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Extending the Conversation: Employee Resilience at the Team Level

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In the focal article, Britt, Shen, Sinclair, Grossman, and Klieger (2016) are rightfully concerned that the topic of resilience may become a "quicksand" term that is used by different audiences in different manners. However, we

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are more optimistic than the authors of the focal article, as several researchers at the team level of analysis have outlined frameworks that have attempted to tease apart team resilience from related constructs such as adaptation. Likewise, such work has also provided a deeper understanding of the factors that serve as antecedents to team resilience and adaptation, as well as how both constructs can shape subsequent team outcomes. Accordingly, the "sand" is starting to congeal at the team level of analysis, and we bring in these insights to extend the conversation about resilience.

In part, the recent attention provided to resilience and adaptation is attributable to the realization from both researchers and practitioners that individuals within organizations are increasingly faced with dynamic environments that put a premium on flexibility (e.g., Grant, 1996). In response, research has considered various individual-level factors in the hope of pinpointing which individual characteristics are most apt to shape resilience and adaptation (e.g., Baard, Rench, & Kozlowski, 2014). Given that teams are increasingly being used within organizations, researchers have also become increasingly interested in resilience and adaptation at the team level of analysis. We agree with Alliger, Cerasoli, Tannenbaum, and Vessey (2015), who suggest that individual and team resilience are not synonymous, as a group of resilient individuals may not function as a resilient team. However, it is extremely likely that the team context can impact the resilience and adaptation of individual members. Although the focal article focused on individual resilience, it did not adequately consider the team level of analysis.

Therefore, the primary goal of our commentary is to extend the conversation presented by Britt and colleagues by including the lessons learned about resilience and adaptation at this higher-level of analysis to provide a more complete picture of the phenomena. We use examples from a population who demonstrates considerable resilience over the long haul: teams of astronauts on long-duration spaceflight missions. The authors have particular knowledge of these teams, and given that NASA continues to focus on how to create individual and team resilience and adaptation, this context is particularly relevant to the current conversation. Further, leveraging the structure used for the focal article, we introduce several recommendations for a multilevel consideration of resilience and adaptation within organizational settings.

Resilience and Adaptation: Considerations Within Teams

From a historical perspective there are numerous examples of Earth-bound exploration teams within extreme conditions that demonstrate that certain teams may be more equipped to deal with environmental disruptions than others. For instance, numerous articles and books have been written about Ernest Shackleton and, in particular, how his leadership engendered re-

silience within his entire crew who survived in Antarctica for more than 2 years after their ship, the *Endurance*, became trapped in the ice (e.g., Morrell & Chapparell, 2001). In contrast, Charles Francis Hall's crew on the *Polaris,* who were attempting to be the first expedition to reach the North Pole, responded to the challenges with the belief that failure and death were inevitable (e.g., Parry, 2009). Given this apparent lack of team resilience, the crew of the Polaris suffered from constant infighting, and the leader was presumably poisoned over the defiance. Although these examples provide a "picture" of the need for resilience and adaptation within teams, when we started to look at the research addressing resilience and adaptation at the team level of analysis, we witnessed a similar phenomenon as articulated by Britt and colleagues, namely that there has been substantial construct confusion regarding team resilience.

In particular, similar to individual resilience, team resilience has also been conceptualized as both a capacity and a demonstration or team process (Sutcliffe & Vogus, 2003; West, Patera, & Carsten, 2009). Interestingly, when one looks to the related literature of team adaptation, a similar confusion exists. Namely, team adaptation has been viewed by some as an inherent capability of certain teams (e.g., Gibson & Birkinshaw, 2004), whereas others conceptualize team adaptation as a process of adjusting strategies and behaviors within a team (e.g., Cannon-Bowers, Tannenbaum, Salas, & Volpe, 1995). That said, within the team level of analysis, there has been some development on this front. Specifically, Maynard, Kennedy, and Sommer (2015) recently provided a framework of team adaptation that described the capacity of a team to make needed changes as *team adaptability*, although the actual demonstration of such capacity by making adjustments to relevant team processes is *team adaptation process*, and such adjustments can lead to various *team adaptive outcomes*. Although we feel that making this distinction addresses the comingling of terms that has occurred within these literatures for some time, it does not fully address how adaptation is distinct from resilience.

