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Soldier Perspectives on the Knowledge, Skills, and Behaviors of a Good Teammate

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14. ABSTRACT

Teams are foundational to Army success. These small units allow Soldiers to accomplish tasks of greater scale and complexity than they could on their own. Identifying the attributes of individual Soldiers that relate to teamwork will support the Army's pursuit of a team-based personnel strategy. To identify what teammate characteristics contribute to team functioning, Soldiers listed characteristics they would use to describe a good teammate. Researchers then mapped these terms to the Army Talent Attribute Framework (a list of knowledge, skills, and behaviors; KSBs) and identified several patterns from the mapping. Overall, Soldiers listed dispositions more often than knowledge, skills, behaviors, or abilities. More specifically, they wanted future teammates to be driven to succeed, to model Army Values, and to be intelligent. The Soldiers' point of view gives an early glimpse about what characteristics contribute most to team functioning across domains.

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SOLDIER PERSPECTIVES ON KSBS OF A GOOD TEAMMATE

EXECUTIVE SUMMARY

Research Requirement:

Teamwork allows individuals to achieve goals of greater complexity and scale than they can achieve on their own. However, teamwork demands certain knowledge, skills, and behaviors (KSBs) in addition to the KSBs demanded by the task environment. Once the Army has identified what KSBs serve team functioning in specific team contexts, researchers can use this information to enhance the development, composition, and evaluation of Army teams by prioritizing the KSBs that are most essential to team functioning. In this study, researchers thematically analyzed Soldier responses to understand what KSBs Soldiers find most valuable in a new teammate.

Procedure:

Researchers interviewed 46 Soldiers and officers across 21 focus groups about what qualities they desire in a teammate. Each participant listed five qualities of a good teammate. Researchers then compiled these lists of terms and linked them to KSBs in the Army Talent Attribute Framework (ATAF). After translating the Soldier terms into the language of the ATAF, researchers used the groupings of the framework to identify patterns in Soldier responses. These patterns revealed what characteristics Soldiers would use to describe a good teammate.

Findings:

Soldiers prioritized dispositions and personality before skills or abilities on their lists. Based on the pattern of responses, the most valued dispositions reflected broad personality constructs like conscientiousness and agreeableness as well as dispositions more specific to the military such as an appreciation for Army values. A more granular analysis revealed that Soldiers wanted a teammate who was driven to achieve, committed to Army values, and smart.

Utilization and Dissemination of Findings:

This study offers a first glance at what characteristics Soldiers value in a teammate and what KSBs teams need to succeed. These findings have implications for Army team assignment, training, and development. They also show what characteristics may be prioritized in teams working closely together. Finally, researchers revising the Army Talent Attribute Framework may find this research useful for validating and modifying the competency model.

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Introduction

Small teams are popular organizational units because they are more agile than large groups and more powerful than individuals. In the U.S. Army, small teams execute in fluid operational environments with minimal oversight through the exercise of command and control (ADP 6-0, U.S. Department of the Army, 2019). This advantage is one reason why small unit effectiveness will be key to successfully fighting and winning the nation's wars (Grinston et al., 2020). To support small units, the Army People Strategy (U.S. Department of the Army, 2019) deploys 21st century approaches to talent management that capitalize on individual knowledge, skills, and behaviors (KSBs) to ensure that Army teams are cohesive, resilient, and lethal.

One line of effort (i.e., LOE3) in the Army People Strategy is to "maximize the engagement and contribution to readiness of Soldiers" by identifying, aligning, and advancing Soldier talents (Grinston et al., 2019, pp. 7-8). This LOE to employ Army talent primarily concerns individual Soldiers but readily transfers to teams. In the team context, this line of effort means identifying the knowledge, skills, and behaviors that drive team success, aligning team KSBs with the demands of the team, and then advancing these KSBs as a team by transforming them into team success.

To support team success through team composition, researchers need to understand how KSBs support teamwork and produce effective teams. To this end, the U.S. Army Research Institute for the Behavioral and Social Sciences has paired the Army Talent Attribute Framework (ATAF; Army Talent Management Task Force, 2016) with a systematic investigation of team KSBs to identify what KSBs are the ingredients for team success. Researchers carried out team-based work analysis to understand team contexts across the U.S. Army and to identify what KSBs Soldiers need to operate in different team environments.

Early stages of the team-based work analysis involved interviewing Soldiers about what makes an effective teammate from their perspective. Gathering data from multiple sources this way ensures the results of the analysis are not only guided by established research but also grounded in teams' experiences. To gather this information, Soldiers were asked to explain in their words what "characteristics and attributes of Soldiers … make them a good teammate" (Appendix A). Their responses provide the basis of this report. The patterns of Soldier responses reveal what teammate characteristics are most salient and most critical in the eyes of Soldiers. Identifying these patterns contributes to the larger analysis by providing evidence about what KSBs support team processes and what team processes are most essential. This paper explores the former point by summarizing what KSBs Soldiers value most in a new teammate.

Studies that link individual-level KSBs to teams contextualize the KSBs Soldiers identified in this study. Most established models of team-relevant KSBs adopt an approach that is individual-level and team-focused (Mathieu et al., 2013). These models describe what knowledge, skills, and behaviors support individual performance in a team setting. For example, Stevens and Campion (1994) argued that KSBs concerning interpersonal and self-management skill support performance in a team environment by helping with taskwork and teamwork, respectively. Other models consider whether the KSBs an individual offers meet specific team needs given the balance of existing KSBs within the team (Mathieu et al., 2014). If, for example,

the KSBs equip the individual to satisfy a valuable role in the team's interpersonal dynamic, the overall team effectiveness will increase (Mathieu et al., 2010). Alternatively, an individual's personality may provide a complimentary fit to the team's personality profile (Prewett et al., 2009) that balances the team's personality composition and improves its chances of success. These models and studies are useful for understanding Soldier responses.

Method

Participants and Procedures

Researchers conducted focus groups with Armor and Infantry units[1] to learn about Army teamwork and the desirable team member KSBs. Focus groups had one to six participants. To reduce bias, participants were grouped according to rank or position so that no groups contained subordinate-leader pairs. The sample[2] included a variety of positions and ranks, including Team Leaders, Squad Leaders, Platoon Sergeants, Platoon Leaders, Company Commanders, Master Sergeants, and Schoolhouse Cadre. See Table 1 for a breakdown of participant type.

Table 1

Positions of Participating Soldiers

Position	Armor	Infantry
Officer		
Platoon Leader	4	1
Company Commander/Captain	1	9
NCO		
Squad/Team Leader	0	9
Platoon Sergeant	3	2
Schoolhouse Cadre	5	0
First Sergeant	2	3
Master Sergeant	0	7
Total	15	31

Every Soldier across 21 focus groups was asked to generate a list of characteristics or attributes that they would use to describe a good teammate. See Appendix A for the focus group prompt of this activity. The first six focus groups were conducted in-person. During those focus groups, the group generated a list of terms. All participants were able to contribute to the list.

[1] Although a variety of individuals from both Armor and Infantry units were sampled, the focus was on Armor Crewman and Infantryman, respectively.

[2] The data were part of a larger team-based work analysis. To ensure coverage of small units, leadership from the Company level and below were sampled primarily. A few focus groups were held with junior enlisted Soldiers and intact teams, but those focus groups did not include the activity that generated the Soldier terms.

The facilitator recorded the list where all participants could see it. Participants chose their list of terms from the group-generated list but were instructed that they could add additional terms to their personal list if they felt they were necessary. The remaining 15 focus groups were conducted virtually via teleconference. For virtual focus groups, participants generated a list individually without consulting others. The prompt for list generation simply asked what characteristics and attributes were necessary for a good teammate. Leaving the prompt intentionally vague prevented participants from limiting their responses to characteristics based on a preconceived notion (perhaps based in Army doctrine) about what made up a good teammate. Participants could interpret good teammate to be relevant for teamwork execution and/or for task completion. In fact, participants noted some characteristics that were tied to teamwork (e.g., "sociable," "selflessness") and some characteristics that were tied to taskwork (e.g., "self-driven," "hardworking").

