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“The Evolution of C2”

Utilizing a sense of community theory in order to optimize  
interagency response to complex contingencies

Topic 4 – Collective Endeavors

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## Report Documentation Page

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**Abstract:** The efficacy of the United States during complex contingency operations depends on a “whole of nation” approach to solving complex problems. Psychological sense of community (PSOC) theory provides the link that explains how an organization can bridge the critical gap from the development of an adequate C2 architecture to an organization in action. This research found that the rank of military members had a significant impact on their PSOC towards either the joint, own Service or interagency community. However, it also found that this disparity in sense of community along with predilections towards the perceived importance or efficacy of other’s community can be overcome with experience and education. These findings have significance for interagency policy makers who need to find ways to ensure that trust, interaction, and fulfillment of goals occurs when the interagency is called upon to attend to crises or problems.

### *Foreword*

*Sense of Community* as a psychological concept can be defined as the feeling of belonging that exists to a greater or lesser degree within a group. This research study focused on the extent to which a group of military officers experienced a sense of community towards the joint, interagency, or own Service community. More specifically, it investigated the relationship between the sense of community which military members feels towards either the joint, interagency, or Service community and the perceived efficacy and importance of those communities in addressing complex problems during overseas and domestic contingencies. The primary theoretical framework for this research is based upon the sense of community theory of Chavis, Hogge, McMillan and Wandersman developed and proposed in 1986, and further refined by Chavis (1996).

### *Background*

According to the Department of Defense dictionary, the “interagency” is defined quite simply as “United States Government agencies and departments, including the Department of Defense.” Despite this simple definition, the term interagency has developed a robust and ill-defined metaphoric life. It has come to mean the process during which the United States is able

to achieve its interests through coordination of all of its agencies, independent agencies, multilateral organizations, and many others (Desai, 2005). Indeed, the inadequacy of the United States in harnessing the metaphoric interagency is cited as a causal factor for several of the perceived failures of the United States to properly address or prevent many catastrophic events such as Katrina, 9-11, Iraq from 2003-2006, Afghanistan, and global warming (Benashel, 2006; Desai, 2005; Lambright, 1997).

There has been a significant movement within the United States government to take action to make the interagency more efficient in addressing the type of complex problems that face the government and its peoples. The Project for National Security Reform (PNSR) was formed in 2008 under the guidance of James R. Locher III to aid in the transformation of the interagency from a fractious bureaucracy to an organization that can smoothly inter-operate to address problems. Locher was a primary architect for the Goldwater-Nichols Department of Defense Reorganization Act of 1986 (GNA) which is credited with transforming the United States Military from a fractious, uncoordinated, organization that was inept to a coordinated, effective organization that could easily defeat any conventional enemy (Locher, 2001). Through the use of Congressional law effecting Department of Defense policies such as linking a military member's promotions to whether one has worked with other Services and requiring education focused on joint operations, the GNA essentially changed the culture of the Department of Defense. However, the PNSR has a much more difficult task ahead of it because rather than reorganizing a single agency (which has the helpful characteristics of a pseudo-hierarchy, and a single budget) the PNSR is attempting to reorganize a whole host of government agencies. The interagency has many obstacles to overcome if it were to be reformed: each agency has its own budget, stakeholders, hierarchy, and culture (Breul, 2008).

A significant amount of the professional literature on the social science aspects of command and control of disparate entities has focused on trust (Castelfranchi, 2001; McKnight et al, 1998; Jones, 1998; Paparone, 2002). However, insignificant documentation exists whether establishing trust is enough to optimize the rich diversity of talent, resources and knowledge of each participant. What is required is that each entity must come together to construct new knowledge; that is, interact in some manner in order to construct knowledge in a shared way for the purpose of framing the problem at hand and developing “certainty that phenomena are real and that they possess certain characteristics” (Berger & Luckmann, p. 1) While trust theory and social construction theory might serve as a basis for those interested in command and control of complex contingencies, those theories do not extend beyond command and control architecture development into the “real world” of having to take actions to solve problems. Alberts (2002) addresses the critical aspect of interaction by theorizing that command and control requires three key capabilities – richness, reach, and richness of interaction. It is specifically the last capability-richness of interaction- that the author believes is key to increasing the effectiveness of the interagency as an organization. Sense of Community theory developed by Chavis, Hogge, McMillan and Wandersman in 1986, is the theory that practitioners, educators, and trainers should look to for guidance in order to ensure that a “whole of nation“ (interagency) approach to solving complex contingencies is optimized (Davidson, 2009).

