Identifying and Training Perspective Taking within the Army

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ABSTRACT

A significant part of Department of the Army's (D.A.) efforts overseas involve training local security forces and providing humanitarian assistance. To successfully accomplish these missions, Soldiers and D.A. civilians often need to communicate directly with the host national population, which may require bridging large cultural gaps in understanding. Social Perspective Taking (SPT) is an interpersonal process, which can facilitate these communication challenges. Accurate SPT enables an individual to understand how a situation appears to another person and how that person is reacting to the situation in question while minimizing cultural bias and erroneous assumptions. Failures to attempt engaging in SPT and inaccurate inferences often strain relationships and spark conflict, especially in cross-cultural situations. eCrossCulture, Harvard University, and the U.S Army Research Institute for Behavioral and Social Sciences (ARI) have examined the SPT propensity and SPT abilities of 116 participants in an effort to gauge their preparation for engaging in cross-cultural situations. This paper describes the results of three studies (N=116) conducted with U.S. Army Soldiers and D.A. civilians using pre and post test data from an evaluation of an interactive multimedia SPT curriculum. The results suggest that Soldiers and D.A. civilians with greater maturity and cross-cultural exposure (as reflected by rank and number of deployments) tend to engage in SPT more frequently, and generate more hypothetical explanations of others' behavior. These associations may reflect a more complex understanding of others, which develops from exposure to others in cross-cultural situations, and allows one to be open to varying viewpoints, behaviors and cognitions. These findings are also congruent with the possibility that SPT may be enhanced through exposure and therefore may be trainable.

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BACKGROUND

The United States military has a unique purpose within nation building efforts. U.S. Soldiers and D.A. civilians are being asked to operate in areas with unstable or limited security, and leverage all the instruments of national power—diplomatic, informational, military, and economic—to improve the host nation's stability. According to the military's Counterinsurgency Field Manual (FM 3-24; U.S. Department of the Army, 2006), personnel operating in the effort of nation building must:

- Establish and maintain a presence in the populace
- Seek to understand others and avoid any hasty actions
- Build trusted networks of people in the area of operations

Similarly, according to the Military's Stability and Support Operations Manual (FM 3-07; U.S. Department of the Army, 2008), the most successful Soldiers and civilians:

- Understand themselves and empathize with people from all cultures
- Recognize and put aside their own cultural biases
- Ask questions before taking action
- De-escalate tension through humility and respect

These skills are invaluable to effective communication in cross-cultural environments. Further, engaging in the critical cross-cultural conversations required in stability and support operations places a premium on understanding another's thoughts, feelings, motives, and values. The more Soldiers and D.A. civilians can improve their understanding of others, especially in stability and support operations, the more likely they will enhance their effectiveness in these situations. Time and again, Army units, returning from nation building deployments, proclaim that their single most valuable skill was the ability to communicate effectively and establish relationships with host nationals (Ryan, 2008).

Part of the ability to communicate effectively is the ability to truly understand others. That understanding is facilitated by effective "perspective taking" (Gehlbach, 2004). The social psychological literature suggests perspective taking is one of the most crucial skills contributing to improving relationships and building rapport (Garner, 2009). Three aspects of the SPT process contribute to improved interpersonal communication. First, one must be motivated to try to take the perspective of others. Next, identifying when biases might be impacting an interaction can facilitate understanding of others. Finally, one must accurately identify the thoughts and feelings of others and synthesize that information into hypotheses that can potentially explain their behaviors. In the present research we examined these three specific aspects of the SPT process.

The motivation to engage in SPT is fundamental to the frequency with which one attempts to take the perspective of others and the amount of effort one puts into these attempts. The more often an individual engages in SPT, the more frequently SPT may facilitate that individual's social interactions. Increased SPT motivation also increases the likelihood that individuals will persist on challenging SPT tasks and may spend more time on any given SPT attempt.

