The Group Psychology of Red Teaming

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Abstract

Red teams are supposed to be a commander's go-to option to not only understand the mindset of the enemy at hand but also offer objective reviews of friendly forces tactical and strategic plans. The size of the red team and novel nature of the information it presents can be negatively influenced by intergroup dynamics. The following research considers the probability of a group member discussing information is one minus the probability no one mentions the information. Despite the best intentions of the commander and his or her leadership team, red teams can become marginalized or rendered ineffective by psychological aspects of intergroup dynamics and social identity conflicts. Statistically, the red team is at a psychological disadvantage. The research proposes three thematic practices commanders can use to gain the most from their red teams. First, formulate the red team as soon as possible. Second, overcome the natural categorical factors influenced by social identity. Lastly, empower a leader who can manage the multitude of influences wrought by the conflicts from hybrid and dual identity memberships.

That which cannot be believed will not be seen.

—Sydney Dekker (2011, p. 97)

In an operational military environment, it may seem trivial to consider an individual's perception or the greater influence of group dynamics and identity. Decisions and plans often need to be articulated quickly and modified as battles ensue. Cohesive teams work well to produce detailed plans with minimal delays; an individual or dissenting perception/idea may disrupt the flow and organization of such planning. Such a disruption can even be detrimental to overall unit cohesion.

However, it is imperative for a military leader to understand the perceptions of all individuals in an operational environment. Additionally, knowing why some information has been left out can offer significant insights into the intergroup dynamics of a leader's unit or organization. The withholding of information may create an intelligence

gap, especially novel information. To overcome this potential gap in intelligence and planning, leaders will often turn to red teams with hopes of uncovering "black swans," unanticipated events with severe consequences. Unfortunately, leaders often end up with a sounding board of other planning sections or staff sections within the unit. Red teams are a significant tool of adversarial analysis, and analysts can benefit from the inclusion of psychologically based approaches to both threat-scaping and red team formation activities (Heuer, 1999; Matherly, 2013). Firsthand observations of forming a red team expands on the application of social identity theory to encompass a unit's collective judgment and problem-solving abilities; reveals how well information is handled, including hidden profiles; exposes homogeneity amongst groups; and shows how the majority of the unit responds to the minority input of the red team.

A red team is defined by the U.S. Army's University of Foreign Military and Cultural Studies as a "flexible cognitive approach to thinking and planning" (U.S. Army Training and Doctrine Command [TRADOC], 2018). Often, red teams are a selection of individuals tasked with employing special analytical methodologies to either challenge established plans or attempt to determine an adversary's course of action.

A red team has two goals: to anticipate the adversaries' future moves and to root out bias within their unit's planning (Matherly, 2013; TRADOC, 2018). In any large military planning organization, whether a combined air operations center, a joint operations center, or a corps planning team, different staff sections and teams work with similar information to create part of the same plan.

Research has demonstrated that groups that actively value novel or solitary inputs are most likely to see more success over time than homogenous groups (Kolb & van Swol, 2018). Homogeneous groups fail to recognize the importance of novel information following principals of the hidden profile paradigm through group-think bias (Rapport, 2020). The successful groups, however, reject synchronous orientations (group think) in favor of considering all information available to them. In a study that used a fictitious murder mystery with a hidden profile, separatist groups accurately selected the culprit 61% of the time, versus a 38% success rate for synchronous groups (Kolb & van Swol, 2018). More so than just ignoring information the researchers have shown that there is a significant social price to advocating for unique or novel information. Individuals in possession of novel information that conflicts with or contradicts what is accepted as fact within homogenous groups would either

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disregard it immediately in favor of prevailing information or voice it and be actively alienated by the rest of the group (Stasser & Titus, 1987). In the experiment above, groups were given profiles and scenarios in the fictitious crime. Most of the data provided to members within the teams was complementary. However, one member of each team was given data that did not coincide with the rest of the team's data; this asynchronous data is considered novel information.

According to the hidden profile paradigm, the more novel the information, the less likely it will be shared. The hidden profile paradigm states describe this cognitive barrier in information sharing. The more people who share the same information, the higher the probability that information will be accepted as fact and the less likely more remote knowledge will be deliberated or even discussed (Stasser & Titus, 1985). Research has shown that the probability of a group member discussing such novel information is one minus the probability no one mentions the information, which can be expressed mathematically as the conditional probability equation ($p(D) = 1-[1-p(M)]^n$) (Stasser & Titus, 1987). The probability of the novel information being shared within the group ($p(D)$) is equal to one minus the probability ($p(M)$) that no one in the group (n for the number of group members) mentions the information. This equation should sound alarm bells in the minds of leaders who employ red teams. Why? Psychologically speaking, red teams are at an inherent disadvantage providing the novel insights they are charged with gathering. Given the mathematical probability that novel information is likely to be lost within teams possessing corroborating information, red teaming is an insightful tool that can help leaders and commanders overcome the psychological limitation of social desirability.