For the duration of this paper, the items on these lists will simply be referred to as the Soldier-provided *terms* to distinguish them from the characteristics presented in the ATAF. Soldiers limited their list of terms to the five most essential; many elaborated by providing a brief description while others only listed a single word or phrase. Researchers transcribed the 5-term list of every respondent in each focus group. These terms reflect the knowledge, skills, and behaviors Soldiers value most in a good teammate.

Next, researchers compiled the 5-item lists into a single list and then sorted each term into the ATAF, a multi-purpose Army competency framework. The 1.0 version of the ATAF used in this study was comprised of 198 knowledge, skill, and behavior (KSB) constructs nested within 43 broader Talents, which were further nested within 7 broader Talent Domains (Figure 1). To complete the sorting, researchers reviewed the 198 KSBs of the ATAF to increase familiarity with the ATAF and the constituent KSBs. Next, two researchers translated the Soldier terms into the language of the ATAF by linking each term to its most similar ATAF KSB. Researchers compared the results of their sorting and then discussed their disagreements to reach a consensus. This resulted in a list of 230 terms sorted into ATAF KSBs.

Although the sorting occurred strictly at the KSB level, the nested structure of the ATAF allowed agreement calculation across all three levels of the ATAF: Talent Domain, Talent, and KSB. In some cases, raters disagreed about which KSB best matched a Soldier term, but the conflicting KSBs the raters selected still shared the same Talent and Talent Domain. Researchers recorded these instances as disagreement on the KSB level and agreement on the level of Talent and Talent Domain. This is how researchers established agreement across all three levels of the ATAF.

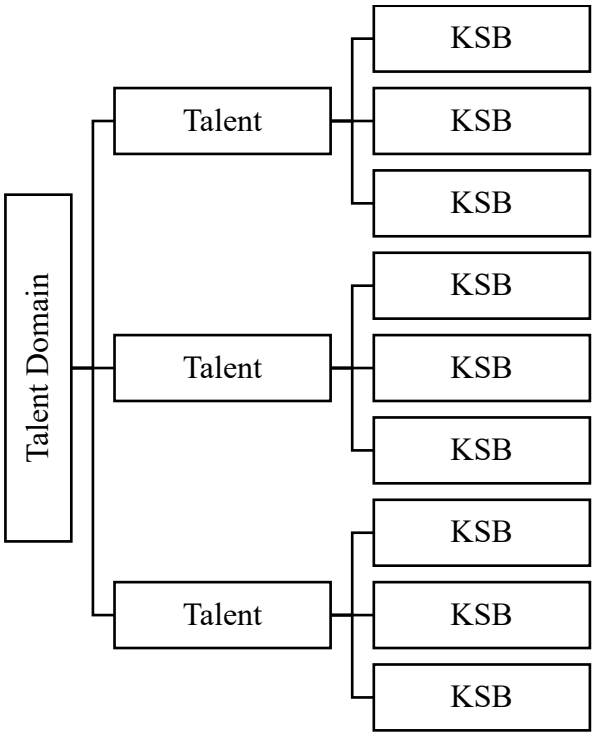
Analysis

Rater reliability statistics were conducted to show rater agreement before and after attempts to reach consensus. Table 2 shows the rate of simple agreement at each level before and after raters met to resolve disagreements. After meeting, many disagreements remained unresolved. For example, researchers failed to reach consensus in cases where Soldier descriptions were ambiguous or ATAF KSBs appeared indistinguishable. In cases of standing

disagreement, each KSB selected by the raters was included in the final frequency analyses but each of the two categories only received a half count to prevent the omission of relevant KSBs.

Figure 1

Illustration of Army Talent Attribute Framework (ATAF) Nested Structure of Knowledge, Skills, and Behaviors (KSBs); Talents; and Talent Domains



Note. KSB = Knowledge, skill, or behavior.

Table 2

Term Sorting Agreement Before and After Consensus Meeting Split by Army Talent Attribute Framework (ATAF) Level and Unit Type

	Initial Agreement			After Discussion		
	Talent Domain	Talent	Measurable KSB	Talent Domain	Talent	Measurable KSB
Armor (79)	87%	63%	51%	96%	78%	61%
Infantry (151)	82%	68%	55%	98%	89%	66%

Note. The number in parentheses represents the number of terms sorted for that group. 230 terms were sorted in total.

Reliability statistics were computed after raters met to resolve their disagreements. Raters were generally consistent in their ratings across the full sample even after controlling for the possibility of chance agreements, which was roughly 3% in any given case. The coefficient of interrater reliability that controls for chance agreement, Cohen's κ, showed that at the KSB level raters maintained a "substantial" level of agreement (κ = .63) that was between "moderate" (κ = .41 - .60) and "near perfect" (κ > .81) according to published benchmarks (McHugh, 2012). However, raters had more agreement in some domains than others (Table 3). The κ value was highest for Disposition, which had the lowest likelihood of chance agreements and was most frequently selected for sorting. The Physical Domain had the lowest κ value and cases were so infrequent that the observed agreement was not significantly different from the likelihood of chance agreement.

Table 3

Rate of Term Sorting Agreement Within Each Domain After Discussion

Domain	Rater Agreement	Percent Chance Agreement	Cohen's κ	*p*
Cognitive	.43	.19	.30	.01
Communication	.43	.09	.37	.01
Disposition	.67	.05	.65	<.001
Expertise and Personal Competence	.67	.32	.51	.01
Interpersonal	.50	.11	.44	.01
Leadership	.54	.09	.49	<.001
Physical	.33	.22	.14	.51
All Domains	.64	.03	.63	<.001

Note. Rater agreement represents simple agreement. All Domains denotes statistics of all ratings at the KSB level.

Overall, the more granular categories of the ATAF resulted in the greatest rate of disagreement, but even in those cases, raters often agreed on the Talent or Talent Domain to which the term belonged. Two points follow from this pattern. First, lower agreement at the KSB level means the sorting results are less reliable and should therefore be interpreted more cautiously. The second point, however, is that there is a stronger basis for inferences about which Talents (e.g., Extraversion, Agreeableness) or Talent Domains (e.g., Disposition) Soldiers prioritized in their descriptions. In these cases, rater agreement was strong to nearly perfect, meaning readers can have stronger confidence that the broader patterns of Talents and Talent Domains presented in this paper accurately reflect the patterns in Soldier answers.

Results

Researchers examined how frequently the Soldier terms reflected the Talent Domains, Talents, and KSBs of the ATAF. The patterns that emerged in the frequency analysis are evidence of which characteristics Soldiers tended to prioritize when describing a desirable teammate. These results are described below and organized by ATAF level to showcase patterns

