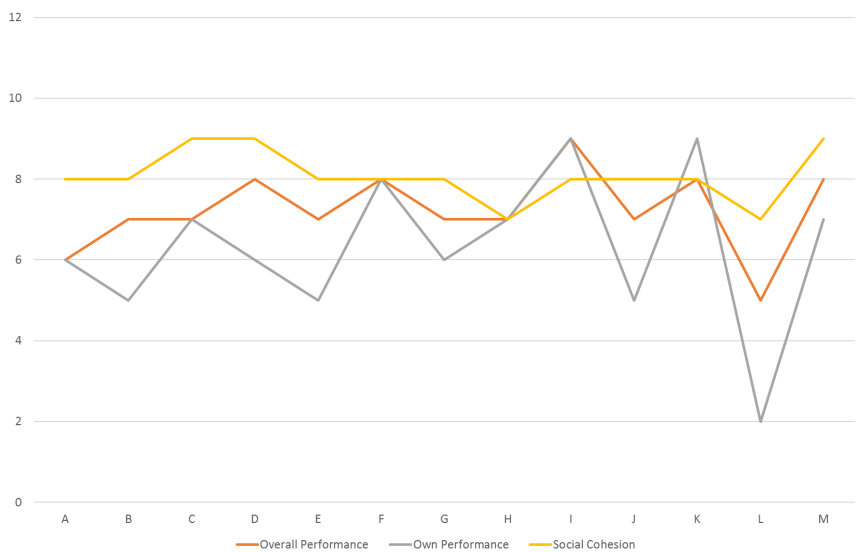


Figure 5
 Social cohesion, Michael's own performance and overall performance across the season
 Note. The alphabetic letters represent each competitive event of the season in order. Michael rated scores for social cohesion, his own performance and overall performance at each competition on a 10 point scale.

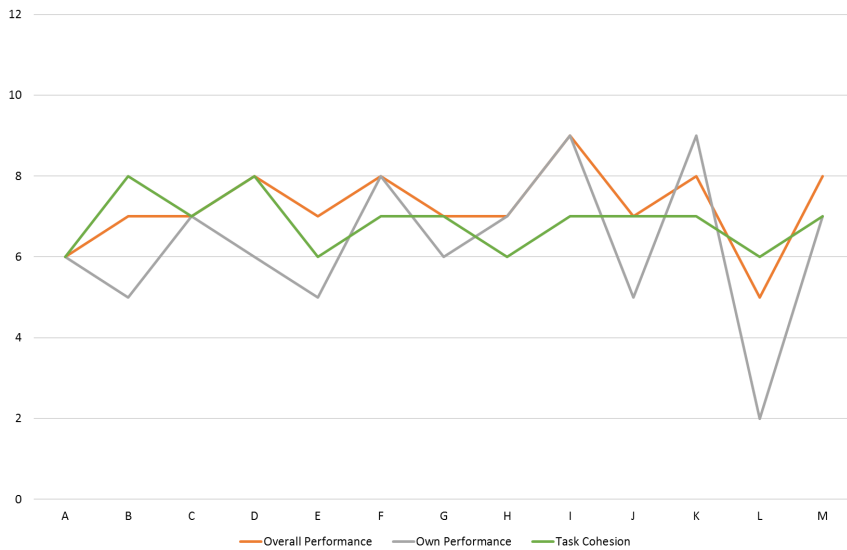


Figure 6
Task cohesion, Michael's own performance and overall performance across the season
Note. The alphabetic letters represent each competitive event of the season in order. Michael rated scores for task cohesion, his own and overall performance at each competition on a 10 point scale

Michael emphasized that “with the driving it (increased pressure) does hamper your ability to relax and drive naturally.” Social cohesion was valued highly and was part of the motivation and drive for performance outcomes; Michael considers his team mate to be “I guess their friend”. Michael wanted to “repay” his teammates, for the way they positively responded to his lack of performance, with performance. This supports previous research evidencing that social cohesion can intensify the cost of pressure to perform.