Unfortunately, not understanding how the hidden paradigm influences teams can have a negative impact on a red team's stated objective. A key underpinning to understanding the intergroup dynamics at play is how the individual defines themselves at the most basic level. We turn to social identity theory as a lens through which intergroup and interpersonal conflict can be observed, recognized, and ultimately overcome. What follows is a theory-to-practice discussion based on direct observations of a military unit's (referenced as the unit) attempt to employ a red team during a brief training deployment abroad. The goal of this research is to introduce leaders to and inform them of basic psychological processes that may negatively influence red team employment.

Social Identity Theory

Social identity theory is arguably one of the core theories underpinning social psychology. This theory articulates how individuals not only define their introspective identities but also what groups they may join and why (Trepte & Loy, 2017). Additionally, the theory goes on to postulate that these attributes of belonging and self-identification also lay the groundwork for intergroup conflict (Bochatay et al., 2019). When one considers

the potential for conflict amongst groups advocating for novel information, there is little surprise that unproductive competition may arise. Psychologically speaking, intergroup dynamics have significant effects on how red teams interact with other groups. The following is an overview of important intergroup dynamics applicable to this research.

Group Problem-Solving

As groups continue to define themselves into self-identified subgroups, the potential for negative performance increases (Martin, 2016). The minimal group paradigm demonstrates that groups of people will divide themselves into competitive subgroups regardless of resource or realistic threat. Said subgroups will automatically compete with one another for resources, status, or simple bragging rights (Otten, 2016). The competitiveness between subgroups is not necessarily hostile and will manifest in intensity depending on the resources at stake and the general social climate. Social identity theory explains that as these divisions occur, group members will identify with common traits of their selected in-group. The deeper and more frequent (shared) the implicit and explicit attitudes of the group members are, the more bound in a shared mental model the group will be (Bagci et al., 2018). This can lead to not only increased performance of the specific in-group but also to increased conflict between the groups.

Group Socialization

In social psychology, there are five basic phases to group membership: investigation, socialization, maintenance, resocialization, and remembrance (Meeussen et al., 2014). These phases transition via specific actions: entry, acceptance, divergence, and exit. For groups to successfully achieve normalization, individual members must balance self-esteem, identity, attitudinal functions, and emotions to match that of the group as a whole while navigating the five phases (Swann et al., 2012; Tekleab & Quigley, 2014). Social identity theory describes a foundational process in which teams evolve and form through social categorization (Swann et al., 2012).

Group Influence on Attitudes

Groups influence how individuals perceive themselves and others. The social groups in which individuals find themselves play a significant role in the formation and development of their own attitudes. These norms provide the functioning dogma of a group and, according to social identity theory, individuals will then categorize themselves in accordance with the dogmatic practices they identify with most. Social groups will de-

fine salient behaviors and attitudes that then form the basis of that social group (Ajzen & Fishbein, 2005). A further implication of this process of social categorization and shared salient attitudes is the perception of threat to a group. The minimal group paradigm expands on social identity theory to describe that groups will perceive threat to one group based on differences in salient attitudes regardless of their applicability to any real or perceived resources (Janneck et al., 2013). This shapes the overarching concept of intergroup threat and the negative attitudes associated with it. The identification of a threatening out-group can be established on something as simple as unshared information. The hidden profile test demonstrated how singular groups could drift into separate ones based simply on available information (Stasser & Titus, 1987). When a group collectively identifies another group as a threat, regardless of available facts or information, the attitude of the threatened group turns against the out-group (Otten & Moskowitz, 2000). This attitude can become systemic and is eventually shared by members of the in-group who have had no interaction or exposure to the out-group.

Self-Concept and the Group

As groups form through normalization of interactions, individuals will derive their self-concept from membership in the group. Normalization occurs during the maintenance and resocialization phase of the group lifecycle (Meeussen et al., 2014). During this process, groups establish their internal culture, and perspectives dictate group interactions. An individual's self-concept is partly based on this normalization and is reflective of the group's world view. Both the individual and group self-concepts can reflect a positive outlook if the assigned group reflects not only their perceived internal social identities but also holds status within the larger cultural or societal context (Cheng & Guo, 2015).