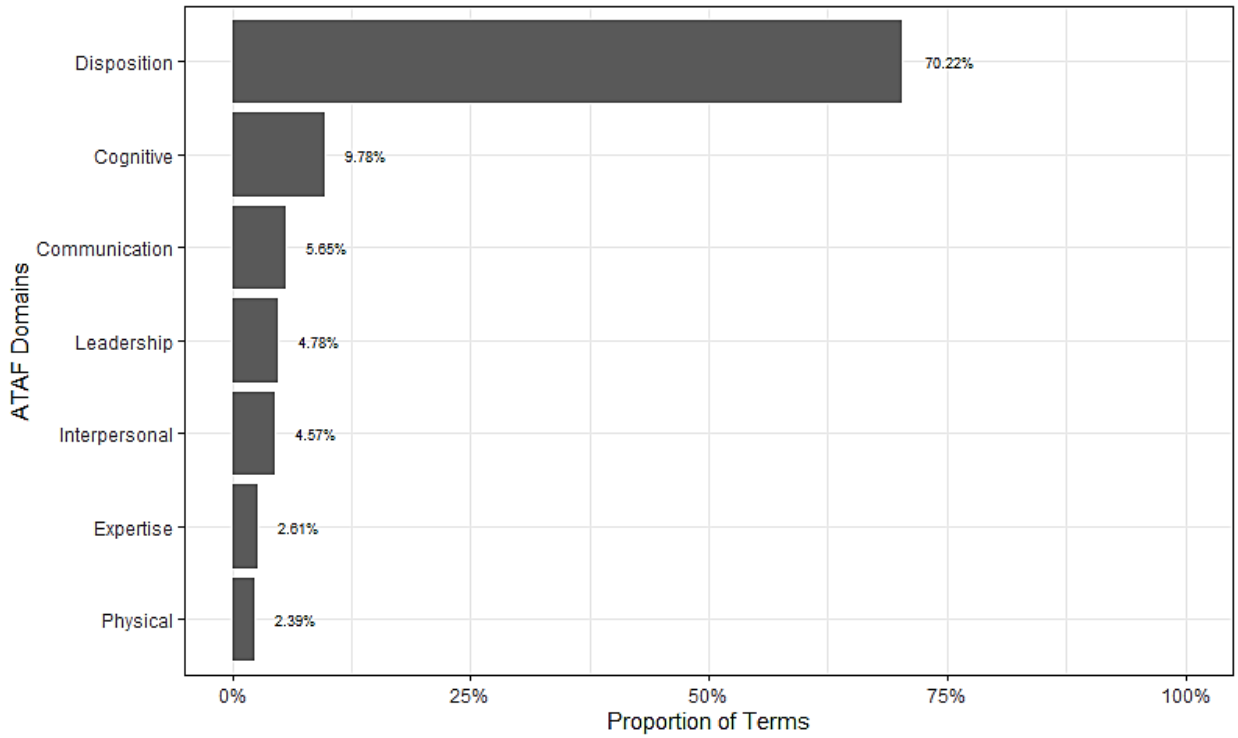
of increasing granularity. This means the frequencies at the Talent Domain level show broader patterns describing what groups of characteristics Soldiers desired, whereas the patterns at the KSB level show how Soldiers value specific characteristics within those Talent Domain groupings.

Talent Domain Level

When asked what characteristics Soldiers would like in a teammate, they described personality features more often than an acquired characteristic like knowledge or skills. Over 70% of Soldier terms matched a KSB in the Disposition Talent Domain. These results are illustrated in Figure 2.

Figure 2

Proportion of Terms Sorted by Talent Domain



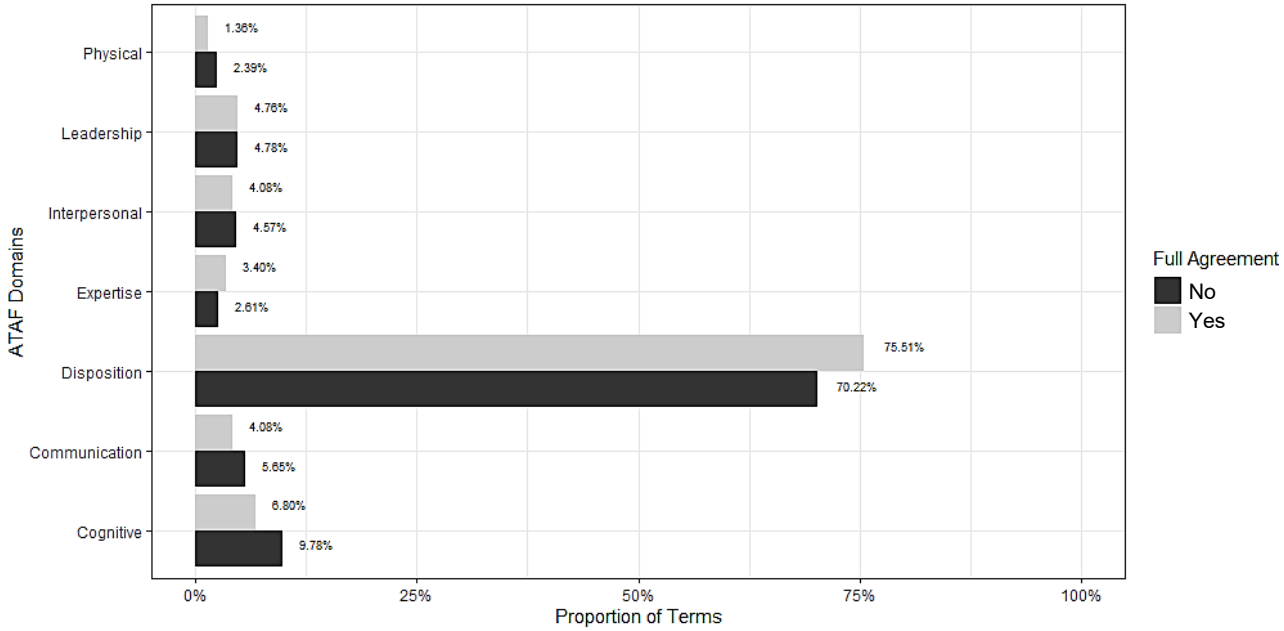
Note. N_{terms}= 230.

Soldier terms reflecting the Disposition Talent Domain included terms like “hard working,” “disciplined,” “personal drive,” and “ability to learn.” Almost 10% of Soldier terms fit within the Cognitive Domain (e.g., “intelligent,” “common sense,” “critical thinking”) and 6.7% of terms fit within the Communication Domain (e.g., “good communicator,” “voice,” “effective receiver of communication”). Terms reflecting Leadership (e.g., “born leader,” “teaching others,” “having courage”) and Interpersonal Skills (e.g., “team focused,” “social skills,” “caring”) were also present but less common. Overall, the Disposition Talent Domain was most dominantly represented.

To understand the role of rater disagreement in sorting, the Talent Domain level proportions were recalculated using only cases of perfect agreement to compare with the above results. After excluding all cases of standing disagreement, the overall proportions and relative order changed slightly (Figure 3, Table 4).

Figure 3

Term Sorting Rates by Talent Domain Including and Excluding Cases of Disagreement



Note. The Full Agreement group includes only ratings for which raters were in complete agreement. The grouping without full agreement represents sorting results that include full agreement and standing disagreement. ATAF = Army Talent Attribute Framework.

Table 4

Term Sorting Rates by Talent Domain Including and Excluding Cases of Disagreement

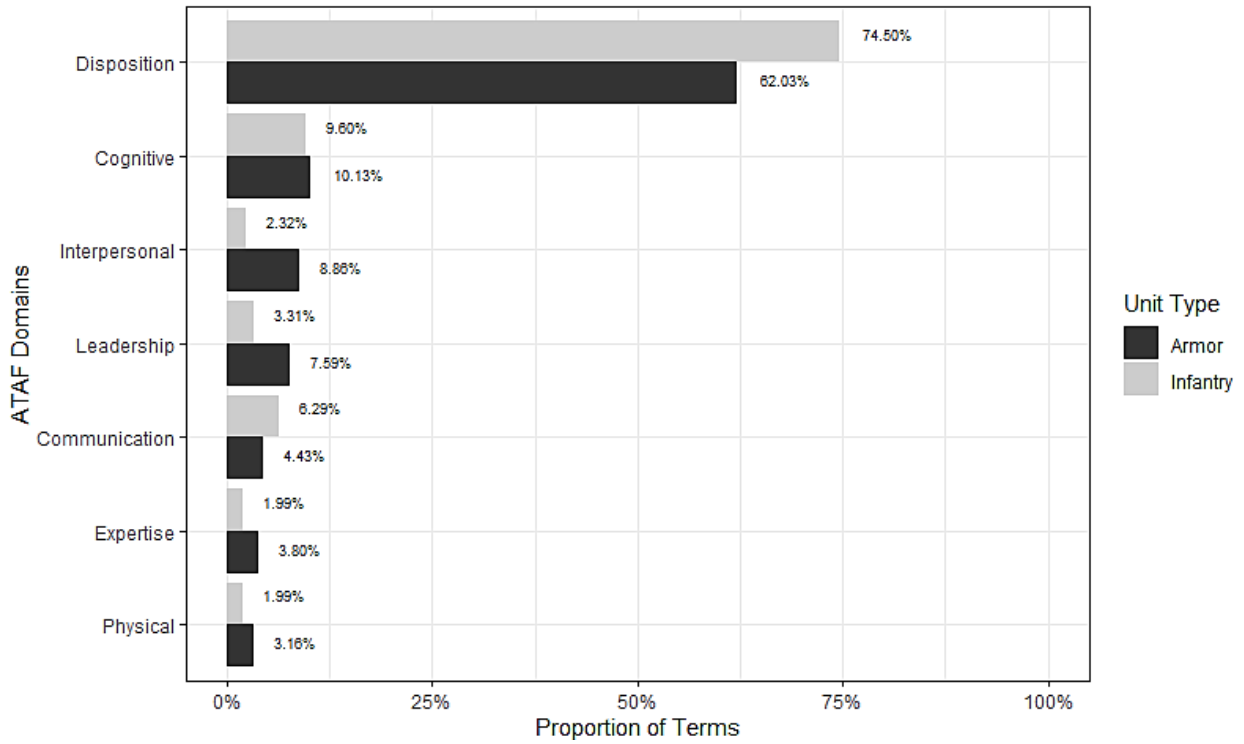
	Full Agreement Only			All Sorting Counted		
Domain	Count	Proportion	Rank	Count	Proportion	Rank
Cognitive	20	6.80%	2	45	9.78%	2
Communication	12	4.10%	4	26	5.65%	3
Disposition	222	75.50%	1	323	70.22%	1
Expertise	10	3.40%	6	12	2.61%	6
Interpersonal	12	4.10%	4	21	4.57%	5
Leadership	14	4.80%	3	22	4.78%	4
Physical	4	1.34%	7	11	2.39%	7