Cohesion requires a coming and sticking together and so a conformity: pressure appears within a highly task cohesive team in the guise of pressure to conform. In this study, Michael emphasized how there were differences in views and opinions within the team over the course of the season, but that cohesion attempted to minimize these differences and create conformity: “There was a lot during the year, especially with tires, that I didn't agree with or my gut didn't agree with but ... I just went with it because it was more important to finish the event than push boundaries for better results.” He did not challenge situations throughout the season: in order to maintain cohesion within the team he went along with the majority view.

In a case study of a Finish ice-hockey team over a season pressure to conform and group think resulted as a cost of high cohesion and had a detrimental impact upon performance (Rovio et al., 2009). Both normative and informational influence harmed the communication processes within the team so that although the team appeared

cohesive and close there was no longer honest or open communication. The group pressure, which was subtle and implicit, within this highly cohesive team resulted in deindividuation. Even if there were individuals within the group who were high “individuator”, they would be unlikely to disagree with the collective agreeing opinions of other group members when the team was under negative circumstances or intense pressures (Boucher & Maslach, 2009). Similarly a study examining the role episode model with football players shows how a highly cohesive team subtly drives pressure to conform and for uniformity: “Really knowledgeable, good players seem to be really into this . . . so I thought yeah, I should definitely be into this.” (Mellalieu & Juniper, 2010, p.409). The process of cohesion and striving for high cohesion attempts to create and maintain uniformity, to minimize conflict.

Conflict is under-researched in the sport literature. After one earlier study examining the conflict-cohesion relationship (Sullivan & Feltz, 2001), there was a paucity of research until some important recent studies all of which reiterate the importance and relevance of continued focus and development of research into conflict in the sporting literature (e.g. Leo, Gonzalez-Ponce, Sanchez-Miguel, Ivarsson, & Garcia-Calvo, 2015; Paradis, Carron, & Marin, 2014). Conflict has been investigated extensively in small group research and is defined as “a dynamic process that occurs between interdependent parties as they experience negative emotional reactions to perceived disagreements and interference with the attainment of their goals” (Barki & Hartwick, 2004, p.234).

Michael said that there were “a lot of” incidents in terms of “tires and set up and certain tactics” when he didn't voice his disagreement with a group decision and was swayed by the group to accept a decision. He asserted that “there were definitely occasions like that where I thought it was better to keep quiet because of my position in the team at the time.” He put this down to being new and not wanting to cause discord within the team. He emphasized that “there would have been” pressure to conform within the team to things he did not feel comfortable with. Normative influence is strong. Michael was new to the team, in his first competitive season at this level, and wanted to be accepted into the group fully, he did not want to rock the boat or go against the majority of the team. So he resisted conflict. Conflict in teams is a complex issue with both potential for negative and positive

outcomes. If conflict is not approached and resolved it will have a damaging long-term impact on any elite team (Paradis et al., 2014). However, conflict can potentially create opportunities for creative thinking, improved decision making and practical problem-solving strategies: producing possibly better results for the team (Dionne, 2000; Jehn, 1995; Paradis et al., 2014). Importantly, having a variety of ideas in a group or team is advantageous. When individual team members perceive pressure to agree with ideas and actions instead of offering alternative ideas and actions then as a group there is potential to miss a better alternative or solution. This case study supports Milne and colleagues' (under review) idea that team members view conflict as having only negative outcomes and so seek to resist conflict. Conflict appears to be the antithesis to cohesion and so the stronger the cohesion the stronger that resistance will be. This process breaks down and harms communication processes.

Normative influence was evidenced as a significant cost and consequence of high cohesion. This is a negative group process. These findings support previous research where high social cohesion has been demonstrated to increase normative influence and compliance (Apitzsch, 2009; Prapevessis & Carron, 1997; Rovio et al., 2009). In retrospect Michael felt that he had been wrongly swayed on various decisions across the season and wished he had spoken out. This pressure to conform had detrimental impacts on performance throughout the season. In the first dip of the season, there was pressure to conform to the management and team expectations to change the original goals and to aim for a higher scoring performance. Michael, at this early stage in the season and wanting to be accepted fully with the team, was swayed to go against what he wanted to do which led to a poorer performance. In the third and fourth dips in performance cohesion was high but there was pressure to conform to changes in goals which impacted negatively on group processes and on performance. Conformity and normative influence caused ineffective and in fact damaging communication within the team.