Majority versus Minority Dynamics

In nearly all social settings, there is a distinguishable majority and minority. This divergence in statuses can come in nearly any combination and is situation-dependent. Social identity theory describes how individuals will subdivide into groups in which membership aligns with regards to individual identity (Trepte & Loy, 2017). The minimal group paradigm shows how these groups can be arbitrarily formed (Otten, 2016). It is important to note this interaction because whenever groups are formed, there will always be a majority and a minority.

Self-attention theory furthers understanding of minority-majority intergroup dynamics. The theory addresses how individuals act when they focus inward on their own salient traits in comparison to that of a majority (Scheier & Carver, 1983). The intro-

spective process creates cognitive dissonance in individuals of minority group membership. As a result, the individuals attempt to project more salient behaviors they perceive as desirable from the majority (Mullen & Baumeister, 1987).

Collaboration and Conflict

Collaboration is the ability of a group or groups to share information and ideas in pursuit of common goals (Patel et al., 2002). As straightforward as this may sound, groups often encounter significant shortcomings that hinder productivity. Sadly, when a group's actual productivity is compared to that of an idealized state, it often falls short of even a reasonable productivity baseline (Kerr & Tindale, 2004). Several factors can affect a group's collaboration. These can include group size, task difficulty, and even resource management. Group size and difficulty of a task are inversely proportional to effectivity and efficiency of the group. One of the major failures of group productivity (performance) comes from a group's inability to identify and harness potential resources at its disposal (Kerr & Tindale, 2004).

The following research is grounded on the application of psychological theory to the intergroup dynamics of the observed unit. Other theories are introduced and discussed throughout the results section to support this central concept. This research will address two specific questions. First, how did group and intraindividual processes shape the roles and effectiveness of red teaming over the course of the situation outlined below? And how can group and intraindividual processes aid in overcoming these limits?

Methodology

The research conducted herein is ethnographic in nature, employing a participant observation-like methodology. The research is based on archival observations and notes taken by the researcher during a deployment originally for purposes other than this research. The methodology resembled participant observation and produced qualitative data through the author's direct observation of the unit's major staff sections and its red team as groups along with observations of these teams' individual members. These observations resulted in data on intergroup and interpersonal interactions.

Initial data collection occurred throughout the unit's 30-day deployment abroad. Data collection was limited to direct observation of the actions within individual staff sections and interactions amongst staff sections. Of particular interest were actions or interactions involving the red team. Prior to the deployment and formation of the red team, the unit was functioning smoothly. An established battle rhythm had been adopted, and many of the staff sections freely shared ideas and information amongst their staffs at both intergroup and interpersonal levels. The high level of

interdepartmental and interpersonal information flow was designated as the ideal benchmark for effectiveness of the red team.

Specific metrics observed included the themes relevant to social identity theory and group conflict: group problem-solving, group socialization, group influence on attitudes, self-concept and the group, majority versus minority dynamics, and collaboration and conflict. A positive integrative effort would be seen by staff sections freely sharing ideas and incorporating feedback form the red team without command intervention. A poor integrative effort would be seen if the red team and its members were isolated from other staff sections and left in an information vacuum.

Following the deployment, a review of all interactions leading to or contributing to intergroup conflict was conducted. This review focused on identifying elements related to intergroup dynamics as discussed addressed in the sections about group psychology above. The elements were then reviewed for general themes and trends. These themes and trends were identified as the final results, are addressed in the results section below, and are critical to intergroup performance of red teams. These themes and trends were then compared to the principles of social identity theory in an attempt to understand why the problems occurred and to offer diagnostic remedies to prevent their reoccurrence in future events.

The identified thematic areas are addressed in the results section using a broad psychological approach that applies numerous theories, each worthy of research in its own right. The intent is to introduce the reader to a basic working knowledge of social psychology, specifically social identity theory, on intergroup dynamics unique to red team employment in a military organization.

The results section will introduce and analyze each of the thematic trends noted. The author then introduces and demonstrate the applicability of social identity theory that coincides with each thematic result. In some cases, additional social theories are presented to further explain or characterize interpersonal and intergroup behaviors. Applications of both the thematic trends and psychological theory for resolution are saved for the analysis section.

Situation

The unit this research focuses on was a very rank-conscious, high-tempo, corps-level unit. Overall, it consisted of tens of thousands of troops whose ranks ranged from general officers with decades of service down to privates with only weeks in the military. The portion of the unit observed consisted of approximately 200 staff troops. The unit divided its wartime planning and execution manpower amongst six staff sections with specific titles that provide services that range from kinetic operations (e.g., operations, fires) to legal and humanitarian operations (e.g., special staff, civil and military logistics). Each staff section contained a diverse mix of

individuals and ranks, and each staff section was led by a colonel. Each staff section maintained cyclical daily and weekly battle rhythms synchronized with unit operations and command-led battle rhythm events (personal observation, June 2016).