### *Theoretical Framework*

Psychological sense of community (PSOC) has received significant attention from scholars during recent years as a viable psychological and sociological concept. Although there are many definitions of the term “community” in the literature, a factor common to many of these definitions is the concept of belongingness (Solomon, Watson, Battisch, Schaps &

Delucchi, 1996). Bellah, Madsen, Sullivan, Swidler and Tipton (1985), define community as the following:

A community is a group of people who are socially interdependent, who participate together in discussion and decision-making, and who share certain practices that both define the community and are nurtured by it. Such a community is not quickly formed. It almost always has a history and so is also a community of memory, defined in part by its past and its memory of the past (p. 333)

For the purposes of this research, the definition and theory of community offered by McMillan and Chavis (1986) will serve as the basic theoretical framework. This definition proposes that community consists of four elements: membership, influence, integration and a shared emotional connection. In essence, “sense of community is a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members’ needs will be met through their commitment to be together” (p. 9). McMillan (1996) later modified and refined the four components of community to include: spirit, trust, trade and art. Unfortunately, little consensus among scholars exists as to the constituent elements of this construct (Hill, 1996). However, Hill, (1996), Royal & Rossi, (1996), Sonn & Fisher (1996) and McMillan and Chavis (1986) do agree that sense of community is comprised of select, identifiable constants. First, these scholars recognize that sense of community can be achieved without individual physical relationships being established. Etzioni (1993) states that community is a set of attributes and not a concrete place. The concept of sense of community is no longer constrained by the geographic proximity of individuals. A second finding concerning sense of community is that community is an aggregate variable, comprised of more than one component, and each component is critical to the larger concept of community. For example,

McMillan's (1996) theory offers that all four components of sense of community - spirit, trust, trade, and art - must be present in order for a sense of community to emerge. Finally, Puddifoot (1996) theorizes that sense of community and its components will vary from setting to setting.

#### *PSOC and the Interagency*

In drawing conclusions based upon work with 300 major multinational corporations and 50,000 individuals, Hall (2008) found that not only is sense of community essential to cooperation, but it correlates to faster change, lower costs, and higher retention. Thusly, PSOC could play a critical role in determining the effectiveness of the interagency as its members come together in order to address a complex problem. Burgoon et al. (2005) found that active participation increases interactivity and trust – both two key components of developing a sense of community. As a matter of reforming the Department of Defense, GNA encompassed initiatives at all levels of government, but primarily targeted increased interaction among the Services through dictating joint education and joint workplaces.

The idea that the interagency process needs to be improved and that the improvement requires Congressional intervention is quickly becoming germane (Breul & Kaminsky, 2008; PNSR, 2009). Sengupta et al., (2006), suggest that education and communication, along with employee participation and involvement in the process are critical in ensuring optimal implementation of any organizational changes. PSOC theory offers a framework within which those responsible for initiating reforms that are to increase the effectiveness of the interagency should look for guidance. It would be premature for policy makers to strictly look at the apparent success of GNA and attempt to replicate its success through imitation without first investigating the underlying theory and causes for its success. The lessons of Total Quality Management (TQM, TQL) should not be forgotten. A solution that works well for one culture

will not necessarily produce the same results in another. However, ample research exists regarding command and control, trust, sense of community, and organizational effectiveness that can provide valuable insight as policy makers undertake the management of the wicked problem of interagency effectiveness.

### *Purpose of the Study*

This study serves two purposes. First it measures sense of community among groups of military members towards the joint, interagency, and own Service communities; thusly adding to the general body of knowledge concerning psychological sense of community. Second, it seeks to determine the relationship between sense of community and the perceived efficacy and importance of that community in addressing complex problems.

