

RESEARCH ARTICLE

MILITARY FAMILY RESEARCH: METHODOLOGICAL LESSONS LEARNED, OFTEN THE HARD WAY

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This report is dedicated to the memory of Dr. David Bruce Bell who passed away in December 2007 after a long illness. Dr. Bell served as a senior scientist for the U.S. Army Research Institute for the Social and Behavioral Sciences in Alexandria, Virginia for decades and may have forgotten more about military families than most scholars ever know. He supervised tens of millions of dollars in federal military research and was a Fellow in the American Psychological Association. He authored over 30 book chapters and journal articles in outlets including Military Review, Military Medicine, Journal of Social Behavior and Personality, Armed Forces & Society, Psychological Reports, Kernvraag, and the Journal of Sex & Marital Therapy. Even more importantly, he inspired a generation of dozens of family military researchers. He also raised, with his wife Beverly, a wonderful family, proving you can be a hard working military family researcher and not destroy your own family in the process. In other words, Bruce accomplished what he wrote about – balancing family life and work, a feat that eludes many. Like Will Rogers, he really liked people and maintained an optimism about his rare illness to the very end. We will all continue to miss him greatly. (condensed from a eulogy to Dr. Bell from Walter Schumm, 22 December 2007).

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ABSTRACT

Some of the advantages and the pitfalls of planning and conducting military family research are discussed. Family theory remains critical to research on military families but needs to be combined with detailed knowledge of the issues faced by military families. The military's concerns about family privacy can lead to tensions with the researcher's need to define population and sample characteristics, as well as to obtain high response rates through systematic follow-up of potential survey respondents. Researchers may find an easier path to publication for research that sounds like "good news", while research that seems like "bad news" may be suppressed, disguised, or managed in a variety of ways. Because of the complexities of military life and military family life it may be very useful to bring military personnel or veterans into your research group when developing and testing theories about military family life.

Key Words: military research, deployment, marital quality, military families, stress

BACKGROUND

On the surface, conducting psychological research with military families may appear to be a slight variant on such research with any type of family. The goal of our paper is to highlight several ways in which psychological research with military families can be substantially biased in theory or methodology by the military context in which the research usually occurs. The senior author has been conducting research on military families for over 20 years and served as an officer in the U.S. Army for nearly 30 years and much of this paper reflects those experiences; hence tales from the "old", for future ("new") researchers of military families.

THEORETICAL CHALLENGES

Theory should be the foundation for most psychological research, including military family research (Paley, Lester, & Mogil, 2013). As an example of challenges in this area, Karney and Crown (2007, 2011) entered a debate about the role of military deployments and couple divorce rates. They used a large military population data

set to investigate whether total length of time deployed had any relationship to divorce rates; generally they found that longer times deployed predicted slightly lower divorce rates. More recently, Karney and Trail (2017) claimed that "evidence linking deployments directly to poorer marital functioning has been sparse" (p. 147). However, Karney and Crown (2007) concluded that "The experience of deployment during marriage generally reduces subsequent risk of experiencing marital dissolution. Current discussions of the effects of deployment usually assume that deployments harm the marriages of those deployed and that longer deployments contribute to a greater risk of subsequent marital dissolution. Our analyses offer scant support for this assumption" (p. 164). In other words, regardless of the many complicating factors, Karney and Crown argued that neither the experience of deployment nor the length of deployment had much to do with rates of family stress or with marital instability. In brief, as detailed below, their theory and analysis, in our view, did not do justice to the theoretical complexity of military family

life or to contrary evidence, however slight, that was available at the time.

Social scientists have posited for many decades that the pathways to marital quality and marital stability are long and complex (Lewis & Spanier, 1979). While they believed that “the single greatest predictor of marital stability is marital quality” (p. 273), they also acknowledged the possible influence of at least seven other factors, including marital expectations, commitment to the marriage and its associated obligations, tolerance for conflict and disharmony, religious doctrine and commitment, external pressures and amenability to social stigma, divorce law and availability of legal aid, and real and perceived alternatives as mediators or moderators of the marital quality/marital stability relationship. They further developed a typology of marital quality and marital stability, based on combinations of low and high levels of each of those two variables (p. 286). More specifically, they postulated that both alternative attractions and external pressures to remain married would serve as moderator variables on the marital quality/marital stability association.

If one were to use theory to develop a detailed model of the role of deployment on marital stability, one would probably start on the left side of the diagram with premarital and family of origin variables. Next one might consider pre-deployment conditions (e.g., level of individual and unit training, service member’s rank, gender, race or ethnicity, values with respect to marriage and/or to the military, quality of unit leadership, popular support for the deployment, health conditions of family members, including for any children; pre-deployment marital quality and stability). The deployment itself might have many measurable characteristics (amount of notice, family time available during train-up for the deployment, location of the train-up,