The unit received notification of the exercise it would participate in 24 months prior to execution. The exercise included multiple services and nations with the expressed goal of furthering international and joint relations amongst the agencies. All of the staff sections detailed above began collaborating and working on processes through working groups and information-sharing methods during this phase. By execution of the event, these teams had spent a significant amount of time working together. The extensive time spent working together on a unified problem set normalized the relationships within each team and achieved a heightened level of cultural normalization between the staff sections. As a result, offices were synchronized in an efficient manner both internally and externally with positive working relationships throughout.

The exercise began 24 months after the first order was received. As with most exercises, this one was designed to stress the flexibility of an operational plan. First contact exploited several areas of ambiguity and weaknesses of this plan. In an attempt to consider additional options and circumvent group-think as well as other potential biases, the unit commander appointed a colonel to assemble and chair a red team.

The red team was constructed at first by soliciting volunteers from all of the existing staff sections to meet for one hour daily. After receiving marginal volunteer support from the established staff sections, a command order tasked each staff section to allocate two individuals with the additional duty of being a "red teamer." The final membership count of the team including the team chair was 13. Whenever the team met, approximately 75% of the members were present. Furthermore, the red team served in an additional duty for team members charged with reporting their findings directly to and advising the unit's commander during weekly planning briefs. The red team conducted analysis of plans made by current and future operations teams through applied methodologies found in the U.S. Army's University of Foreign Military and Cultural Studies *Red Team Handbook.*

Results

Following the deployment, the use of the red team offered a few positive findings for the unit as a whole. Unfortunately, the overall employment of the red team was hampered by poor integration amongst the other staff sections down to the interpersonal level. The postdeployment analysis highlighted indicators within each of the six themes relating to failures surrounding the red team's employment. In order of presentation below, the thematic areas include group socialization, group influence on attitudes, self-concept and the group, collaboration and conflict, majority and mi-

nority conflict, and group problem-solving. Each of these thematic areas are below in terms of how each applied to the unit's attempt to employ a red team.

Group Socialization

When the red team was formed, there were already a number of teams operating at the maintenance and resocialization loop of the process. When these teams contributed their respective members to the red team, each member came to the new group equipped with the culture and socialized tasks that allowed that member to operate within his or her original group. The new group and its members were forced to exchange ideas and nuances relative to their personal values and expectations as they existed in their respective original groups (Meeussen et al., 2014). This exchange of attitudes caused a lengthy investigation and socialization period as the group attempted to feel out each participant and identify that person's role in the group.

The conflicts that began to arise came from conflicting individual membership roles between the original group and the red team. The normalized behaviors each member had established with his or her original group were at odds with those of the newly formed red team and its conglomerate of members. In one aspect of membership, members were asked to contribute to and build a plan of action to advance the evolution of the unit's involvement in and command of the assigned mission. This is an interesting to discuss because the members of the red team were involuntarily placed into a newly forming group whose goal is contradictory to their host groups (Ryan & Bogart, 1997). In this unique case, the red team can be viewed as an out-group in comparison to its membership, each still holding identity and affiliation to their original groups.

Red teams are formed as a subcultural group with the expressed intent of questioning normalcy in the larger group (Zenko, 2015). On the surface and to any red teamer, this seems simple and appropriate enough. However, in practice, this singular purpose of a red team can be its own downfall. Understanding how a team forms and the significant importance communication and emotion play in this development is critical to a well-incorporated red team.

Group Influence on Attitudes

This is an important attribute for red teams to remember. The tendency for a team to favor the in-group is high, but that does not mean that members will favor their assigned group. An in-group is any group that the individual feels is their rightful group, regardless of membership. Being a member of what is perceived as an out-group can lead to negative self and group evaluations. Often, red team members are chosen as representatives from various parts of a planning staff and only come together on occasion.

When groups are formed in a hasty or ill-defined manner, the likelihood that individuals will not positively identify with the group is high. As a consequence of this evaluation, not only would the individual's self-evaluation suffer, but motivation for success of the group would be negatively affected. The lack of consistent contact between members combined with differing perspectives and normalized behaviors along with principles of alternative analysis attempting to identify novel information can further influence the occurrence of minimal group paradigm, placing the red team as an out-group by its own members. As a result, social comparison will occur.