The following research questions were addressed using quantitative methods:

1. Is there a difference in sense of community felt among military members towards the joint, interagency, or own Service communities based on Service, whether one has combat deployments, whether one has worked with the subject community, or rank of the Service member?
2. Is there a difference in perceived importance of the Joint, Service, and Interagency communities to United States' national interests abroad and at home, or the perceived efficacy of those communities in solving problems based on Service, whether one has combat deployments, whether one has worked with the subject community, or rank of the Service member?
3. What is the relationship between the sense of community felt toward the joint, interagency, or own Service communities and the perceived importance and efficacy of those communities in addressing complex problems abroad and in the United

States based on Service, whether one has combat deployments, whether one has worked with the subject community, or rank of the Service member?

### *Research Design*

This study will use a causal-comparative research design and will incorporate only quantitative methods. There was no attempt to manipulate any of the independent variables determined for use. The independent variables measured were carefully selected based upon a broad literature review of articles relating to sense of community, organizational and military culture, and the suggestions of numerous military and education professionals. The participants in this study were chosen because the researcher was granted access. The research population consisted of United States' military officers from the four Service branches – Army, Navy, Air Force, Marines - between the ranks of 0-2 to 0-6. The officers surveyed were attending courses at either Army Logistics University at Fort Lee, Virginia; Joint Forces Staff College at Norfolk, Virginia; or US Army Command and General Staff College at Fort Lee, Virginia. Selection criteria were moot as the survey was administered to all officers attending the targeted courses at the aforementioned institutions. The target population for this study was all mid-rank (0-3 thru 0-6) military officers. Institutional Review Board (IRB) approval was obtained from all three institutions. Response rate was not tracked, nor was the data disaggregated by institution pursuant to IRB imposed restrictions.

Surveys were given to students at the beginning of the morning at the three institutions and students were given the morning (approximately 3-4 hours) in order to complete their surveys. Students were instructed that the surveys were voluntary and were not to be discussed among them. All surveys were collected by the researcher who personally input data into the

database. An initial n of 236 surveys were collected, but 28 surveys had incomplete data and were not used (resulting in a 12 percent rate of collected surveys not used), leaving the researcher with n=208 surveys.

*Limitations, delimitations, and assumptions*

As with any study done there are limitations that are inherent in this study. The first limitation was the causal comparative design of this study. Causality could not be attributed definitely to the independent variables in this study. Although the researcher used significantly valid statistical and research techniques that have been ascertained to help isolate the independent variable; none were directly manipulated.

A second limitation to the study was the self-report nature of the data collected on the interviews. Despite the researcher's assurance of anonymity to the participants, there might be some doubt as to the validity of the researcher's assurances. In addition, social desirability and reluctance to report any negative aspects of one's experience might have resulted in skewed data. The researcher emphasized the assurance of anonymity. In addition, the chosen educational institutions have a strict policy of non-attribution for all involved. This policy was emphasized to the participants during all phases of data collection.

A final limitation to this study was that the research population consisted entirely of military personnel. Although the instrument used (Sense of Community Index II) has undergone significant reliability and validity testing, it has not been specifically tested against a military population.

The following assumptions are made for the intent of this study:

1. The results of this study can be generalized to the experimentally accessible population and the target population that is military officers between the ranks of 0-3 through 0-6.

2. The conduct of this study had a non-reactive effect on the subject's measured perceptions.
3. Subjects responded honestly and without undue external influence regarding the data.

### *The Sense of Community Index II*

The Sense of Community Index (SCI) is one of the most frequently used quantitative measures of sense of community. It has been used in numerous studies covering different cultures on four continents, as well as many contexts ...” (e.g. urban, suburban, rural, tribal, workplaces, schools, universities, recreational clubs, internet communities, etc.)” The SCI is based on a theory of sense of community presented by McMillan and Chavis (1986). The 24 item Sense of Community Index version II (SCI II), unlike the earlier version, was able to cover all the attributes of a sense of community described in the original theory. The minimum and maximum score for each element and overall sense of community are 0 and 18, and 0 and 72 respectively. A Likert like scale is used instead of the previous dichotomous true-false scale, assigning numerical values of 0, 1, 2, or 3 to corresponding answers of not at all, somewhat, mostly, and completely. The original draft was piloted in seven different settings from throughout the United States. Strong reliability was found. The SCI II was revised based upon the results of this pilot and used in a survey of 1800 subjects. The analysis of the SCI II showed that it is a reliable measure (coefficient alpha= .94). The subscales also proved to be reliable with coefficient alpha scores of .79 to .86. (Chavis, 2008).