duration of the deployment and/or pre-deployment training away from the family, whether the other family members moved away from the initial residence during the train-up or the actual deployment, quality of support for military families during the deployment, quality of unit leadership during the deployment, degree of stress during the deployment, including exposure to friendly or enemy casualties). The post-deployment period also can vary, depending on notice given to families, resources available for coping with mental or physical stressors experienced during the deployment, the family’s reception of the soldier, time allowed for family time, and how quickly the service member is required to change stations or begin preparing for another deployment. Reducing deployment variables to total time deployed overlooks an extraordinarily large number of other theoretical concerns associated with deployment characteristics and conditions. One given of current military family life is that service members may often be assigned to locations distant from their families. Although one might be inclined to think that one deployment is the same as any other or that one deployment site might be the same as any other, such assumptions are risky. Some sites may have better facilities for communicating back home or install them more quickly. There may be a learning curve associated with deployments for both service members and their families. First deployments may be more difficult than later deployments – or persons who find deployments more difficult may be more likely to leave the military, making later deployments seem less difficult for the service members and families who remain long enough to go through later deployments. Some families involved in interpersonal violence or conflict may actually welcome deployments as an escape from a dangerous spouse. In one analysis we found that some wives seemed happier when their husband service member was

deployed and about half of the time those wives also reported that their husband had been abusing them physically when he was not deployed (Bell, Bartone, Bartone, Schumm, & Gade, 1997).

Deployments can also have positive associations because of increased military pay, paid R&R (rest and recreation) leave, presentation of military awards, opportunities for online education while deployed, and increases in prestige (rank) and pay. For spouses who are victims of emotional or physical abuse while the service member is at home, deployment may lead to an improvement in mental health and marital satisfaction (Bell et al., 1997). In general, one can expect to find intersections between military career development and events with the development of and changes to military families (Segal, Lane, & Fisher, 2015).

Even if we assume that some of those deployment variables might adversely impact marital quality and that some positives might counteract some of the negatives, the effect of changes in marital satisfaction on marital stability may vary widely because of moderator variables or be part of a chain of pathways involving various mediating variables.

With respect to moderator variables, the military is one of the few large organizations that has religion, in the form of military chaplains and chaplain's assistants, built into its very fabric from battalion to higher levels (e.g., brigade, division, corps, etc.). Many religions and many chaplains may discourage divorce. Aside from military influences, many members of the military and their spouses are very religious and are opposed to divorce. The senior author has known very religious spouses who put up with such terrible abuse they had to come to the point of suicide to realize divorce was a better option than death. The military offers some

substantial benefits, including retired pay and lifetime health insurance, which may be forfeited by a spouse if a divorce occurs before a certain number of years. Some spouses may "hang on" in a low quality/high stability marriage just long enough to earn, rather than lose, some of those important benefits. Furthermore, laws (or the complexities of obtaining a divorce) in many situations may prevent divorce during a deployment or for several months after a deployment, thus moderating the effects of deployment upon divorce.

If deployments are quickly stacked, divorce may not be feasible, even if wanted by both parties. For example, the authors know of one case where a marriage effectively dissolved in less than a week but it took nearly two years for a divorce to be granted because the service member had deployed overseas, soon after the wedding, for over 15 months. While that service member was deployed, the spouse back in the United States received numerous financial benefits (e.g., tax-free housing allowance, separation pay, use of military facilities, possibly worth nearly \$2,000 a month) so there was less incentive for the non-deployed spouse to seek an earlier divorce even after the deployed service member returned from the deployment. In effect, every week of legal delay that the non-deployed spouse could insert into the legal process meant another \$500 in gained benefits.

Our point is that family theory and military realities suggest there can be many factors that may weaken/moderate any linkage between marital quality and marital stability for military couples as well as any linkage between duration of deployment and marital stability. Moreover, there may be a neglect of theory in predicting divorce among married military couples – what about relationship instability among non-married or cohabiting or engaged or dating couples? Or among same-sex couples?

The military records data on marital status, making it an easier target for analysis, but are not break-ups among non-married couples also important? Schumm, Bell, and Gade (2000) found that rates of instability for dating and engaged couples were 62% and 46%, respectively, compared to 21% for married couples over two years for an overseas peacekeeping deployment. During the first Persian Gulf War, break-up rates over two years in one study were 47% for engaged soldiers and 36% for dating soldiers (whether deployed or not)(Schumm & Roy, 2012). Other sources contain more theoretical and empirical evidence on these matters (e.g., Knobloch & Theiss, 2012; Segal, Lane, & Fisher, 2015). Our overall point is that military life and models of ways in which various factors impact military families are complex theoretically and cannot be boiled down into a matter of two or three simplistic concepts or variables, unless one is willing to lose sight of a bigger but more accurate complex picture.

RESEARCH CHALLENGES

The unique theoretical qualities of military life are not the only challenges researchers will face when studying military families. There are constraints that can be imposed by the military itself as well as biases within the military that may hinder accurate research. While it may be unfair to paint the entire military negatively in these areas, the authors' experiences will suggest that there can be serious issues related to the control that the military retains over research with its service members and their families.

Control over Methods

First, research with military families often means that the U.S. military and its leadership are gatekeepers for all research.