Rigid demands and methods are usually evident, and to some extent necessary, in an elite sporting environment. However, with this being the most cited group level disadvantage of high task cohesion in the study by Milne and colleagues (under review), motor sport co-acting team members also perceive this as a distinct disadvantage exacerbated by high team cohesion. High cohesion requires a rigid way of working which again works to avoid conflict. There can be a failure to address problematic issues. This becomes a system which curbs crea-

tive thinking and is a strong disadvantage at the group level damaging the team through narrow goal focus and so failure to think out of the box and find different solutions (Milne, under review). The rigid demands and methods and narrow goal focus of the team operated negatively for Michael in this first season. The team demanded that he follow a change of goals from wide learning goals to performance goals. When the participant was probed by the interviewer as to why the personal and team goals changed throughout the season, he hesitated and responded "Ehm, throughout the year I think, ehm, maybe on certain rallies there was tension..." As team goals changed, he had to change and align his personal goals. He did not feel comfortable with this. Reduction in autonomy reduces intrinsic motivation and personal value found in competition and in sport (Decci & Ryan, 2002; Hodge & Smith, 2014). When learning turns to performing only for the team there is a narrowing of the goal focus and a reduction of personal consideration and individual in-put. Within a team situation, team goals are the priority, but ideally personal goals should be taken into consideration encouraging individual self-development while allowing precedence of team outcome and success (Rovio et al., 2012). There is limited research into elite athletes and teams; and there is minimal research examining motivational climate in elite sport (Hodge et al., 2014). Michael is in a co-acting team where they are the subordinate team and although he is motivated by performance and achieve his personal best in every competitive event, the team sometimes requires and demands that he must get round and score points to contribute to the wider team, this means driving more cautiously to prevent an accident. Michael described an instance of goal tension in the first dip of the season where the initial goal was not to crawl but to finish and "We won't be paying too much attention to the result" but after they "just naturally increased the pace a little during the event" he was encouraged to go faster and keep an eye on the car in front in order to try and achieve points and performance results for the wider team. He emphasized at this point at the start of the season it was important to stick to goals but that because this was only the second race of the season there was a greater pressure not to let the team down and to do what they wanted. He describes his emotional response to this: "it is just that it makes you feel uncomfortable I think and almost a little bit pissed off because you had been told to come here to do something and all of a sudden you are being told to do something else so yeah it is difficult to process and then it makes you rethink what

do I do here and that's when you make the decision to go with what they say or stick to the original goal.”

The Cohesion Costs' Reduction Model

This research sought to develop more understanding of the psychological costs of high team cohesion in sport teams and when and how these costs impacted detrimentally upon performance. From this, a key aim was to offer strategies to minimize the significant potential costs in order to improve individual welfare and team performance illustrated in Figure 7. The first practical application is to raise awareness and counter the popularly held belief that cohesion is intrinsically and naturally only a positive phenomenon. This research has begun this process. The raised awareness of this among team members and practitioners will allow them to be pro-active in prevention of the instigation and development of these processes. These processes may be subtle and implicit. Raised awareness may allow a more open viewpoint that prevents the negative process being activated. Cohesion undoubtedly has multiple positive outcomes. Cohesion can also have negative outcomes. When coaches and team managers are aware of the potential negative consequences of a highly cohesive team, they can seek a team environment which cautions against attempts to indiscriminately increase cohesion. Ultimately, the participants in Milne et al.'s (under review) and in Hardy et al.'s (2005) study believed a balance of social and task cohesion was the best team environment. This research supports that excess is not a good thing and that aiming for balance is beneficial for a team.

Secondly, and building on this awareness, is for team practitioners to view cohesion as a starting point for team success. It is vital to continue to build both task and social cohesion, but team practitioners should also focus on creating team expertise and team coordination through processes of establishing and sustaining effective communication (Filho et al., 2015). Communication is a prerequisite of cohesion: if the cost of high cohesion is then subtle disruption in effective communication through implicit group processes it will also then disrupt ongoing cohesion levels within the team, these negative subtle group processes are often unintentional. Therefore, emotional intelligence qualities of communication have emerged as a practical solution. Early research suggested that cohesion might impact performance through its effect on communication (Eccles & Tenenbaum, 2004). Although there has been little development here, research evidence suggests that high task cohesion would increase performance outcomes but that high social cohesion would impact communication processes and increase

negative processes that could negatively impact performance (Apitzsch, 2009; Prapevessis & Carron, 1997; Rovio et al., 2009).