### *Data*

Data were collected at the approved educational institutions as previously detailed. The result for this research was n=208. Of these 208 surveys, 70 measured sense of community toward the Joint community, 60 toward own Service community, and 78 toward interagency

community. Table 1 below shows the frequency breakdown of independent variable data collected. Average years of service for the respondents was 13.37, with a standard deviation of 6.52.

Table 1

### **Frequencies of independent variable data**

Variable	Frequency	Percent	Cumulative Percent
SOC (Joint)	70	33.7	33.7
SOC(Service)	60	28.8	62.5
SOC (Interagency)	78	37.5	100
Service (Army)	163	78.4	78.4
Service (Navy)	16	7.7	86.1
Service (Air Force)	20	9.6	95.7
Service (Marines)	9	4.3	100
Grade (0-2)	4	1.9	1.9
Grade (0-3)	108	51.9	53.8
Grade (0-4)	50	24	77.9
Grade (0-5)	32	15.4	93.3
Grade (0-6)	14	6.7	100
Combat (yes)	186	89.4	89.4
Combat (no)	22	10.6	100
Worked JSI (Yes)	146	70.5	70.5
Worked JSI (No)	61	29.5	100*
Sex (male)	173	83.2	83.2
Sex (female)	35	16.8	100
Status (Active Duty)	198	95.7	95.7
Status (Reserves)	3	1.4	97.1
Status (National Guard)	6	2.9	100

\*one missing record, N=207 for this group

### *Research Question 1*

Research question one queried “Is there a difference in sense of community felt among military members towards the joint, interagency, or own Service communities based on Service, whether one has combat deployments, whether one has worked with the subject community, or rank of the Service member?” The null hypothesis that was tested to answer this research question was Ho1: There will be no difference in the sense of community felt among military members towards the Joint, Service, or Interagency communities based upon Service, rank, combat deployments, or whether one has worked with the subject community. This null hypothesis was tested using a multiple analysis of variance (MANOVA). Community type (Joint, Service, Interagency) was one independent variable of nominal value with three levels; combat deployment was another nominal variable with two levels (yes or no); rank was a nominal variable with five levels (0-2, 0-3, 0-4, 0-5, 0-6); and worked with the subject community was a nominal variable with two levels (yes or no). The dependent variables were overall sense of community and its four parts (spirit, trust, trade, and art) as measured by the Sense of Community Index II instrument developed by Chavis.

### *Results for Research Question 1*

The pooled means (with standard deviations in parentheses) for the overall sense of community and its four parts is detailed in table 2 below:

Table 2

#### **Means for Dependent Variables (with Standard Deviation in parentheses)**

Variable	Joint Mean	Service Mean	Interagency Mean
Overall SOC	37.10 (12.19)	36.55 (10.98)	33.14 (12.68)
Spirit	9.53 (3.37)	9.23 (2.72)	8.67 (3.72)

Trust	8.89 (3.95)	9.58 (3.48)	8.10 (3.59)
Trade	9.33 (3.70)	8.62 (3.23)	8.04 (3.47)
Art	9.41 (3.64)	9.98 (3.93)	8.26 (3.96)

The first MANOVA was conducted to determine if the dependent variables of sense of community or any of its four parts significantly differed as per research question 1. Data screening revealed no univariate or multivariate within-cell outliers at  $p < .001$ . The multivariate assumption of equality of covariance matrices was not tenable based on the results of Box's test,  $M = 101.965$ ,  $p = .000$ . Consequently, Pillai's Trace was used to evaluate multivariate significance because it is robust to violations of the assumption of equality of covariances. There was no statistical significance identified with the exception of an interaction of JSI and rank with  $p = .022$ , eta squared .05 and multivariate effects power of .952 which is high observed power. Dunnett C was used as the post hoc test because of the violation of the assumptions of covariance. There was a Dunnett C post hoc result  $p < .05$  between Service art and Interagency art, mean difference (I-J) 1.73. Additional results of the Dunnett C post hoc,  $p < .05$  are summarized in table 3 below:

Table 3

#### **Dunnett C Post Hoc Results for JSI and Rank**

Variable	(I) Rank	(J) Rank	Mean Difference (I-J)
Spirit	0-3	0-4	-1.77
Trust	0-3	0-4	-2.67
Trade	0-3	0-4	-2.38
Art	0-3	0-4	-3.57

SOC                      0-3                      0-4                      -8.87

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*Research Question 2*

Research question two queried “Is there a difference in perceived importance of the Joint, Service, and Interagency communities to United States’ national interests abroad and at home, or the perceived efficacy of those communities in solving problems based on Service, whether one has combat deployments, whether one has worked with the subject community, or rank of the Service member?” The null hypotheses that was tested to answer this question was Ho2: there will be no difference in perceived importance of the Joint, Service, and Interagency communities to United States’ national interests abroad and at home, or the perceived efficacy of those communities in solving problems based on Service, whether one has combat deployments, whether one has worked with the subject community, or rank of the Service member. The pooled means of the three dependent variables of perceived importance in achieving national interests abroad, perceived importance of achieving national interests domestically and perceived ability to address complex problems are reported below in table 4:

Table 4

**Pooled Means for Dependent Variables (With SD in parentheses)**

Variable	Joint Mean	Service Mean	Interagency Mean
Interest Abroad	4.37 (.66)	4.18 (.89)	3.80 (1.00)
Interest Domest	3.93 (1.03)	3.85 (1.01)	3.56 (.99)
Address Problems	3.76 (.71)	3.67 (.77)	3.14 (.99)

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The first MANOVA was conducted to determine if the dependent variables differed as per research question two. Data screening revealed no univariate or multivariate within-cell outliers at  $p < .001$ . The multivariate assumption of equality of covariance matrices was tenable based on the results of Box's test,  $M=72.458$ ,  $p=.088$ . Consequently, Wilk's Lambda was used to evaluate multivariate significance. There was no statistical significance identified either with a main effect or interaction. However, the researcher did conduct a one-way ANOVA to evaluate if the pooled means differed based only upon community questioned. Statistical significance was found between groups for interests abroad,  $p=.004$ , and ability to address problems,  $p=.000$ . Results of a Tukey HSD post hoc are shown below in table 5:

Table 5

**Tukey HSD Post Hoc Results for JSI**

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Variable	(I) JSI	(J) JSI	(I-J) Mean Difference
Interest Abroad	Joint	Interagency	.47
Address Problems	Joint	Interagency	.62
Address Problems	Service	Interagency	.53

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*Research Question 3*

Research question three queried "What is the relationship between the sense of community felt toward the joint, interagency, or own Service communities and the perceived importance and efficacy of those communities in addressing complex problems abroad and in the United States based on Service, whether one has combat deployments, whether one has worked with the subject community, or rank of the Service member?" The null hypothesis that was tested to answer this question was  $H_03$ : There will be no relationship between the sense of community

felt by military members and the perceived importance and efficacy of those communities in addressing complex problems abroad and in the United States based on Service, combat deployments, rank, or whether one has worked with the subject community. This relationship was tested using partial correlations controlling for Service, combat deployments, worked with the subject communities, or rank. The results are shown in table 6 below:

Table 6

**Partial Correlation Coefficients Controlling for Rank, Service, JSI, Combat Deployments**

	SOC	Interest Abroad	Interest Domestically	Address Problem
SOC	---	.3167 p=.000	.2039 p=.003	.3613 p=.000
Int Abroad	.3167 p=.000	---	.5493 p=.000	.4561 p=.000
Int Dom	.2039 p=.003	.5493 p=.000	---	.4670 p=.000
Address	.3613 p=.000	.4561 p=.000	.4670 p=.000	----

*Analysis of Results*

While there were no main effects noted in pursuit of the answer of research question one, there was a significant interaction effect between community type (JSI) and rank. The post hoc not only revealed that there was a statistical difference in the art component of sense of community between the Service and Interagency community; but that in addition, the MANOVA

in research question one showed that there was a statistically significant difference in sense of community based upon the intersection of rank and community. It appeared that 0-3s (the youngest of the ranks surveyed) exhibited statistically significant less psychological sense of community in total and in each component of sense of community. This phenomenon might be the result of the way 0-3s are perceived, and thusly perceive themselves, in the military culture. 0-3s are thought to be “Junior Officers” and have not made the transition to organizational leadership or “buy in.” I have heard it said numerous times to 0-4s that “you are no longer able to blame bad things on the “them”, because now that you have been promoted to 0-4, you are the “them”.”