Domain Level Differences Between Unit Types

Small differences emerged between the Armor crews and Infantry teams when describing what characteristics they would like in a teammate (Figure 4). A chi-squared test was conducted to determine whether the two unit types received systematically different sorting decisions at the Domain level. The test yielded a significant but negligible effect ($\chi^2(2, N = 460) = 18.28$, $p = .005$, Cramer's $V = .009$). First, even though both types of units referred to dispositional characteristics most of the time, Infantry units listed them more often. This suggests that Armor units prioritized knowledge and skills more frequently by comparison. After examining differences, it appears Amor units weighted interpersonal and leadership skills more heavily than Infantry units. However, these differences are less pronounced than the shared pattern of Disposition's high frequency. Overall, responses from both types of units share a pattern: most Soldier terms reflected the Disposition Talent Domain.

Figure 4

Differences in Domain-Level Term Proportions Between Unit Types



Note. ATAF = Army Talent Attribute Framework.

In general, a team's tasks and task environment can heavily influence which KSBs help them thrive. Therefore, it is possible the differences in response patterns reflect differences in Armor and Infantry contexts. For example, perhaps the Armor crews prioritized interpersonal skills more because they spend longer periods of time in closer quarters. However, the dominance of Disposition suggests that factors like personality are most salient to Soldiers across both unit types. It is possible that dispositions play a large role in team performance in other

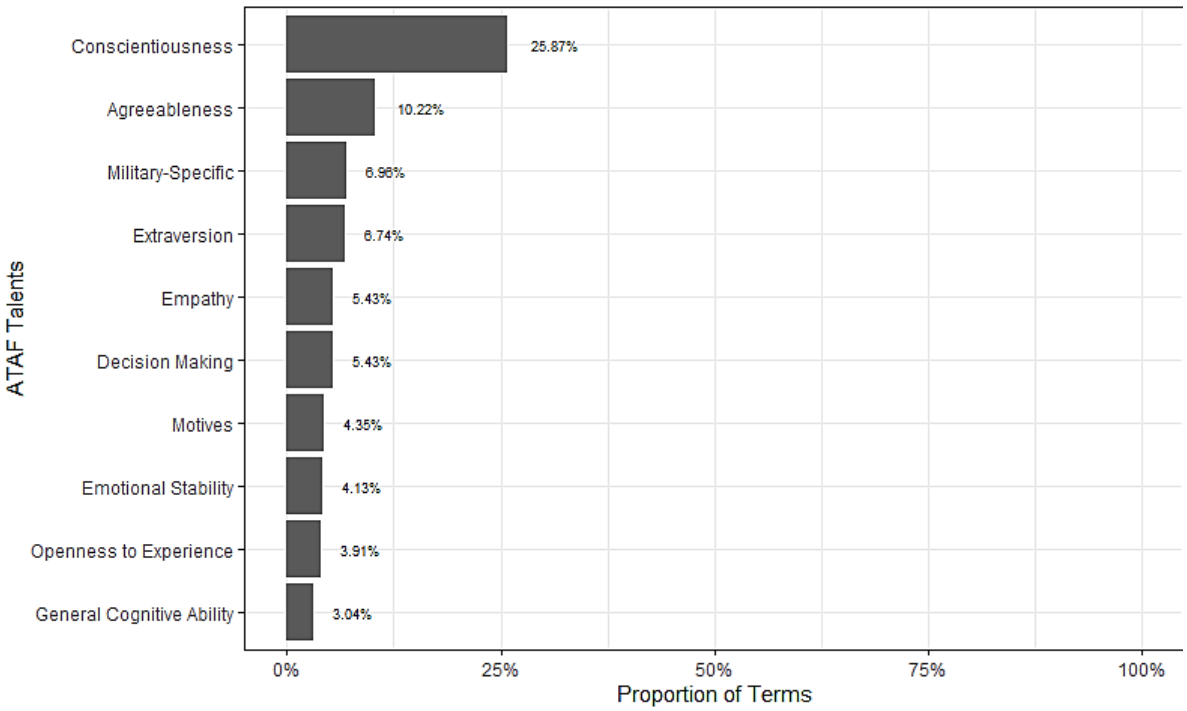
Army contexts, too, which future research could address. For now, these findings simply indicate that some types of KSBs, like dispositions, may benefit all kinds of teams while other KSBs, like domain-relevant skills, may benefit teams in some contexts more than others.

Talent Level

Soldier terms were most often matched to the Talents of Conscientiousness, Agreeableness, Military-Specific, and Extraversion (Figure 5). Table 5 shows the four most common ATAF Talents, their description in the ATAF, and examples of Soldier terms sorted into each Talent category. The plurality of terms (25.87%) described the Conscientiousness Talent; these included terms like "disciplined," "detail-oriented," and "accountable." Terms reflected Agreeableness (e.g., "selfessless," "humble," "empathetic") in 10.22% of cases, and 6.96% of terms (e.g., "loyalty to Army," "commitment") were matched to the Military-Specific Talent. Extraversion was matched to 6.74% of the terms (e.g., "sociable," "initiative").

Figure 5

Proportion of Terms Sorted into 10 Most Frequent Talents



Note. ATAF = Army Talent Attribute Framework. $N_{terms} = 230$.

KSB Level

The lowest level of the ATAF describes measurable knowledge, skills, and behaviors. These KSBs were the basis of researchers' sorting. The five most commonly occurring KSBs among Soldier terms were Achievement Orientation, Army Values, General Cognitive Aptitude, Dependability, and Persistence (Figure 6; Table 6).