Self-Concept and the Group

The social identity of self-concept is a critical aspect of achieving normalcy in any team, especially a red team. This emphasizes categorization of other individuals and group traits by the observer. The observer then identifies what social grouping best represents the self in which they identify and strives to become a member of that group (Morran & Stockton, 1980). An individual can identify membership in many social groups; as a result, their self-concept is shaped by the categorical attributes of each group.

As was mentioned earlier, the red team was hastily formed, and membership was comprised of random individuals from various staff sections that have worked together for a considerable amount of time. Applying the model of social identity to self-concept shows how individuals will harbor loyalty to their indigenous group. The individual has come to identify a part of his or her self-concept as tied to the success or failure of his or her initial performance group.

The individual who works in the G-5 staff section (responsible for developing operational plans and contingencies) who is attached to the red team is likely to consider any product from this staff section as a good or sound plan. If it were not viewed as such then their self-concept would be in conflict—especially if they had a hand in its initial development. This friction point can cause issues not just for the red team as a whole but also with how the individual is accepted back in his or her original team. The individual's self-concept, which identifies with the G-5, is challenged when the red team analyzes G-5's plan. Worse yet, the group's perception of the individual's membership as a trustworthy member is also challenged—by both teams. The individual now finds themselves in a dilemma where they no longer feel welcomed by their original group and betrayed by the red team.

Majority versus Minority Dynamics

Three main categorical distinctions that place the red team in the minority of all the other functional groups in our the unit are (1) longevity, (2) favoritism, and

(3) unity. Each of these place the red team as a minority population within the larger group. Longevity describes the length of time that the group has existed. Compared to all the other groups within the unit (intelligence, plans, fires, civil and military logistics, etc.), which have functioned together as a group for up to a year prior, the unit's red team had only come together at the beginning of an event. Under these ad hoc conditions, the red team is unrecognized by other teams as a legitimate organ that supports the overall unit. However, a perceived favoritism by leadership can be inferred. This new group receives special attention and time from leadership who values the conclusions of a relatively small team in contrast to the combined conclusion of a larger group. Both of these factors can feed into a lack of unity among the groups, but the red team specifically will be marginalized as a minority for its analyses alone. While the majority of the unit's staff works together to develop a common plan, the red team analyzes that plan for potential shortcomings including bias, assumptions, and a misunderstanding of enemy motivations.

Collaboration and Conflict

As is in the case of the unit's particular red team, there is a marked failure in its ability to not only use but also identify resources. One of the major resources the red team had at its disposal was expertise. The team, being constructed of representatives from each of the other staff sections within the unit, had a sampling of expertise from across the unit's functioning disciplines. This resource, however, went unrealized owing to individual interests and motives amongst the group members.

Considering the individual perspectives of the red team members, each member felt as if his or her interests rested with his or her original group. The core social motivators and social identity theory have explained why red team members' allegiances are aligned in this way. As a result, the immediate loyalty felt to their original group outweighs the possible benefits of the new group. Collaboration within a group can be observed from the social judgment scheme model that governs consensus processes. This model considers individual preferences weighted in an exponential function amongst group members (Demont et al., 2013). As a result, the moderate consensus of the group becomes the predominant pathway for group interactions. Much like the majority of teams that reject a hidden profile in favor of group consensus, the red team follows the consensus of the members' collective perspectives as out-group members (Lu et al., 2012).

This divergence in group consensus is a vital attribute in the failure of the unit's red team. It highlights a criticality in forming efficient and successful groups—resource management. In this case, the resource is information or knowledge provided to the group in the form of a diversified membership. However, owing to each mem-

ber's own interest based on his or her social identities, the potential for productive impact on the larger organization (the unit) is lost.

Group Problem-Solving

As a result, the red team finds itself at a crossroads between the two approaches to cognitive decision-making, each producing valid yet potentially contradictory results. When one is closer to the subjective end of the spectrum, one will find selection versus rating tasks, and at the objective end, there will be intellective versus judgmental tasks (Mohammed & Ringseis, 2001). Simply put, the former comprises decisions that are based more on individual preferences and requires, at the very least, a degree of rating. This requires individuals to take stock of the options at hand and resolve one of them based on a mutual conclusion. The latter article of cognitive decision-making, intellectual versus judgmental tasks, is more grounded. These tasks have right and wrong answers that can be demonstrated (Mohammed & Ringseis, 2001). The red team attempts to understand and articulate intellective versus judgmental type tasks—what an adversary will do or how a friendly plan will execute. Red teams often find themselves attempting to employ selection versus rating methodology to address what are largely intellective versus judgmental questions.