Emotional intelligence is defined “as the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions.” (Salovey & Mayer, 1990, p.189). Self-awareness and self-regulation are the core of this: through development of these skills there can be a following of social awareness and relationship management. Together these operate to establish and sustain effective team communication and work to prevent, or at least minimize, the emergence of the negative group processes that will compromise effective communication. Self-awareness is a key characteristic of both an effective coach/manager and an effective athlete team member (Chan and Mallett, 2011; Goleman, 1998). Self-awareness allows for a conscious decision at a point where high cohesion is subtly influencing group dynamics and group processes. Thus, self-awareness and self-regulation are the core of a communication strategy within a cohesive team. Through development and sustaining of these skills there can be a following of social awareness and relationship management which are fundamentally the key components of stable effective team communication.

This research has evidenced how conflict avoidance, which cohesion works to produce, is not always a good thing. An important part of this practical strategy, to prevent the break-down in effective communication, which is a cost of high cohesion, is an acceptance of conflict as healthy in a team environment. Effective strategies and procedures for conflict resolution should replace conflict avoidance. This should be developed into team communication policy.

Thirdly, and closely relating to effective communication is to counter conformity and rigid demands and methods with creativity and flexibility in decision making and goal procedures. Rigid demands and methods are a potential cost of a highly task cohesion that encompasses the tight structure and demands within a highly cohesive team that reflect and increase a narrow goal focus: this means that team members are made to feel that they do not matter as individuals and become cogs in a spinning wheel. Transformational leadership can embrace conflict and encourage individuality and diversity of thinking; the practical solution is to develop a transformational leadership mind-set within a team particularly focusing on the two aspects of individual consideration and fostering acceptance of group goals simultaneously (Hardy et al.,

2010). This means an encouraging of diversity and individuality within a team, a true valuing of the individual and their in-put to the team, and most importantly allowing personal goals to be part of the wider team goal setting process. This means that practically part of fostering of group goals must also focus more on individual goals and personal development goals and a recent team-building intervention study could be used as an example of good practice (Rovio et al., 2012).

Fourthly, and finally, in order to minimize the potential costs of team cohesion within a team there must be a reduction in performance pressure. Of course, in elite sport everything depends on performance. The core of the strategy to reduce the potential cost of increased pressure to perform should be a celebration and encouragement of multidimensional narratives in sporting lives: all of performance, relational, discovery, embodiment and hard work narratives should be celebrated and encouraged.

Limitations and Future Research

The focus on the motorsport performer's perceptions of cohesion in his rookie season and the potential costs produced rich data: interviewing the co-driver and team manager or gathering observational data would create an even fuller understanding in future studies. Due to the constraints of working with an elite athlete over the course of the season a self-report measure of cohesion was adopted. This self-report measure included the participant's perception of both social and task cohesion. This measure is limited as is all self-report data by social desirability response. This was to some extent counter-acted by the study design and procedure and use of a narrative framework which aimed to develop trust and honest communication. Future research utilizing the GEQ to include measuring the cohesion dimensions of attraction to the group and group integration at both task and social levels would take more account of the complexities of the changing cohesion dimensions and capture subtle differences in more detail. This research has supported previous research and developed evidence that important costs of high team cohesion can detrimentally impact performance, these costs are interactive processes which are influenced by a multitude of other factors. Therefore, future studies should analyze the importance of these specific costs by examining each of them individually in relation to cohesion and to performance.

Conclusion

The results suggest that, although psychological costs are identified separately as personal and group level costs

by athletes themselves, costs are related: it would be most useful to simply identify them as costs of high task cohesion and/or high social cohesion. Cohesion when it becomes uniformity and conformity has negative outcomes and can detrimentally impact performance. Implementing the Cohesion Costs' Reduction Framework as part of a team building intervention to minimize the costs while at the same time increasing team members' perceptions of cohesion would be an interesting research study. Future research should further examine the role of conflict avoidance in highly cohesive teams.

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