In addition to effort and hypotheses generation, the second element of SPT that influences an individual's ability to understand others is cognitive biases. These biases are key perceptual (a.k.a., "cognitive") biases that lead to incorrect assumptions about the motivations, thoughts, feelings, and behaviors of others (Gehlbach & Brinkworth, 2008). A cognitive bias is the human tendency to draw erroneous conclusions in certain circumstances because other motivations override people's general motivation to accurately

perceive their social world. In order to improve an individual's SPT efforts, they must identify and account for their own cognitive biases and those of others. Many biases take the form of "cognitive shortcuts." Although these shortcuts make our thinking more efficient, they frequently lead to misperceptions within our social environment.
Among the many different cognitive biases are:

- Fundamental Attribution Error: The tendency for people to make dispositional rather than situational attributions for someone else's actions. As a result, people often fail to acknowledge or under-value contextual factors that may be influencing a person's thoughts and behavior (Ross, 1977).
- Naïve Realism: A way of looking at the world in which a perceiver assumes others will process the world as he/she does. When others perceptions of the world differ from the perceiver, they are assumed to be subject to different (usually lesser) information, too lazy to process the information normally, or biased in their interpretation of the information (Ross & Ward, 1996).
- Confirmation Bias: The tendency for people to seek out and/or disproportionately attend to information that confirms beliefs that they already hold. This can include ignoring information that contradicts one's preconceptions (Wason, 1960).
- InGroup/OutGroup Bias: The tendency for people to favor "in-groups" in which they are members, and to mistrust, fear, and stereotype "out-groups" with which they are less familiar (Tajfel, 1970).

These cognitive biases can obscure a person's ability to accurately perceive others -- potentially resulting in the misunderstanding of the thoughts, motives and intentions of host nationals. These biases may limit a Soldier's or a D.A. civilian's situational awareness and potentially lead to an over-reliance on the use of force. According to the Army's Tactics in Counterinsurgency Manual (FM 3-24.2; U.S. Department of the Army, 2009), a Soldier can avoid such outcomes if s/he has begun to achieve culturally influenced situation awareness by asking and answering the following questions (p. 1-26):

- What is my adversary thinking and why?
- What are the host nation security forces thinking and why?
- What will my adversaries, groups of people, adjacent units, and coalition partners, and Host Nation security forces do if I take action X, and why?
- How are cultural factors influencing my operations?

The third aspect of SPT we examined in this research was SPT accuracy and how these inferences were synthesized into potential explanations of others' behavior. We were interested in how well individuals could correctly identify others' thoughts and feelings. This accuracy is critical to effective communications between Soldiers, civilians and host nationals, because it creates the basis from which hypotheses are developed to understand another person's thoughts, feelings, motivations, and behaviors.

To the extent that personnel engage in SPT frequently, recognize their own and others' cognitive biases, and develop hypotheses about others based on accurate inferences, they should be well poised to better understand their present situation and those with whom they are interacting. In this way, SPT is likely to play a key role in improving the chances for mission success.

RESEARCH QUESTIONS

Given the importance of these three facets of SPT, it stands to reason that the U.S. military would benefit from being able to determine what characteristics are associated with better SPT capabilities and identifying Soldiers for different roles accordingly. Therefore, the objective of the present research was to identify those personnel who potentially make better social perspective takers based upon their personality and demographic profiles. Given that, for our research, we asked "What, if any, characteristics are associated with":

1. The propensity to engage in SPT?
2. The ability to identify cognitive biases?
3. SPT accuracy and the ability to generate explanatory hypotheses about others thoughts, feelings, and actions?

METHODS

Participants

The participants consisted of 116 individuals from three different U.S. Army installations. There were 53 noncommissioned officers, 53 officers, and 10 civilians. The Soldiers' ranks ranged from E-4 to 0-6. The modal ranks were E-8 (Master Sergeant) and O-3 (Captain). Soldiers' education levels ranged from completion of high school to completion of a doctorate, with the mean being completion of 3 years of college. Of the 116 participants, 95% were male, 69% were White, 14% were Black, and 10% were Hispanic. 92%

of the respondents spoke English as their primary language. On average, the participants had served 11.56 years in the Army and had been deployed 2.42 years.