To address this point, we view *team resilience* as a shared belief held by the team that it can respond to disruptive and challenging events, recover from setbacks, and thrive as a team under these conditions. Therefore, rather than a capacity or a demonstration of such a capacity, we view team resilience as an emergent state or one of the "cognitive, motivational, and affective states of teams" (Marks, Mathieu, & Zaccaro, 2001, p. 357). By making this distinction, we aim to address the conceptual overlap between resilience and adaptation evidenced by Britt and colleagues and by various team resilience researchers (e.g., Carmeli, Friedman, & Tishler, 2013). As such, we view team resilience as one of several outcomes that are included within the *team adaptive outcomes* category. Accordingly, rather than primarily considering indi-

vidual personal health outcomes that arise from resilience as was done by Britt and colleagues, here we adopt the framework articulated by Maynard, Kennedy, and Sommer (2015) that suggests that team adaptive outcomes can include not only personal health outcomes but also team performance and emergent states such as resilience, team cognition, cohesion, collective efficacy, and trust. We feel that this view of team adaptation and resilience may provide a more holistic view of the implications than is articulated within the focal article.

Likewise, we suggest that the relationship between team adaptation and resilience is reciprocal in nature, whereby a team that adapts in the face of a disruption is apt to enhance the team's feelings regarding resilience, and possessing such resilience is likely to set the team up for better adaptation in the face of future triggers. There is some evidence to support such a reciprocal relationship within the literature. For example, Gomes, Borges, Huber, and Carvalho (2014) examined another extreme team sample, nuclear power plant employees, engaging in emergency simulations to assess a number of potential resilience antecedents. The authors suggest that team resilience may have benefited from diversity of knowledge, communication, smaller and modular plans, and reorganization (small groupings) for discussions. In addition, once team resilience emerges, it may support team processes. A longitudinal study of student teams by West and colleagues (2009) linked team resilience to improved team cohesion and cooperation after an initial period. Taken together, these findings provide support for resilience as an emergent state phenomenon that may relate to team adaptation and mediate team-level outcomes.

Revisiting and Extending Recommendations

By considering resilience at the team level of analysis and conceptualizing it as an emergent state, and thereby distinct from both a team's capacity (i.e., team adaptability) as well as the demonstration of such a capacity (i.e., team adaptation processes), a number of the recommendations posed by Britt and colleagues may be revised or extended. In providing our recommendations, we draw on real-world situations of teams living and working on spaceflight missions. This context provides a highly analyzed environment where individual and team task performance has received significant attention. Moreover, the authors are particularly aware of how resilience is a top-level concern for NASA. Thus, we draw on knowledge about the way astronauts are trained and expected to maintain resilience over time, often over years of training before and between spaceflights as well as during long-duration spaceflights.

Recommendation 1. What Gives Rise to Resilience? Not Just Adversity

Throughout the focal article, Britt and colleagues focus their attention on adversity as the primary impetus for resilience. We feel that the term adversity may be too narrow in its focus, as prior researchers have articulated that numerous positive and negative events may prompt a team to adapt and be resilient (e.g., Alliger et al., 2015). We feel that this is how the literature could also be characterized to date—too narrow. In response, we suggest that the resilience and adaptation literatures need to examine different types of triggers and their unique effects on team adaptation processes and resilience.

For instance, Maynard, Kennedy, and Sommer (2015) outline that triggers can be categorized as either team- or task-based, and each category is apt to place a greater emphasis on adjustments to either interpersonal or action processes, respectively. Interestingly, research conducted to date has predominantly focused on task-based triggers, and the impact of team-based triggers is unknown. This gap in the literature could be problematic as a series of interviews that we conducted with various NASA personnel suggests that team-based triggers may occur as frequently as task-based disruptions and may have more lasting effects within the team. In part, these lasting effects may be attributable to the fact that task-based disruptions can often be planned for to some extent, whereas team-based triggers may have more uncertainty. Accordingly, we see the need for future resilience research to consider the specific type of trigger that is giving rise to adaptation and seek to understand how each type of trigger has different impacts on adaptation processes and resilience.