An additional area that might have influenced sense of community among 0-3s, is that the 0-3s were all from the United States Army. Over the past 9 years the United States Army has asked their 0-3s to perform repeated deployments to combat zones. Suicides in the Army have peaked and there is a lot of dissatisfaction with the manner in which the Army has taken on the burden of most of the mission in Iraq and Afghanistan (Moon, 2007). Brodsky (1996) documented the concept of negative sense of community in certain urban or harsh environments. Results suggested that a lack of sense of community, rather than a null finding, could be meaningful. Perhaps what the results indicate is that the Army is indeed pushing its members to the breaking point. A significant component of sense of community is the ability to interact and not only give to the community, but to also have some of your needs met by the community. All components of sense of community have to be present in order to have a sense of community.

The MANOVA for research question two showed no statistically significant main effects or interaction effects. This statistical finding was surprising to the researcher because during additional runs of preliminary statistical tests, there were significant differences among the two

of the three dependent variables based solely upon community – specifically  $p < .05$  for perceived importance of addressing interests abroad and perceived ability to address complex problems. The difference resided between Service perceptions and interagency perceptions. However, when other confounding and independent variables statistically were considered, there was no statistical difference in the perceptions across the communities. This finding would indicate that the selected variables appropriately addressed concerns of the researcher.

The partial correlation coefficients showed moderate to high correlation among the three dependent variables of perceived importance in interests abroad, domestically, and of perceived ability to address complex problems. However, sense of community had moderate to low correlation with each of the three previously mentioned variables. A thorough review of sense of community theory does not reveal that a sense of community is tied to perceived efficacy or importance of the community of the individual. For instance, a member of the Naval Service may have strong feelings of spirit, trust, trade and art with the Navy; but that does not necessarily indicate that he or she will feel the Navy community can address complex problems in an adequate fashion.

### *Implications and Recommendations*

There were two very important findings of this research that has implications for those who will attempt to reform or make policy concerning the interagency. First, is the finding that there is minimal correlation between a psychological sense of community and the perceived importance or problem addressing efficacy or the joint, own Service, or interagency communities. This means that the predilection to label a community as not important or inept does not depend on how much a person feels a sense of community with that group. In other words, I may have a great feeling of community towards the U.S. Navy, but that does not

necessarily equate to belief that the U.S. Navy is either important for certain things or even adept as addressing problems. Ad hoc operations (as in the case of the unforeseen disaster relief operation in Haiti) that will require military members to work with other agencies on a moment's notice do not have to rely on having developed a rich sense of community in order to have the respect (and subsequent cooperation) of military members.

The second finding that is significant is compendium of two sub findings. The first part is that although there is a basic difference in the sense of community that is felt among military members towards the joint, own Service, or interagency communities; a member's rank (which in the military equates most often to professionalism, education, and experience), and working with a certain community will mitigate the differences felt. This is interesting because it demonstrates that although the culture may initially be insular, that it is open to integration based on education and experience. The second part of this finding – which significantly supports the first part- is that there was no difference of perceived importance or ability to address problems once all variables were calculated into the statistical problem. Initially it appeared (when a simple ANOVA was performed) as though the interagency community would be denigrated, but once the variables of working with the agency, and rank were statistically accounted for; there were no differences in perceptions. This indicates that education and experience may mitigate any predisposed tendency to be insular and think of “other communities” (interagency) as less able or important.

Recommendation for further research into this area should focus on a more diverse representation of military Services. The U.S. Army comprised 78.4 percent of the researcher's accessible population. This might have exposed the researcher to a history threat because of the current operating environment for Army personnel. Although the researcher controlled for the

threat by collecting data on combat deployments, there is the possibility that it may not have been enough. Another recommendation for further study would be to expand this research to members of agencies other than Department of Defense.