Collective judgment is a concept that can be surmised through the idea of schisms (Mohammed & Ringseis, 2001). A schism is the tendency for groups of people to strengthen general tendencies of opinions within the group. There are several conditions that can cause this polarization, but in the context of red teams, social comparison might be one of the primary motivators. In this context, social comparison theory explains how an individual's perceptions in a group setting will gradually grow from relatively moderate to extreme based on the viewpoints of other group members (Gerber et al., 2018). In other words, the desire to belong and self-enhance ends up influencing individuals to take on opinions different from their own in order to maintain membership (Matherly, 2018). This alteration of an individual's identity traces back to social identity theory, which describes how individuals will form groups aligned with common desirable traits, which are expressed as a collective identity that is further motivated by the core social need to belong (Trepte & Loy, 2017). This motivation can create tight intragroup bonds that cause conflict between groups with opposing views. Red teams in an organizational environment often make proposals that are counterintuitive or directly challenge the findings of other groups (TRADOC, 2018). When one considers the cognitive processes discussed above, it is of little surprise that such recommendations could be met with hostility.

Observations fell into one of six categories relevant to social identity theory and group conflict: group problem-solving, group socialization, group influence on attitudes, self-concept and the group, majority versus minority dynamics, and

collaboration and conflict. The observations noted trends of significant issues related to intergroup conflict and group formation. The observations made above are analyzed in the following section.

Analysis

Analysis of the observations revealed three themes relating to the unit's experience with its red team. Two of these themes contributed to negative aspects of employment, and one theme worked to the team's and unit's benefit. The negatively contributing trends included formation of the red team during mission execution rather than early in mission planning phases. Secondly, little was done to help team members disassociate with their current analytical thinking and associate to counter-cultural, or out of the box, thinking. Lastly, the unit selected a very strong leader whose leadership talents were instrumental in the successes the team did bring to the unit.

Many group loyalties and identities are based on the prestige, status, and power as well as the benefits such attributes bring with membership. Groups within an organization thrive on these benefits throughout intricate networks supported by the organizational structure either explicitly or implicitly. As has been discussed through this research, social identity theory rests on intergroup social comparisons and on the categorical outcomes made by individuals within each of the competing groups (Hogg & Terry, 2000). This in-group/out-group evaluative process is fueled by the need for positive self-efficacy (Mazziotta et al., 2011).

Differences between groups can be easily interpreted as threats to the in-group members. The in-group/out-group distinctiveness promotes a positive in-group outlook that often results in a negative or indifferent out-group perception. This dynamic is often seen with immigrants who do not fully integrate into their host country's culture. This outward representative of an out-group is regarded as potentially threatening (Esses et al., 2001). The evaluative in-group/out-group process is an iterative process that is applicable for the members of the red team who viewed the red team itself as an entity (out-group) that threatened the success, prestige, power, and status of their originating groups.

The conflicts that began to arise came from membership responsibilities between the original group and the red team. The culture each member had established with their current group was at odds with that of the red team. In one aspect of membership, members were asked to contribute to and build a plan of action to advance the evolution of the unit's involvement with and command of the assigned mission. An interesting attribute to discuss is that the members of the red team are being involuntarily placed a newly forming group whose goal is contradictory to their host groups (Jacoby-Senghor et al., 2015). In this case, the red team can be viewed as an out-group in comparison to its membership, each still holding identity and affiliation to their original groups.

One observation worthy of specific note regards an individual working in the G-5 staff section, who was responsible for developing operational plans and contingencies for the unit, and who was also attached to the red team. This individual considered any product from this staff section as a good or sound plan. Psychologically speaking, if he or she viewed the plan differently, their self-concept would be in conflict—especially since they had a hand in the product's initial development. This friction point can cause issues not just for the red team as a whole but also for how the individual is accepted back into his or her original team. The individual's self-concept, which identifies with G-5, is challenged when the red team analyzes the G-5's plan. Worse yet, the group's perception of the individual's membership as a trustworthy member is also challenged by both teams. The individual is now caught in a dilemma where he or she no longer feels welcomed by the original group and betrayed by the red team.

Based on the research, there are three main categorical distinctions that place the red team in the minority of all the other functional groups within the unit: (1) longevity, (2) favoritism, and (3) unity. Each of these place the red team as a minority population within the larger group. Longevity describes the length of time that the group has existed. Compared to all the other groups within the unit that have functioned together as a group for up to a year prior, the red team has only come together at the beginning of the event. In these terms, the red team is unrecognized by other teams as a legitimate organ that supports the overall unit. To complicate matters, a perceived favoritism by leadership can be easily inferred. The new red team receives special attention and time from leadership who values the conclusions of a relatively small team in contrast to the combined conclusion of the larger, established group. Both of these factors can feed into a lack of unity amongst the groups, but the red team specifically will be marginalized as a minority for its analyses alone. While the majority of the unit's staffs work together to develop a common plan, the red team is analyzing that plan for potential shortcomings including bias, assumptions, and a misunderstanding of enemy motivations.