Measures

All participants completed three groups of measures. The first was a survey designed to measure five constructs: SPT importance, SPT propensity, SPT confidence, emotion regulation, and open-mindedness. . The second measure used a multimedia case to determine the participants' ability to identify cognitive biases. This measure also provided assessments of participants' ability to generate multiple hypotheses in explaining others' behaviors and their level of effort in crafting each hypothesis. The third measure assessed, SPT accuracy, through an exercise in which participants watched video taped conversations between pairs of individuals and then reported on their thoughts and feelings.

Measure 1: Survey – SPT Importance, SPT Propensity, SPT Confidence, Emotion Regulation, and Open Mindedness.

The first set of measures was a series of scales from a survey designed to assess aspects of participants' SPT motivation and other related constructs. Specifically, the five scales measured the following constructs; each is illustrated by a sample item:

1. SPT Importance: (7 items; a = .82) When others see a situation differently than you, how important is it for you to understand the reasons why?
2. SPT Propensity: (7 items; a = .83) How often do you attempt to understand your friends better by trying to figure out what they are thinking?
3. SPT Confidence: (6 items; a = .90) Overall, how confident are you that you can figure out what other people are feeling?
4. Emotion Regulation: (7 items; a = .90) Once you get upset, how often can you get yourself to relax?
5. Open/Close-mindedness (Webster & Kruglanski, 1994) : (8 items; a = .48) I dislike questions which could be answered in many different ways.

The first four scales were developed specifically for this study. Our pilot studies established that our scales had robust correlations with other closely related constructs. The close-mindedness scale was taken from Webster and Kruglanski's need for cognitive closure scale, though the valence was changed to facilitate its interpretation relative to our other measures, i.e., we treated it as "open-mindedness."

For each scale, participants selected responses on a slider ranging from 0 (Almost never, Not at all important, Not at all confident) to 100 (Almost always, Extremely important, Extremely confident).

Measure 2: Video Case – Cognitive Bias, Hypotheses Generation, Hypotheses Effort

Our second group of measures was included in one of two scenario-based case studies (one which was set in Kenya and one which was set in Afghanistan). Participants read and respond to questions about the main character in each story. Each case represented a composite of real events reported by Soldiers who had served overseas. Participants were randomly assigned to one case or the other. To equate the cases, scores on each measure were converted to z-scores.

The first measure we extracted from these cases studies determined the participants' ability to identify the following cognitive biases: fundamental attribution error, naïve realism, confirmation bias, and ingroup/outgroup bias. As participants read a case, they paused three times to identify which bias was represented by a highlighted section of text.

The second measure from these cases, assessed participants' capacity to develop multiple hypotheses to explain the behaviors of a specific character in the case. At the aforementioned three stopping points in the case, we asked participants to list potential explanations for a character's particular behavior or decision. For the second and third stopping points, participants were given the opportunity to modify or remove their old hypotheses as well as to add new hypotheses. As a related measure, we also assessed the effort that participants put forth in developing their hypotheses by generating a word count for each one.

In sum, the vignettes provided us with measures of:

- Bias (the number of biases respondents correctly identified),
- Multiple hypotheses (the total number of hypotheses participants generated), and
- Hypotheses-effort (the average word count for each hypothesis).

Measure 3: Video Vignette - SPT Accuracy

Our third and final measure was designed to capture SPT accuracy. To assess SPT accuracy, participants viewed a series of four videotaped conversations held between two individuals. Participants were asked to identify which thoughts and feelings were experienced

by the individuals in the video. For example, in one video two women discussed a car accident that one of them had experienced several years ago. Participants were asked to select from a list what emotions were being felt by each participant during their discussion. Participants' scores were calculated by comparing their answers to the two women's actual responses, which were recorded immediately after their video-taped conversation.

RESULTS

The basic objective of our research was attempt to predict which individuals might be better perspective takers based on their personality and demographic profiles. Specifically we sought to learn which individuals were more likely to engage in SPT, which individuals were good at recognizing cognitive biases, and which were more accurate perspective takers and better hypothesis generators. Tables 1 and 2 present the descriptive statistics and correlations between the characteristics and SPT components of propensity, bias recognition, and accuracy. Hypothesis generation is discussed in the text below.