Recommendation 2. It Isn't All Positive: A More Complete Picture of Adaptive Outcomes

While looking at the title of Britt and colleagues' initial recommendation (stop calling everything good resilience), we were hopeful that they would address the point that the literature thus far has only assumed that resilience and adaptation garner positive results for the individual or team. However, they did not approach their recommendation in this way, so within our recommendation, we would like to consider this point. To date, the organizational team adaptation literature has not considered that adaptation can result in negative consequences. In fact, such research has only focused on the positive outcomes of adaptation and resilience, which Britt and colleagues acknowledge in their primary emphasis on individual health outcomes. Although such individual health outcomes are a part of the picture, we contend that they are not the complete picture. For instance, there are numerous instances of astronauts acknowledging salutogenic experiences from spaceflight. However, there are also instances of astronauts not having such positive experiences.

For instance, an astronaut during the Mir program provided an example of when team context both impaired and enhanced individual resilience. This astronaut was assigned to a mission on a team of Russian cosmonauts, with whom he had limited experience due to replacement of his original Russian team members just before launch (Burrough, 1998). Being thrust into a long-duration mission with effectively two strangers may have been a factor in the astronaut encountering depressive symptoms during the mission. This example demonstrates how adaptation within a team (i.e., a change in team membership) can have adverse impacts on both the team as a whole and the particular members of the team. However, this mission also demonstrates the positive outcomes of team adaptation as this Mir team later actively assisted the astronaut in overcoming integration challenges and increased his individual resilience repository by facilitating an adjustment that made his workload more sustainable.

Accordingly, this story provides a compelling example of how a team context can shape individual resilience and also how team adaptation can have both positive and negative outcomes. Given this fact, we believe it is naïve to think that every time an individual or team adjusts in the face of a trigger that they do so in a way that results in only positive outcomes. Leveraging this thinking, Maynard, Kennedy, Sommer, and Passos (2015) outlined a framework of different types of adaptive outcomes. Specifically, they considered positive consequences as *meritorious adaptive outcomes*. In contrast, they labeled the potentially negative consequences of team adaptation as *maladaptive outcomes*. These two categories of team adaptive outcomes are not the only potential consequences that can emerge. Instead, teams can also merely adjust their processes in such a way that they maintain the performance levels that they experienced before the disruption, also known as *maintenance adaptive outcomes*. However, these various types of team adaptive outcomes have yet to be empirically examined, and thus we would suggest that future research examines not only the factors and processes that may lead to meritorious (i.e., positive) adaptive outcomes but also what may prompt either maladaptive (i.e., negative) or maintenance adaptive outcomes.

Recommendation 3. Not Just Time: Other Temporal Considerations

We were pleased to see Britt and colleagues highlight the need for future resilience research to give more attention to the role of time. We would like to extend this recommendation to include several temporal considerations that we argue would greatly strengthen future work on resilience and adaptation. Namely, we contend that researchers need to more fully examine when a trigger is occurring within a team's lifecycle. How a team adjusts to a given trigger may depend on what stage in the team's development the team is

forced to adjust. If it happens too soon, will the team be ready? In contrast, if the team has been together for quite some time and then faces a trigger, will the norms and rituals that have developed within the team impair the team's ability to adapt and be resilient? Beyond when the trigger occurs, we also see value in considering how a team has performed on prior triggers, as such performance is likely to shape resilience and, therefore, adaptation processes on subsequent triggers. Each of these research questions bolsters Britt and colleagues' suggestion for longitudinal designs as this is the primary way in which to examine team reactions to triggers over time; thus, NASA is strongly encouraging longitudinal research designs with their teams.

In addition, research has yet to fully examine the impact that continual or sporadic disruptions can have on a team's resilience, and we feel it would be valuable to consider whether too many disruptions can impair the team. Likewise, if the team has not faced a disruption in a while, is that problematic for the team? Again, from our recent project with NASA, a former astronaut we interviewed stated that "complacency is the enemy of resilience that could be caused by continued success" (former astronaut, personal communication, April 16, 2015). It may be beneficial for a team to perform well on prior triggers because it can improve shared beliefs such as resilience, but it begs the question of whether a team can encounter too much success, which may thus impair subsequent adaptation. In other words, can a team become "brittle" over time because of either team development or team success?