**THIS IS A SAMPLE OF THE INTERAGENCY SCI II. SIMILAR SURVEYS FOR THE JOINT AND OWN SERVICE COMMUNITY WERE ALSO ADMINISTERED.**

This research is being conducted to determine the relationship between feeling of community and perceived efficacy of the interagency in order to determine a more effective way to conduct operations. **Your participation in this research is COMPLETELY VOLUNTARY.** If you choose to participate in this survey please be aware that the information provided will in no manner be linked to you personally (do not put your name on any part of the survey) and that the researchers have taken every precaution to ensure the confidentiality of your responses. The projected average time it will take to complete this survey is between 5 and 8 minutes. Thank you for helping to expand the body of knowledge concerning this very important facet of operations.

**Instructions:**

*The following questions about community refer to the community known as "**THE INTERAGENCY.**" When answering the questions, please insert your concept of the interagency for the term community when appropriate. Please clearly mark your responses. Thank you.*

## **START HERE**

How important is it to you to feel a sense of community with other interagency members?

Prefer not to be  
A Part of this  
Community

Not Important  
at All

Not Very  
Important

Somewhat  
Important

Important  
Very Important

How well does each of the following statements represent how you feel about this community (interagency).

I get important needs of mine met because I am part of this community.	Not at all	Somewhat	Mostly	Completely
Community members and I value the same things.	Not at all	Somewhat	Mostly	Completely
This community has been successful in getting the needs of its members met.	Not at all	Somewhat	Mostly	Completely
Being a member of this community makes me feel good.	Not at all	Somewhat	Mostly	Completely
When I have a problem, I can talk about it with members of this community.	Not at all	Somewhat	Mostly	Completely
People in this community have similar needs, priorities, and goals.	Not at all	Somewhat	Mostly	Completely
I can trust people in this community.	Not at all	Somewhat	Mostly	Completely
I can recognize most members of this community.	Not at all	Somewhat	Mostly	Completely
Most community members know me.	Not at all	Somewhat	Mostly	Completely
This community has symbols and expressions of membership such as clothes, signs, art, architecture, logos, landmarks, and flags that people can recognize.	Not at all	Somewhat	Mostly	Completely

I put a lot of time and effort into being part of this community.	Not at all	Somewhat	Mostly	Completely
Being a member of this community is a part of my identity.	Not at all	Somewhat	Mostly	Completely
Fitting into this community is important to me.	Not at all	Somewhat	Mostly	Completely
This community can influence other communities.	Not at all	Somewhat	Mostly	Completely
I care about what other community members think of me.	Not at all	Somewhat	Mostly	Completely
I have influence over what this community is like.	Not at all	Somewhat	Mostly	Completely
If there is a problem in this community, members can get it solved.	Not at all	Somewhat	Mostly	Completely
This community has good leaders.	Not at all	Somewhat	Mostly	Completely
It is very important to me to be a part of this community.	Not at all	Somewhat	Mostly	Completely
I am with other community members a lot and enjoy being with them.	Not at all	Somewhat	Mostly	Completely
I expect to be a part of this community for a long time.	Not at all	Somewhat	Mostly	Completely
Members of this community have shared important events together, such as holidays, celebrations, or disasters.	Not at all	Somewhat	Mostly	Completely
I feel hopeful about the future of this community.	Not at all	Somewhat	Mostly	Completely
Members of this community care about each other.	Not at all	Somewhat	Mostly	Completely

1. Have you been on a combat deployment? Yes No
2. Have you worked with the interagency while deployed? Yes No
3. Have you worked with the interagency in a non-deployed environment? Yes No
4. How many months total have you worked with the interagency? \_\_\_\_\_
5. How important is the interagency to addressing United States' interests abroad?
 

Not Important at All	Not Very Important	Somewhat Important	Important	Very Important
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6. How important is the interagency to addressing United States' interests domestically?
 

Not Important at All	Not Very Important	Somewhat Important	Important	Very Important
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7. How effective do you perceive the interagency to be in addressing complex problems?
 

Not effective at all	Not very effective	Somewhat effective	Effective	Very effective
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The following information is being collected for demographic purposes and in no way will be used to identify individuals.