Table 5

Most Frequent Talents with Army Talent Attribute Framework (ATAF) Description and Examples of Soldier Terms

Talent	Talent Description	Soldier Terms
Conscientiousness	Tendency towards self-discipline and duty, strives to follow rules, do what is right, and thoroughly accomplish work goals.	Disciplined, detail-oriented, accountable, responsibility
Agreeableness	Tendency towards a general concern for social harmony and connection to others.	Selflessness, humble, empathetic, compassionate
Military-Specific	Exemplifies Army values, commitment to service, successfully performs duties, and models the actions and internal shared attitudes and beliefs that embody the Army profession.	Loyalty (to Army), commitment, invested
Extraversion	Tendency towards enjoying attention and interactions with others and being a part of the group.	Sociable, healthy competitive attitude, initiative

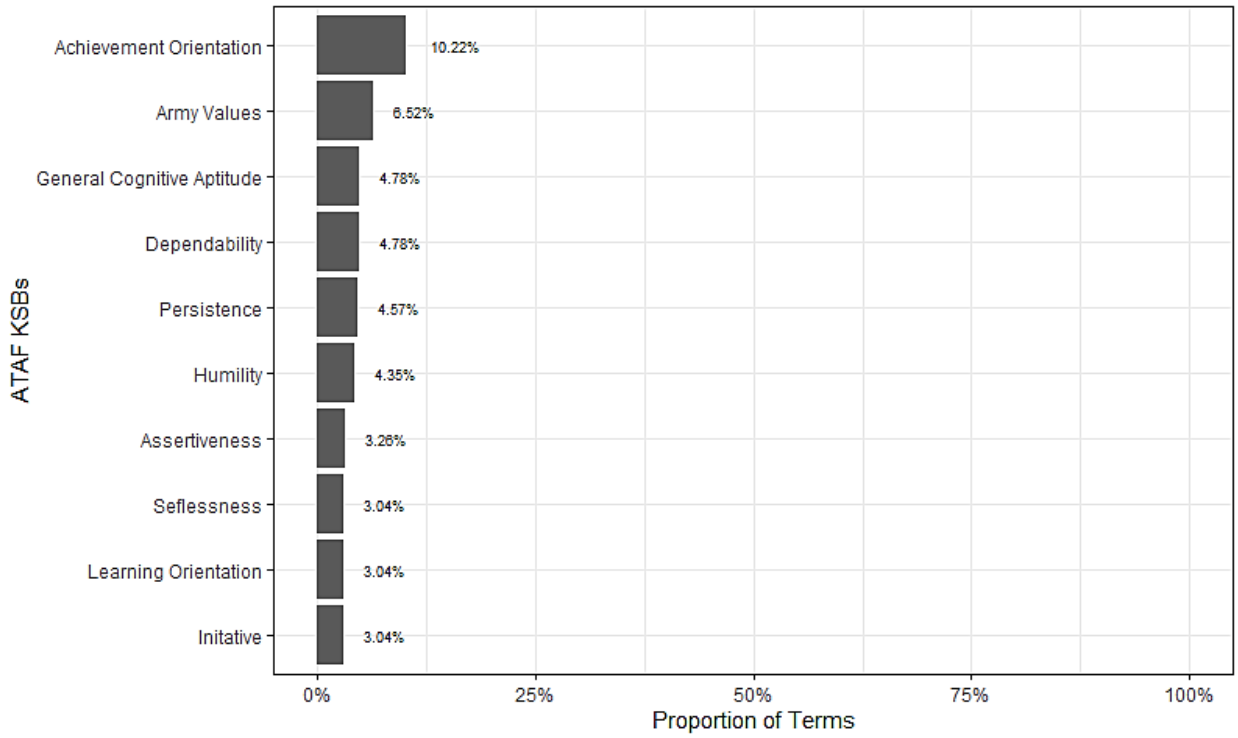
Terms were sorted into Achievement Orientation more often than any other KSB. This group included terms like "self-driven," "hardworking," and "personal drive." Together, Achievement Orientation terms made up 10.22% of all terms that Soldiers provided. Army Values was the KSB that received the second most terms (6.52%; e.g., "loyalty," "courage," "respect") followed by General Cognitive Aptitude (4.78%; e.g., "intellect," "intelligence") and Dependability (4.78%; e.g., "consistent," "accountability," "maturity"), which were the KSBs tied for third most frequent. The fourth most common KSB was Persistence (4.57%; e.g., "work ethic," "willing to work," "will and determination"). Figure 7 displays the ten KSBs most frequently matched with Soldier terms, and a table that lists frequency rates for all KSBs used in sorting is presented in Appendix B.

Discussion

One line of effort (i.e., LOE3) in the Army People Strategy is to identify, align, and advance Soldier talents that serve the Army's mission (Grinston et al., 2019, pp. 7-8). Applying this strategy to support small unit functioning means first identifying the talents that drive team success. After identifying these talents through team-based work analysis, they can be incorporated into other personnel systems that align and advance these team-based KSBs. Calibrating personnel systems with team-based models ensures that the KSBs targeted by Army personnel systems contribute teams as well as individual Soldiers.

Figure 6

Proportion of Terms Sorted Into 10 Most Frequent Knowledge, Skills, and Behaviors (KSBs)



Note. ATAF = Army Talent Attribute Framework. N_{terms}= 230.

To begin identifying these KSBs, researchers asked focus groups of Soldiers to describe what characteristics they would use to describe a good teammate. In general, these Soldiers described dispositions before skills or abilities. More specifically, Soldiers wanted a teammate to be smart, driven to achieve, and to be a model of Army Values. Other desirable characteristics broadly mapped onto two personality features of the five-factor model of personality: Conscientiousness and Agreeableness. Both personality characteristics are linked to team performance in studies of team composition.

Frequency analysis across all levels of the ATAF revealed patterns in Soldier responses. Patterns at the highest level showed that respondents tended to name KSBs in the Disposition domain most often. This suggests that when Soldiers think of what makes a good teammate, personality features and motive dispositions are deemed most important. Sorting results at the lower level of the ATAF provide more detail about what observable behaviors Soldiers found most important. Although ratings at this level were less reliable, established research lends some validity to these KSB-level findings.

Table 6

Five Most Frequent Knowledge, Skills and Behaviors (KSBs) with Army Talent Attribute Framework (ATAF) Description and Examples of Soldier Terms

KSB	KSB Description from ATAF	Soldier Terms	Talent (Talent Domain)
Achievement Orientation	Sets high personal standards and is willing to give one's best effort, works hard to achieve difficult objectives, is confident and resourceful in striving for accomplishment.	Self-driven, goal oriented, hardworking, personal drive	Conscientiousness (Disposition)
Army Values	Models loyalty, duty, respect, selfless service, honor, integrity and personal courage.	Loyalty, courage, respect	Military-Specific (Disposition)
General Cognitive Aptitude	Capacity to understand and interpret information that is being presented, ability to identify and solve problems, and capability to learn new things quickly and efficiently.	Intellect, intelligence	General Cognitive Ability (Cognitive)
Dependability	Trustworthy, reliable, planful, and accountable. Respects the value of discipline and does not shy away from responsibility. Makes an effort to keep promises.	Consistent, reliability, maturity, trustworthiness, accountability	Conscientiousness (Disposition)
Persistence	Focuses on tasks and activities until they are completed and is determined to accomplish their goal even in the face of obstacles.	Work ethic, willing to work	Conscientiousness (Disposition)

Decades of observational studies helped scientists identify what team member characteristics consistently improve team functioning. Notably, Soldiers pointed to many of these characteristics unprompted based on their own experiences in the field. This section includes the Domains, Talents, and KSBs Soldiers identified and elaborates on their relevance to teamwork using established research in team psychology.

Talent Domain Level

Analysis at the Domain level showed that Soldiers tended to name KSBs in the Disposition Talent Domain most often. One explanation is that dispositional qualities are harder to develop over time, so Soldiers may have determined that more tractable, skill-based Domains like Leadership or Communication are secondary to the stable personality qualities found in the Disposition Domain. One participant explicitly called this idea out in the elaboration of their terms: "All tasks are trainable," they said, "Characteristics… [take] a bit longer." Soldiers prioritized dispositions when asked what qualities exist in a good teammate.

Talent Level

The two Talents most reflected in Soldier terms referred to two broad personality dimensions in the five-factor model: Conscientiousness and Agreeableness. Scientific studies on team composition report that teams with greater levels of these characteristics tend to outperform other teams (Bell et al., 2007), and they roughly correspond to self-management and teamwork categories presented in earlier models (Stevens & Campion, 1994). Therefore, studies support the relevance of these Talents for performance in a team context.