Recommendation 4. Resilience: Can You Build It or Do They Come With It?

Within the focal article, a great deal of attention (given its individual-level focus) is given to discussing which individual characteristics give rise to resilience, in addition to discussing training programs thought to enhance resilience and adaptation within individuals. We would agree that developing ways to assess an individual's tendencies regarding resilience and adaptation might be valuable in certain contexts. However, in other situations, such as in the composition of teams from the pool of available employees, individual tendencies are less under the control of the organization, and thus training and development processes require greater emphasis. Britt and colleagues do a thorough job outlining some the key training programs such as hardiness, Psychological Capital (PsyCap), and Comprehensive Soldier Fitness. However, integrating this work into our temporal recommendation (i.e., Recommendation 3), it would be valuable for future research to examine how long such training interventions sustain their efficacy. This question is of significant relevance to NASA as it contemplates how to best train astronauts years before a mission and whether and how the transit time of future long-duration exploration missions can be used to reinforce such training. In particular, given that the round-trip transit to Mars could be approximately

12 months, with an 18-month stay on the planet, team members may need refresher training sessions to maintain individual and collective resilience.

Beyond the training interventions reviewed by Britt and colleagues, we would add that at the team level of analysis there has been substantial success using interventions such as team debriefing tools (e.g., Tannenbaum & Cerasoli, 2013). In fact, work conducted by these scholars suggests that debriefing tools become increasingly salient as team tenure increases. Granted, there is obviously more research that could be conducted here to better understand how, and under what conditions, such debriefing tools are most advantageous, particularly because such techniques appear extremely valuable in the development of resilience. In addition, we think it could be valuable for researchers to also examine the impact that other interventions may have on the development and demonstration of resilience and adaptation. For instance, Mathieu and Rapp (2009) demonstrated the value that creating team charters can have on the coordination and performance of teams. However, it is an unanswered question regarding what impact interventions, such as team charters, may have on resilience and adaptation in teams and for individual members of such teams.

Conclusion

To summarize, in this commentary piece, we have tried to build on the work of Britt and colleagues to include a greater appreciation of the work that has been conducted on resilience and adaptation at the team level of analysis. We contend that this extension is valuable to the thoughts outlined by Britt and colleagues, as prior work has shown that a multilevel perspective allows one to better understand the construct of interest (e.g., Hackman, 2003). Likewise, we introduce four additional recommendations that we think complement, in many respects, the initial six recommendations suggested by Britt and colleagues. Our hope is that the conversation that emerges from this focal article and the commentaries will continue the current enthusiasm that surrounds the topic of resilience and adaptation and will lead to further developments within this literature at multiple levels of analysis over the coming years.

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Resilience Practices

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In the words of Winston Churchill, "When you're going through hell, keep going." Britt, Shen, Sinclair, Grossman, and Klieger (2016) note several traits (e.g., individual resources), environmental factors (e.g., unit, family, and community resources), and processes (e.g., seeking help from others) that help individuals to "keep going" in the face of adversity. I would argue that the third category, which I would suggest be expanded to *practices*, is the most important going forward. Unfortunately, psychologists often tend to focus the most effort on the first two: traits and environmental factors, which often leave individuals feeling helpless because both are largely outside of their control. In the face of adversity, people instead want to know, "What can I *do* to keep going?" This is not to say that traits or environmental factors are not important. They are. However, the most powerful work in resilience will promote personal agency (Bandura, 2001) and confidence in one's ability to develop resilience (e.g., a growth mindset; Dweck, 2006).

Why Practices?

Resilience practices are important because they operate in the space between genetic predispositions and environmental determinants (see Figure 1). This is the region of agentic choice where actions and learned habits have the potential to grow and expand over time (Bandura, 2001; Wood & Neal, 2007). "Practices" is a noun (a skill that is developed) and simultaneously points to the verb (to exercise a skill repeatedly to improve one's abilities); that is, practices can be learned through practice. Ericsson, Charness, Feltovich, and Hoffman (2006) have documented, for example, the critical role that practice plays in the development of expertise, especially *deliberate practice* (i.e., intentionally working to improve on tasks beyond one's current level of com-

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