SPT importance, SPT confidence, emotional regulation and open-mindedness were all correlated with SPT propensity but not with bias identification or SPT accuracy.

Those individuals with higher levels of SPT confidence created fewer hypotheses on average, and the individuals with more open-mindedness, put more effort into generating more hypotheses. None of the demographic information that we collected predicted the total number of hypotheses developed. However, two variables were associated with the amount of effort participants put into developing hypotheses. Respondents with a higher rank wrote more developed hypotheses (r_{100} = .22, p = .03); however, those participants with a greater number of service years put less effort into developing their hypotheses (r_{112} = -.28, p = .002).

Because several correlates of SPT propensity were significant, we conducted several exploratory analyses to more fully understand these associations. In one such analysis, we regressed SPT propensity onto rank, and service years. A Soldier's rank and years in service explained 14% of the variance in the number of hypotheses participants developed. Rank was a marginally significant positive predictor (t = 1.80, p = .08) and years of service was a negative predictor (t = -3.71, p < .001). Participants' level of education was highly correlated with their rank (r_{102} = .74, p < .001) and thus was not included in our final model. This was to avoid problems with multicollinearity.

In a further exploratory analysis, we included whether or not participants had received prior training in nonverbal behavior in the aforementioned regression equation. This new equation predicted substantially more variance in SPT propensity (Adjusted R^2 = .24), with all predictors now being significant at p < .05.

DISCUSSION

An important goal for the Army is to improve nation building efforts by increasing cross-cultural understanding and reducing the need for force. Towards this end, this research sought to identify those individuals who may be better perspective takers. Our results, indicate that some criteria may be helpful in predicting which individuals will be more motivated perspective takers who are capable of generating more hypotheses. Predicting which individuals will be less biased, more accurate perspective takers based on demographic information seems less promising.

Identifying Cognitive Biases and SPT Accuracy

With one exception (a small correlation between rank and bias identification), none of the variables we examined helped to predict which Soldiers or civilians would be less biased and more accurate perspective takers. Perhaps other demographic or personality characteristics are better predictors of these outcomes. Alternatively, these findings may suggest there are no substantial differences between sub-groups of people naturally. If this is the case, then our time and effort may be better spent training Soldiers on these skills rather than trying to identify who is already good at them.

SPT Propensity

Our most interesting findings were associated with one of the most important aspects of SPT, which is a person's propensity to engage in SPT. We found that as a Soldier's rank increased, his or her propensity to engage in perspective taking also increased. Curiously, we also found that as a Soldier's number of years in service increased their propensity to engage in SPT decreased. (Note that rank and number of years in service were not correlated in this data set.) One possible explanation for these seemingly contradictory results could be that being a better perspective taker might result in a faster rate of promotion. For instance, engaging in SPT may result in better communication and more successful decision-making. These qualities might pave the way for better performance, and hence, promotion. Alternatively, the norms of the military may hinder social SPT

Table 1. Descriptive Statistics and Correlates for Four Components of SPT and SPT Accuracy and SPT Propensity

	M	*sd*	Correlations with: Bias	SPT accuracy	SPT propensity
SPT importance	59.76	16.86	.09	.09	.69***
SPT confidence	57.20	15.99	-.07	-.01	.55***
Open-mindedness	63.06	9.45	.07	.18	.45***
Emotion regulation	72.58	15.16	.10	.11	.45***

N ranges from 113 - 115
*$p < .05$; **$p < .01$; ***$p < .001$

Table 2. Descriptive Statistics and Correlations between Demographic Characteristics and SPT Components

	Scale range/metric	*M*	*sd*	Correlations with: Bias	SPT accuracy	SPT propensity
Bias	*z*-score	.00	.98			
SPT accuracy	0 - 1	.65	.07	.09		
SPT propensity	0 - 100	67.36	14.00	-.02	.15	
Age	years	33.66	5.47	-.11	.10	-.15
Participant's education	0 - 18	15.46	2.16	.18	-.13	.25**
Mother's education.	0 - 18	13.59	2.50	.03	.04	.10
Father's education.	0 - 18	13.54	3.01	.16	-.06	.01
Rank	1 - 28	15.70	7.58	.20*	.05	.21*
Service years	years	11.56	6.61	-.11	.09	-.26**
Deployment	times	2.43	1.41	-.02	.16	-.16