1. Agency: Army Navy Air Force Marine Other: \_\_\_\_\_
2. Years of service in agency you marked above: \_\_\_\_\_
3. Are you: Active Duty military Armed Forces reserve National Guard None  
Other\_\_\_\_\_
4. Sex: Male Female
5. Grade: 0-1 0-2 0-3 0-4 0-5 0-6 Other:\_\_\_\_\_

If there are any questions, please contact Dr. Bill Davis, 804 765 8473, [william.davis46@us.army.mil](mailto:william.davis46@us.army.mil)

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Utilizing a sense of community  
theory in order to optimize  
interagency response to  
complex contingencies



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# Problem Statement

- The efficacy of the United States during complex contingency operations depends on a “whole of nation” approach. However, there has been evidence to suggest that cultural chasms among “whole of nation” components detracts from the efficacy of effort. This study seeks to identify facets of those cultural chasms and offer potential ways to minimize them.

# Sense of Community

- Identification/belonging, interdependence (Sarason, 1974)
- Membership or belonging, member's needs would be met (McMillan, 1976)
- Membership, Influence, integration and fulfillment of needs, shared connection (McMillan and Chavis, 1986)
- Spirit, trust, trade, art (McMillan, 1996)

# Sense of Community

A community is a group of people who are socially interdependent, who participate together in discussion and decision-making, and who share certain practices that both define the community and are nurtured by it  
(Bellaah et al., 1985)

# Research Questions

- Is there a difference in sense of community felt among military members towards the joint, interagency, or own Service communities based on Service, combat deployments, rank, or whether one has worked with the subject community?
- Is there a difference in perceived importance of the joint, interagency, or Service communities to US national interests abroad and at home, or the perceived efficacy of those communities in solving problems based on Service, combat deployments, rank, or whether one has worked with the subject community?

# Research Questions

- What is the relationship between sense of community felt toward the joint, interagency, or own Service communities and the perceived importance and efficacy of those communities in addressing complex problems abroad and in the United States based on Service, combat deployments, rank, or whether one has worked with the subject community?

# Design and Instrument

- Causal-comparative (no manipulation of groups)
- Quantitative only
- Research population (ALU, CGSC, JFSC)  
N=208 (163 Army, 16 Navy, 20 Air Force, 9 Marine) 0-3 thru 0-4 76 %, 0-4 thru 0-5 22%
- Sense of Community Index II (25 questions) – alpha .94, subscales alpha scores .79 - .86
- Researcher administered and tabulated all surveys
  - How important is the \_\_\_ to addressing U.S. interests abroad?
  - How important is the \_\_\_ to addressing U.S. interests domestically?
  - How effective do you perceive \_\_\_ to be in addressing complex problems?

# Limitations

- Instrument not validated with military community
- Causal-comparative design
- Self-report nature of data
- Research population predominantly Army

# RQ1 Results and Analysis

• Variable	Joint Mean	Service Mean	Interagency Mean
• Overall	37.10 (12.19)	36.55 (10.98)	33.14 (12.68)
• Spirit	9.53 (3.37)	9.23 (2.72)	8.67 (3.72)
• Trust	8.89 (3.95)	9.58 (3.48)	8.10 (3.59)
• Trade	9.33 (3.70)	8.62 (3.23)	8.04 (3.47)
• Art	9.41 (3.64)	9.98 (3.93)	8.26 (3.96)

Significant difference is highlighted in red

*Also, significant difference between 0-3s and 0-4s (JSI and rank)*

# RQ2 Results and Analysis

• Variable	Joint Mean	Service Mean	Interagency Mean
• Interest Abroad	4.37 (.66)	4.18 (.89)	3.80 (1.00)
• Interest Domestic	3.93 (1.03)	3.85 (1.01)	3.56 (.99)
• Address Problems	3.76 (.71)	3.67 (.77)	3.14 (.99)

(Likert scale: Not at all important/effective, not very important/effective, somewhat important/effective, i/e, very i/e)

- MANOVA – no statistical difference
- ANOVA- difference between Joint and Interagency (address problems, interests abroad)

# RQ3 Results and Analysis

	Interest Abroad	Interest Domestically	Address Problem
PSOC	.3167 p=.000	.2039 p=.003	.3613 p=.000

Correlation moderate to low (high among the variables (.5493 -.4561))

# Findings and Implications

- Minimal correlation between PSOC and perceived importance/efficacy of addressing problems May bode well for ad hoc crisis response.
- PSOC is affected by interaction, maturity, and experience. Perceived prejudices are negated by interaction (JPME II model)

# Questions?