Conscientiousness

Conscientiousness is a personality characteristic that describes one's attention to detail, adherence to rules, and drive for achievement. After discussion, 26% of Soldier terms were sorted into the Conscientiousness Talent. Conscientious individuals succeed in ambiguous roles, help focus the team on tasks necessary for goal completion and tend to engage in goal-related behavior themselves (Barrick & Mount, 1991; Judge & Ilies, 2002; LePine et al., 1997; McCrae & Costa, 1987). These behaviors may explain why teams with conscientious members outperform other teams (Bell et al., 2007; Carter et al., 2019). In general, conscientiousness advances team taskwork and in this study, terms reflected Conscientiousness more than any other Talent.

Agreeableness

Agreeableness was the second most common Talent and accounted for 10% of all Soldier terms. Agreeableness is the personality characteristic that describes one's tendency to cooperate with others and seek harmony within a group. Agreeable individuals in a team are inclined to cooperate, avoid competition with other team members, and have stronger conflict management skills (Hogan & Holland, 2003; LePine & Van Dyne, 2001; van de Vliert & Euwema, 1994). A meta-analysis of teammate perceptions showed that agreeable team members were considered better at teamwork than others (Barrick & Mount, 1991). It is not surprising then, that, across

studies, teams with more agreeable members tend to outperform other teams (Bell et al., 2007). In general, Agreeableness is associated with stronger teamwork among individuals. In this study, it was the second most common Talent.

Military-Specific Dispositional Qualities

Military-Specific dispositional qualities appeared third most frequently. This Talent represents KSBs like a commitment to Army Values, embodiment of the warrior ethos, and professional/military bearing. Unlike the other top Talents, this Talent is specific to the U.S. Army and does not reflect a broader psychological construct already studied in scientific literature. However, Soldiers are exposed to these concepts through their training, the Soldier Creed, and the Army Values. Roughly 7% of all terms matched Military-Specific dispositional qualities.

Extraversion

Extraversion occurred just as frequently as the Military-Specific Talent. Extraversion enfolds attributes like being talkative, assertive, and bold; those with lower extraversion are described as withdrawn or reserved (Goldberg, 1992). Team members with higher extraversion share information more readily and are more likely to emerge as the leader of an unstructured group (de Vries et al., 2006; Do & Minbashian, 2014). About 7% of all terms were sorted into the Extraversion Talent.

KSB Level

The most frequent KSBs were Achievement Orientation, Army Values, Cognitive Aptitude, Dependability, and Persistence. These KSBs primarily reflect the Conscientiousness Talent in the Disposition Talent Domain. The exception is Cognitive Aptitude, which has clear relevance for task completion and coordination within a team.

Achievement Orientation

Achievement Orientation is a psychological construct that describes the personal tendency to set and achieve goals as a way of demonstrating or mastering skills (Dweck, 1986). In the ATAF, this characteristic is situated in the Conscientiousness Talent of the Disposition Talent Domain. Individuals with this disposition are more likely to engage in organizational citizenship behaviors and perform better in their jobs (Neuman & Kickul, 1998; Payne et al., 2007). When Soldiers gave a term that described driven team members with a desire to get the job done, researchers sorted it here.

Army Values

The Army Values KSB describes a Soldier's commitment to the virtues of the Army. Loyalty was the most common Soldier term sorted into this KSB, followed by other values like courage and respect. Army Values is unique in the list of top KSBs because it does not represent an established psychological construct. Instead, the category was specially created to describe

Soldiers that model the core values of the Army, and these are qualities that Soldiers want to see in a teammate.

General Cognitive Aptitude

General Cognitive Aptitude is another attribute taken from the psychology literature that influences Soldier functioning in myriad ways. As a characteristic of the Cognitive Talent Domain, General Cognitive Aptitude refers to an individual's ability in spatial, numerical, and verbal reasoning (Hough & Oswald, 2000). Individuals with this attribute quickly gather and process information from a variety of sources and transform this information into sound judgement. As a reflection of overall intellect, this attribute serves worker performance in a variety of professional contexts (for a review see Schmitt, 2014). High General Cognitive Aptitude in a single member can elevate the performance of an entire team when tasks depend on the highest performing member. For example, when a team is engaged in problem solving, ideation, or decision making, having one member high in General Cognitive Aptitude can be enough for the team to excel.

Dependability

Dependability in the ATAF is a subfacet of the Conscientiousness Talent that captures trustworthiness and accountability. Members can count on dependable teammates to contribute to the team's success. This is critical when teamwork involves interdependent or conjunctive tasks where the performance of the team is equally dependent on each individual member. Examples of these tasks include rucking a set distance as a team as fast as possible or operating a tank. Dependable teammates ensure the team's performance potential is not foreclosed by a proverbial "weak link" where one member holds the others back.

Persistence

Persistence describes a tendency to see work through to completion and maintain determination in the face of obstacles. In the ATAF, persistence is another facet of the Conscientiousness Talent in the Disposition Talent Domain. Persistence describes the way a Soldier takes on their taskwork, and so it has conceptual overlap with Achievement Orientation and Dependability.

Implications

Across all contexts, team performance depends on team composition. This includes all team member characteristics, like knowledge, skills, and behaviors, that contribute to team functioning (Bell et al., 2018; Ilgen et al., 2005). As ARI researchers are currently applying team-based work analysis to systematically identify which KSBs are most valuable to teamwork in Army teams, it is also useful to know what KSBs the Soldiers themselves value in a new teammate. The Soldier perspective about what characteristics describe an effective teammate has implications for the broader work analysis and future implementation of team-based models.

The results from these interviews provide direction to the team-based work analysis by gesturing broadly to what KSBs might support team processes. Presumably the KSBs that Soldiers prioritized will overlap somewhat with the KSBs that support team effectiveness. However, it is important to note that Soldiers may have had different conceptions of "effectiveness" when responding to the prompt. For example, Soldiers may be describing someone that adds to overall team cohesion, carries out discretionary helping behaviors, or someone who can further the mission of the team. These are distinct but interrelated notions of team effectiveness that may have influenced Soldier responses. Therefore, the terms Soldiers provided give broad direction for which KSBs may support core team processes but should not preclude exploration of other KSBs in a team-based work analysis.

This research takes the Army a step closer to developing team-based personnel systems that make teams more effective than the sum of their parts. Identifying the characteristics that Soldiers believe make up an effective teammate provides some information about which team composition characteristics may help teams succeed. Findings provide a useful point of reference for the ongoing team-based work analysis by showing what characteristics Soldiers value most.

Future team assignment models will depend on data like these to create effective teams. Assignment models identify what teams need to succeed and ensure teams have those KSBs as part of their composition. The work in this research note offers a starting point for these Army-tailored models. Teams with the characteristics identified in this study may have stronger cohesion, adaptability, and performance as a result of their composition. Future research can explore that question. For now, these findings contribute to a framework of Soldier assignment that enhances team effectiveness.

In a similar way, the findings in this report provide some information about the future effectiveness of intact teams. If team members lack the characteristics Soldiers identified in this study then the team may find teamwork arduous or unnatural. This information can guide team development efforts by identifying what compositional deficits, if any, are present in the team. Teams short on the KSBs identified here may rely on training or leadership support to achieve the typical level of functioning. Nevertheless, identifying what knowledge, skills, and behaviors may be missing can give them a head start in addressing those gaps before they disrupt team dynamics.

This study provides the groundwork for models enhancing team assignment and team performance by pointing out the characteristics Soldiers most value in another team member. Measuring these characteristics and applying them to predictive models of team functioning will be necessary to validate the team-based assignment frameworks generated from this research program. In short, this study is a first step to developing team-based personnel systems informed by established research, scientific studies, and the perspectives of Soldiers in the Army.

Limitations

The frequency of rater disagreements should inform interpretations of this report. Although researchers usually found agreement through the sorting process, some cases required deliberation. For example, there was initial disagreement about whether the term "accepts

constructive criticism" is primarily concerned with learning or with handling the emotions associated with negative feedback. After discussion, raters agreed the elaboration by the respondent focused primarily on emotion management and modified their sorting to reflect this consensus. However, there were many cases in which disagreements remained unresolved. A rater training to calibrate rater frames for reference may have reduced the frequency of all disagreements between raters, but in this study no rater training was completed prior to sorting.