N ranges from 111 - 115
*$p < .05$; **$p < .01$; ***$p < .001$

propensity over time. For example, the exigencies of training for and engaging in combat operations might discourage thoughtful SPT. Given that engaging in SPT is often perceived as time consuming, it might be viewed as threatening to rapid decision-making in combat. Alternatively, a Soldier's Military Occupational Specialty (MOS) may be related to his/her SPT propensity. It is logical to presume that depending on a Soldier's "job," SPT may or may not be perceived to be a relevant skill, and this would influence his or her ability and/or propensity to engage in SPT. To examine this question, future research could explore the extent to which certain duties facilitate versus inhibit Soldier's motivation to engage in SPT.

Hypothesis Generation

Oddly enough, Soldiers who were more confident in their hypotheses tended to generate fewer of them. Perhaps overconfidence with regard to a particular hypothesis causes an individual to overlook alternative explanations for events occurring around him or her. To the extent that this occurs, Soldiers may overlook alternative explanations of the actions of others and become less effective in their interpersonal relations. Somewhat congruent with this possibility, we found that open-mindedness was associated with higher levels of effort Soldiers put into their hypothesis generation. Those with more open-minded dispositions might see merit in generating multiple possibilities (in a way the more confident perspective takers tended not to) and as a result might try harder to explore more solutions. This would certainly benefit individuals in complex counterinsurgency and nation building roles.

The results related to hypothesis generation suggest that the more an individual has been deployed the more effort s/he puts into developing alternative hypotheses to explain the behavior of others. This stands to reason, because with multiple deployments these Soldiers may have accumulated more domain relevant knowledge and been exposed to a variety of viewpoints and differences, which may aid in developing a more robust schema of the world from which to reference. It would be a tremendous benefit if this capacity could be formally developed or trained.

Our exploratory investigation with respect to training in non-verbal behavior suggests that Soldiers who receive training in non-verbal behavior tend to demonstrate a higher propensity to engage in SPT. This suggests that some training interventions may improve the likelihood that Soldiers can and will engage in SPT.

Overall, our research suggests that there are some factors associated with a Soldier's or a D.A. civilian's SPT propensity. Some of these factors may be affected by training and development, and others may not. In either case, if Soldiers and civilians become even more deliberate and choose to engage in SPT, this has the potential to markedly improve their understanding of others and situations. This increased understanding may in turn reduce the need for the use of force and have positive downstream consequences for mission success.

DIRECTIONS FOR FUTURE RESEARCH

The current research is an important component of understanding particular Soldier skills and abilities that help them function more effectively in nation building efforts. Because of the correlational nature of our study, we do not know the extent to which other underlying variables are influencing the participants' high or low performance on the various SPT measures. Therefore future research should seek to discover any other possible explanations. Ultimately, we would like to be able to determine whether or not SPT training, like non-verbal behavior training, can be beneficial, and if so, for what populations? Perhaps some groups are more amenable than others to the impact of an SPT curriculum.I If so, we would like to conduct more research on these subgroups in order to gain a better understanding of the phenomena.

SPT improves cross-cultural communications and interactions, which may reduce the need for the use of force. Given our preliminary results, the U.S. military may not be able to wait for these skills to develop through experience, but rather may have to learn how to develop the capability through training. We believe the next logical step for the U.S. military is to train Soldiers in effective SPT. In support of this effort, future research should focus on designing the most effective ways of improving SPT capabilities in Soldiers. To do that, we suggest testing different training curricula and refining the most successful one(s). Once that is completed, it may be possible to integrate this curriculum into pre-deployment and/or schoolhouse training.

It probably goes without saying that it is incredibly difficult to "win the hearts and minds" of other nations, but by teaching Soldiers how to engage in effective SPT, we may greatly improve our chances for doing

just that. And if we can earn the respect and trust of other nations, then we are that much closer to critical mission success.

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