Compared to other social motivation theories that pertain to intergroup dynamics, self-attention theory accurately describes processes occurring within the membership of red team and their original staff sections. The red team members have not fully identified each other as members of an in-group and still view other groups as their primary social group. As a result, the red team members attempt to resolve their dissonance by minimizing salient behavior associated with the red team and maximizing behaviors associated with their original staff sections (Mullen & Baumeister, 1987).

The nature of the red team is to challenge accepted assumptions or perceptions, so a synergistic effect amongst team members is critical. The members must have a shared social identity that holds value in the goals of the red team and, ultimately, the success of the unit as a whole (Tanis & Postmes, 2005). Otherwise, the team will continue down a divided path in favor of the assumptions and biases of its parent teams within the organization. The problem set for the leader is

unique and requires a particular mix of attributes from both the leader and the team itself. Despite these intricacies, the leader offers the most practical solution in bridging the social identity gap.

It can be easy to view a leader as a unifying or motivational force that is responsible for any success or failure that befalls a team. This, however, is only half of the equation, and by implication, a team consists of more than one person. A leader-follower relationship is a reciprocal one in which a leader is granted an authoritative, influential opportunity over a given group. As such, leaders can be chosen or appointed; in a military setting, leaders are often appointed based on rank, as was the case with the red team. A colonel was appointed to lead the red team. This individual outranked all members anywhere from one to 10 pay grades.

In summation, each of these individual factors amplify and cause increasing strain on intergroup relationships that negatively impact the ability of an organization to effectively employ a red team to problem solve. Not only does this alienate red team members from the rest of the organization, but it also drains vital resources needed for the institution's growth.

Based on the preceding anecdote and corresponding notes discussed above, the subsequent analysis yielded three practices for successful red team employment. First, establish and staff the red team as soon as possible. Second, overcome the natural categorical factors influenced by social identity. And lastly, empower a leader who can manage the multitude of influences wrought by the conflicts from hybrid and dual identity memberships.

Red teams should be formed early in the planning phase. The longer other teams are able to function and normalize operations, the further behind the red team will be in its eventual startup. If this task is either impractical or impossible, leveraging the latter approaches will aid in red team production through an expedited assumption of individual group identity. Just as social identity has framed the basis of the group dysfunction, it also allows for insight into harmonizing the multigroup identity dilemma encountered by the team members. These underlying solutions involve an exploitation of in-group preferences through targeting in-group boundaries and norms (Esses et al., 2001).

The latter finding, however, requires a more detailed exploration and is discussed in the following sections. The data is presented in a manner that addresses theoretical underpinnings, and when applied, it will allow individuals to overcome limitations noted when a red team must be formed in an ad hoc manner.

The ways individuals form meaningful relationships within groups is a learned behavior reinforced by self-enhancing membership rewards from all the groups the individual has been a part of to that point (Smith & Tyler, 1997). Overcoming these learned behavioral attributes will be the leader's biggest task when producing an effective and productive team. What follows is a discussion on how a leader can overcome these learned behaviors and their underlying psychological processes.

Overcoming Social Identity

Self-identity and categorical processes inform individual and group behaviors within organizations. Harnessing these processes are essential to bridging the social gaps created by competing groups and identities that plagued the red team. One of the most effective methodologies for reducing intergroup bias targets the premise of out-group membership by reducing the salience of in-group exclusion. Participants with strongly based competitive and zero-sum impressions of immigrants were given literature to read that discussed salient group traits in a neutral, pro-in-group (or anti-out-group) orientation. Individuals reading the material with a strong pro-in-group outlook were more likely to hold fewer discriminatory attitudes toward immigrants than individuals in the other two conditions (Esses et al., 2001). The pro-in-group material enhanced the salience of shared group attributes within the in- and out-groups. Simply attempting to improve the perception of general attributes of the out-group generally resulted in strengthened or increased negative perceptions. The emphasis of commonalities in the pro-in-group articles directly manipulated the intergroup boundaries by increasing common group identity attributes (Esses et al., 2001). This approach is one that could be of benefit to a unit's red team. Literature that articulates similarities of the red team to the other divisions within the unit could proffer this hyphenated identity.