The unresolved disagreements between raters occurred for primarily two reasons. One reason for disagreement comes from the sorting method selected by the researchers. Researchers assigned each term to the single most representative KSB, instead of assigning it to all plausible matches, which assumes the KSBs operate as mutually exclusive categories. Also, researchers did not create new KSBs to capture novel descriptors which implies the list of KSBs in the ATAF is exhaustive. This is not the case, however. To provide one example, including the KSB of Mastery Orientation may have offered a more accurate representation of Soldier terms than Achievement Orientation, given the former is more beneficial for team outcomes (Cellar et al., 2011). Furthermore, in the ATAF, KSBs are recognized as overlapping and interrelated constructs. Unresolved disagreements occurred when researchers attempted to sort terms into one of two overlapping KSBs as if they were mutually exclusive. The most frequent disagreement, for example, occurred when Soldiers provided terms like "hard working," "purpose driven," or "motivated" because researchers could not confidently determine whether these descriptors best reflected the KSB of Persistence or Achievement Orientation. An example worth considering emerged from the overlap between the Agreeableness KSB Selflessness and the Military-Specific KSB Army Values which includes selfless service in its definition (Table 6). When Soldiers described the ideal teammate as selfless, researchers attempted to sort the term based on the context. The term may fit Army Values where the Soldier describes someone who puts the mission above themselves, or the term may fit Selflessness if they are describing someone more generally generous with their time and resources. As with Persistent and Achievement KSBs, the distinctions were not always apparent and led to unresolved disagreements among raters.

The second source of disagreement noted by researchers was ambiguity in the terms and descriptions that Soldiers provided. Allowing Soldiers to describe terms in their own words gave them more liberty in their responses, but this sometimes led to multi-faceted or imprecise descriptions that were difficult to reliably match to KSBs. For example, one Soldier wrote "willing to integrate into the team" as a desired characteristic, but their elaboration contained a double-barreled definition: "At the top of the list, I put willingness to integrate into the team. I think as far as attributes, that goes to empathy and respect."

Apart from creating disagreements, the open-ended questions present another limitation. When Soldiers elaborated on the terms included in their list, they sometimes began with narrow descriptions of events that broadened to larger patterns of behavior. As a result, broad constructs like personality and dispositions that describe behavior across contexts may be overrepresented in the analysis. This may explain why Disposition KSBs were frequently selected to match a Soldier term.

Because the focus of the team-based work analysis was on Armor and Infantry units, the results may not generalize to other military occupational specialties (MOS). The degree to which

there is overlap and convergence is a question for future research. However, the generally similar results for Amor and Infantry units suggests that the pattern may be generalizable to MOS with similar taskwork structure. At the same time, because the research sampled NCOs and officers, future research is needed to determine the extent to which the results generalize to what junior enlisted Soldiers think makes a good teammate.

Finally, there may be differences between the characteristics Soldiers think teammates should have and what characteristics will be most valuable to the team. What Soldiers described in their responses may improve team cohesion or viability but not necessarily the team's ability to achieve its objectives, for example. In other words, respondents may be describing someone they would value as a friend or colleague but not someone who is the missing piece to their team composition. Further exploration in the team-based work analysis will help show the extent of overlap between the most important KSBs to team functioning and the terms Soldiers provided.

Conclusion

Results from this report serve the ongoing team-based work analysis by providing a Soldier's-eye-view of what makes a good teammate. In future steps, researchers will empirically link KSBs to core team processes to validate their relevance in team functioning. Results in this report suggest that, as in other scientific studies, the dispositions of Conscientiousness and Agreeableness play a valuable part in Army team processes.

Within the context of the U.S. Army Research Institute's Program of Team-Based Assignment, this information offers a foundational contribution to the larger framework of team functioning. Calibrating personnel systems to produce teams with stronger emergent properties requires a firm grasp on which team attributes combine to create those properties. This step grounds current research by incorporating Soldier perspectives on these theoretical problems. The body of research gathered contributes to a framework of team performance that will guide the development of team-based personnel systems.

References

Army Talent Management Task Force. (2016). *Army talent attribute framework* [audiovisual media]. https://talent.army.mil/ataf/. U.S. Department of the Army.

Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, *44*(1), 1-26. https://doi.org/10.1111/j.1744-6570.1991.tb00688.x

Bell, S. T. (2007). Deep-level composition variables as predictors of team performance: A meta-analysis. *Journal of Applied Psychology*, *92*(3), 595–615. https://doi.org/10.1037/0021-9010.92.3.595

Bell, S. T., Brown, S. G., Colaneri, A. & Outland, N. (2018). Team composition and the ABCs of teamwork. *American Psychologist, 73*(4), 349-362. https://doi.org/10.1037/amp0000305

Carter, K. M., Mead, B. A., Stewart, G. L., Nielsen, J. D., & Solimeo, S. L. (2019). Reviewing work team design characteristics across industries: Combining meta-analysis and comprehensive synthesis. *Small Group Research*, *50*(1), 138-188. https://doi.org/10.1177/1046496418797431

Cellar, D. F., Stuhlmacher, A. F., Young, S. K., Fisher, D. M., Adair, C. K., Haynes, S., Twichell, E., Arnold, K. A., Royer, K., Denning, B. L., & Riester, D. (2011). Trait goal orientation, self-regulation, and performance: A meta-analysis. *Journal of Business and Psychology*, *26*(4), 467-483. https://doi.org/10.1007/s10869-010-9201-6

de Vries, R. E., van den Hooff, B., & de Ridder, J. A. (2006). Explaining knowledge sharing: The role of team communication styles, job satisfaction, and performance beliefs. *Communication Research*, *33*(2), 115-135. https://doi.org/10.1177/0093650205285366

Do, M. H., & Minbashian, A. (2014). A meta-analytic examination of the effects of the agentic and affiliative aspects of extraversion on leadership outcomes. *The Leadership Quarterly*, *25*(5), 1040-1053. https://doi.org/10.1016/j.leaqua.2014.04.004

Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, *41*(10), 1040–1048. https://doi.org/10.1037/0003-066X.41.10.1040

Goldberg, L. R. (1992). The development of markers for the Big Five factor structure. *Psychological Assessment*, *4*(1), 26-42. https://doi.org/10.1037/1040-3590.4.1.26

Grinston, M. A., McConville, J. C., & McCarthy, R. D. (2019). *The Army People Strategy*. U.S. Department of the Army. https://people.army.mil/wordpress/wp-content/uploads/2019/10/The-2020-Army-People-Strategy-Final.pdf

Grinston, M. A., McConville, J. C., & McCarthy, R. D. (2020, October 13). *Action plan to prioritize people and teams.* U. S. Department of the Army. *https://www.army.mil/article/239837/action_plan_to_prioritize_people_and_teams*

Hogan, J., & Holland, B. (2003). Using theory to evaluate personality and job-performance relations: A socioanalytic perspective. *Journal of Applied Psychology*, *88*(1), 100-112. https://doi.org/10.1037/0021-9010.88.1.100

Hough, L. M., & Oswald, F. L. (2000). Personnel selection: Looking toward the future--Remembering the past. *Annual Review of Psychology*, *51*(1), 631-664. https://doi.org/10.1146/annurev.psych.51.1.631

Ilgen, D. R., Hollenbeck, J. R., Johnson, M., & Jundt, D. (2005). Teams in organizations: From input-process-output models to IMOI models. *Annual Review of Psychology*, *56,* 517-543. https://doi.org/10.1146/annurev.psych.56.091103.070250

Judge, T. A., & Ilies, R. (2002). Relationship of personality to performance motivation: A meta-analytic review. *Journal of Applied Psychology*, *87(4)*, 797–807. https://doi.org/10.1037/0021-9010.87.4.797

LePine, J. A., Hollenbeck, J. R., Ilgen, D. R., & Hedlund, J. (1997). Effects of individual differences on the performance of hierarchical decision-making teams: Much more than g. *Journal of Applied Psychology*, *82*(5), 803-811. https://doi.org/10.1037/0021-9010.82.5.803

LePine, J. A, & Van Dyne, L. (2001). Voice and cooperative behavior as contrasting forms of contextual performance: Evidence of differential relationships with big five personality characteristics and cognitive ability. *Journal of Applied Psychology*, *86*(2), 326– 336. https://doi.org/10.1037/0021-9010.86.2.326

Mathieu, J. E., Tannenbaum, S. I., Donsbach, J. S., & Alliger, G. M. (2013). Achieving optimal team composition for success. In E. Salas, S. I. Tannenbaum, D. Cohen, & G. Latham (Eds.), *Developing and enhancing teamwork in organizations: Evidence-based best practices and guidelines* (pp. 520-551). Jossey-Bass.

Mathieu, J. E., Tannenbaum, S. I., Donsbach, J. S., & Alliger, G. M. (2014). A review and integration of team composition models: Moving toward a dynamic and temporal framework. *Journal of Management*, *40*(1), 130-160. https://doi.org/10.1177/0149206313503014

Mathieu, J.E., Tannenbaum, S.I., Kukenberger, M., Donsbach, J.S., Alliger, G.E., & Salas, E. (2010). The development of the team role experience and orientation (TREO) measure. Working paper. *The Group for Organizational Effectiveness*

McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, *52*(1), 81-90. http://dx.doi.org/10.1037/0022-3514.52.1.81

McHugh, M. L. (2012). Interrater reliability: The kappa statistic. *Biochemia medica*, *22*(3), 276-282. https://doi.org/10.11613/BM.2012.031

Neuman, G. A., & Kickul, J. R. (1998). Organizational citizenship behaviors: Achievement orientation and personality. *Journal of Business and Psychology*, *13*(2), 263-279. https://doi.org/10.1023/A:1022963108025

Payne, S. C., Youngcourt, S. S., & Beaubien, J. M. (2007). A meta-analytic examination of the goal orientation nomological net. *Journal of Applied Psychology*, *92*(1), 128-150. https://doi.org/10.1037/0021-9010.92.1.128

Prewett, M. S., Walvoord, A. A. G., Stilson, F. R. B., Rossi, M. E., & Brannick, M. T. (2009). The team personality-team performance relationship revisited: The impact of criterion choice, pattern of workflow, and method of aggregation, *Human Performance, 22*(4), 273–296. https://doi.org/10.1080/08959280903120253

Schmitt, N. (2014). Personality and cognitive ability as predictors of effective performance at work. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*, 45-65. https://doi.org/10.1146/annurev-orgpsych-031413-091255

Stevens, M. J., & Campion, M. A. (1994). The knowledge, skill, and ability requirements for teamwork: Implications for human resource management. *Journal of Management*, *20*(2), 503-530. https://doi.org/10.1177/014920639402000210

U.S. Department of the Army. (2019). *Mission command* (Army Doctrine Publication No. 6-0). Author.

van de Vliert, E., & Euwema, M. C. (1994). Agreeableness and activeness as components of conflict behaviors. *Journal of Personality and Social Psychology*, *66*(4), 674-687. https://doi.org/10.1037/0022-3514.66.4.674

Appendix A

Example Virtual Focus Group Activity Protocol

We'd like you to generate a list of characteristics and attributes of Soldiers that make them a good teammate. Characteristics and attributes can be anything about a Soldier that makes them a good teammate.

[About six sessions received additional explanation: Think about the people characteristics that makes someone a team player. A people characteristic can by anything about a person – something about their background that makes a difference, something that they do that makes a difference, some part of their personality that makes a difference.]

Please generate your list of the top five characteristics on your own and write them down and then we'll ask for everyone to share their list if they're comfortable.

[Participants generate list.]

Now look at your list; if you had to give up one of them, meaning that a new Soldier coming to your team would have all of the other ones, which one would it be? Think about it for a minute and then I'll ask everyone to share their answers if they're comfortable doing so.

[Participants share their list.]

APPENDIX B

Frequency of All Knowledge, Skills, and Behaviors Matched to Soldier Terms

Rank	KSB Name	Frequency (%)
1	Achievement Orientation	47 (10.22)
2	Army Values	30 (6.52)
3	General Cognitive Aptitude	22 (4.78)
4	Dependability	22 (4.78)
5	Persistence	21 (4.57)
6	Humility	20 (4.35)
7	Assertiveness	15 (3.26)
8	Selflessness	14 (3.04)
9	Initiative	14 (3.04)
10	Learning Orientation	14 (3.04)
11	Virtue	12 (2.61)
12	Resilience	12 (2.61)
13	Adaptability	11 (2.39)
14	Discipline	10 (2.17)
15	Commitment to Serve	10 (2.17)
16	Sound Judgment	9 (1.96)
17	Optimism	8 (1.74)
18	Empathy	8 (1.74)
19	Active Listening	6 (1.30)
20	Oral Communication Skill	6 (1.30)
21	Consideration	6 (1.30)
22	Self-Control	6 (1.30)
23	Basic Mechanical Knowledge	6 (1.30)
24	Team Orientation	6 (1.30)
25	Warrior Ethos	6 (1.30)
26	Communicator	5 (1.09)
27	Cooperation	5 (1.09)
28	Curiosity	5 (1.09)
29	Interpersonal Tact	5 (1.09)
30	Physically Fit	5 (1.09)

(continued)

Rank	KSB Name	Frequency (%)
31	Critical Thinking	4 (0.87)
32	Communication Ability	4 (0.87)
33	Adjustment	4 (0.87)
34	Tolerance	4 (0.87)
35	Sustains a Climate of Trust	4 (0.87)
36	Instructing	4 (0.87)
37	Intercultural Communication	3 (0.65)
38	Prudent Risk-Taker	3 (0.65)
39	Self-Management	3 (0.65)
40	Cooperation/Teamwork	3 (0.65)
41	Health and Fitness Orientation	3 (0.65)
42	Situational Awareness	2 (0.43)
43	Systems Thinking	2 (0.43)
44	Encourages Discourse	2 (0.43)
45	Affiliation	2 (0.43)
46	Detail-Focused & Precise	2 (0.43)
47	Enthusiasm	2 (0.43)
48	Sociability	2 (0.43)
49	Army Self-Efficacy	2 (0.43)
50	Self-Efficacy	2 (0.43)
51	Knowledge of Processes and Procedures	2 (0.43)
52	MOS/Branch Specific Knowledge	2 (0.43)
53	Interpersonal Relationship Building	2 (0.43)
54	Conflict Management	2 (0.43)
55	Consensus Building	2 (0.43)
56	Encourages Subordinates to Take Ownership	2 (0.43)
57	Balances Mission and Welfare of Followers	2 (0.43)
58	Physical Endurance	2 (0.43)
59	Cognitive Flexibility	1 (0.22)
60	Creative Problem Solving and Innovation	1 (0.22)

(continued)

Rank	KSB Name	Frequency (%)
61	Mental Agility	1 (0.22)
62	Reflective Thinking	1 (0.22)
63	Structured Problem Solving	1 (0.22)
64	Analytical Thinking	1 (0.22)
65	Non-Delinquency	1 (0.22)
66	Even-Tempered	1 (0.22)
67	Machiavellianism	1 (0.22)
68	Attention Seeking	1 (0.22)
69	Warrior Ethos	1 (0.22)
70	Autonomy	1 (0.22)
71	Locus of Control	1 (0.22)
72	Soldier Common Task Knowledge and Skills	1 (0.22)
73	Specialized Expertise	1 (0.22)
74	Cultural/Interpersonal Adaptability	1 (0.22)
75	Perspective Taking	1 (0.22)
76	Coordination	1 (0.22)
77	Inspirational leader	1 (0.22)
78	Motivating Others	1 (0.22)
79	Physical Strength	1 (0.22)