The conclusion of this research is that the critical node that can offer this vital oversight is a leader from within the red team. A leader is not particularly an individual who has practical knowledge of the integrative processes or psychological theory. In addition to Army leadership attributes, a successful red team leader is one who can, either implicitly or explicitly, exercise the principles of intergroup integration and recognize what constitutes motivation and integrative behavior amongst all teams within a unit.

The Leader

Leadership is a critical attribute for any successful team. It can be noted as one of the few guaranteed lynchpins for either success or failure of any team (Bird, 1977). Of all the theoretical underpinnings discussed the leader is the sole individual who can sway a group either toward or away from pitfalls.

The military is generally very good about training its members in myriad leadership qualities and techniques. As discussed, red teams are unique to the traditional military construct of leader/follower relationships of intergroup dynamics. The leader needs to understand the purpose and function of the team's members. A keen understanding of the psychology underlying intergroup conflict as presented in this research is imperative.

Perception of a leader is paramount. The team must be able to view the leader as an individual worthy of following, one who transforms a goal into something worthwhile. A successful navigation of this process can be viewed through a connectionist model. This approach involves a moldable schema of interconnected attributes and behaviors that combine under the influence of a given set of contextual constraints (Monroe et al., 2017). The interaction of the leader's schema and a context will determine how successful, or not, the leader is. The context is defined by environmental factors surrounding the team. These can include culture, perceptions, values, and norms. As these contexts change, successful leaders can adapt their behaviors to match the demands of the environment (Pech, 2003).

As an appointed leader in a military environment, it is easy to force productivity from a group with direct orders and control. However, such an approach will only create the appearance of effectiveness and lower the quality of any product the team members produce (Bar-El, 2009). The problem faced with this form of leadership is a shared identity amongst group members that includes value in the assigned or needed task. This is the problem set the red team's leader needed to address, a non-existent social identity. By understanding the reciprocal nature of his or her influence over not just the red team but the unit as a whole, the leader can be a unifying force. The contextual issue of a fractured social identity presents the appointed leader with the opportunity to create the shared social identity needed to realize the full potential of the red team. To be successful, the red team's leader had to effectively establish and deliver a vision, exert positive influence, manage resources, mentor, and be accountable to both the team members and organizational leaders (Small, 2011). Chief amongst these attributes is the ability to establish and deliver a vision for the organization. If the leader does not embrace the value of the team, no one else will, including the team members themselves. This is the crossroads to which social identity theory had brought the team. It was now the responsibility of the team's leader to contend with and overcome this shortfall.

Conclusion

In this context, the findings of the red team are not received as constructive or as an alternative analysis of facts; rather, they are received as a direct attack on the identity of each group member in other groups. Whenever possible, a commander should strive to have an active and ongoing red team within the organization, not just when a specific operational need is identified. A perpetual red team offers the unit the ability to train a multitude of members on analytical techniques used by such teams; it also eliminates the need to form a red team early in the military decision-making process since they will already exist. Red teams can offer organizations running analyses of programs, processes, training, security, and other aspects of organizational management (TRADOC, 2018).

Leaders should be keenly aware of the emotional processes that are ongoing during a group's formation. If expressive or instrumental tasks are misidentified and handled inappropriately, the productivity of the entire unit is at risk. Conflict will happen at both the emotional and functional levels of the group as it analyzes scenarios. The biggest influence a military environment will have on the individual is the expectation of a "military bearing." This is an unemotional state where the individual executes orders given from an appointed leader. When conducting red team analysis, this state should be avoided as it unnaturally deflects both macro- and micro-expressive group development and will result in a frozen instrumental process, rendering the red team ineffective.

Many of the members had formed alliances and shared identities with the groups in which they originally belonged. Their contributions to the larger organization were internalized though these individual groups, each forming its own culture of norms and expectations where the members knew their roles and what contributions were expected of them. Being placed on an additional team with others who held conflicting organizational goals and being asked to expressly identify and challenge these norms, biases, and assumptions created a multitude of organizational issues for the team members. It also formed the groundwork for an ineffective team. Social identity theory has demonstrated the theoretical basis and offers fixes for this dilemma and the leader as the key in bridging shortfalls in perception and integration amongst the team members.

This research has discussed a theoretical framework of applied social psychology to an observed team formation. The recommendations given are based purely on this analysis. Future research can offer definitive articulation on their applicability and effectiveness. Measures of effectiveness can be drawn on how quickly and accurately team members recognize the resources at their disposal as well as the number of and frequency of intergroup and intragroup altercations. With no ethical concerns identified, the findings could also be tested in a laboratory setting designed to test social categorization of defined groups. ❧

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