One of the first doors in this gatekeeping is that you may not be able to obtain a bona fide sample of military service members or their family members without cooperation from military leadership. In contrast, one could use a local telephone directory or an R. L. Polk city directory to locate potential civilian respondents without having any barriers other than your research organization's institutional review board (IRB). With the military you need to sell not only your institution's IRB on your research but also military leadership and a military IRB. The military, in order to protect the privacy of its members and families, may not provide you with a sample list, but may send your survey to a sample that it selects for you. This means a couple of things. First, you may not learn your population's characteristics and, therefore, be unable to determine how nonresponse or selection effects have biased your research. Second, while you are free to use complex follow-up designs (e.g., Dillman, 2007) with civilian samples, the military might limit your contact with the sample to one initial email and perhaps one or two reminder emails. You may not be allowed to meet the sample members in person to better "sell" their participation in your research. For example, when we did research at Fort Leavenworth (Theodore, Weber, & Schumm, 2011), emails for the survey were sent close to graduation and only one or two follow-up reminders were sent, without surveys attached. If the original email had been deleted, potential respondents could not respond to the survey in a second email. Thus, because some sample members had already departed the area for combat zones and because many of the others probably felt they had better things to do (and probably deleted our first email that contained the survey), our response rates ranged between 15-25%, far below our goals for response rates. Another time we were given a list of veterans of the Reserve Components with mailing

addresses and names, but we found that much of the list was inaccurate and our response rate did not exceed 30% (Schumm, Webb, Bollman, Jurich, Reppert, Castelo, & Stever, 2004). One thing this should warn researchers against is that some military research may feature very low response rates and unknown selection effects. On a third occasion, we were able to obtain pre-test and post-test data as part of an evaluation design, but obtaining follow-up data at six months required that we obtain contact information that would be valid for the participants in six months. Many of those potential participants were not sure where they would be stationed in six months and did not have stable physical or email addresses while many others did not wish to consent to the follow-up even if they did have stable contact information; thus, we had to abandon our follow-up evaluation because of insufficient potential respondents, even though the military had approved of that long-term follow-up and wanted to see its results. Another gatekeeping issue is that usually installation commanders or their key staff have a variety of attitudes about research with their service members; while one commander might be very favorable, another might not be. Thus, if you are working with a commander who appreciates research, all it takes is a change of command with a new commander reluctant to support research and support for your military family research project could disappear virtually overnight.

Gatekeeping can also occur at lower levels of the military hierarchy. On one occasion the plan was for an Army agency to offer military spouses post-deployment reintegration training (and program evaluation). The plan was approved from the Pentagon down to the head of the Army Family Readiness Groups on that particular installation. However, at some point lower in the chain, communication or persuasion

broke down and instead of having thousands of spouses attending the training, no more than three dozen spouses attended. The agency had planned to be at the installation for only two or three weeks and by the time they realized that the plan was not working, it was too late to make the changes needed to get it working.

Gatekeeping can also occur at the soldier level. At one redeployment training, the instructor introduced some of the classes with a video made by his great-nephew which featured flights over Baghdad and film of his roadside bomb demolition unit at work. One scene included a camera recording what a roadside bomb explosion looked like from about ten yards away (a large orange ball of fire coming at the camera) and what things looked like inside the associated truck (virtually anything loose in the cab was flying around, bouncing off the cab walls). The thought had been that this would connect the world of the instructor with that of the soldiers and lead into a discussion of how the deployment had impacted soldiers and their families. Yet many soldiers complained that such internet-based videos were being used by the enemy to help them improve their roadside bomb techniques so they could kill more Americans and our allies. Thus, the video had to be abandoned as a teaching tool.

We should note that not all military gatekeeping is all bad. In one instance, an enthusiastic researcher – without doing a careful needs assessment first - decided that military children needed a specific type of program to foster their self-esteem, assuming that low self-esteem was a problem without having checked that situation empirically. The situation exploded when some military children got together to protest the research because they did not think they needed an improvement in their self-esteem and the funding for the

research grant was eventually halted because of the protests. Better gatekeeping might have directed the research into a more productive direction based on needs agreed upon by the target population, military leadership, and the research team.

Control over Ideas

Those who obtain military grants may become biased to accept worldviews held by their military sponsors. Recently, Karney and Trail (2017) argued that “evidence linking deployments directly to poorer marital functioning has been sparse” and “inconsistent” (p. 147). While Karney and Trail acknowledged discrepancies in findings between their large study of military personnel and those of Negrusa, Negrusa, and Hosek (2014) and Negrusa and Negrusa (2014), they seemed to imply that most other studies had “relied mostly on small samples of convenience” (p. 148). It is our sense that readers of Karney and Crown (2007) might have easily gotten the impression that there was little to no empirical research to support the idea that deployments had ever been associated with an increase in divorce rates. We contend such an impression, to be sustained, depended upon a lack of awareness of some of the research that had looked at deployments and divorce rates (e.g., Rosen & Durand, 2000; Schumm, Bell, & Gade, 2000).

Karney and Crown (2007) found little indication in a large military population study of a positive relationship between total deployment time and risk of divorce. Karney and Crown (2011), summarizing their 2007 book, cited Bell and Schumm (2000) and Schumm, Hemesath, Bell, Palmer-Johnson, and Elig (1996) as background support for the idea that deployments did not increase divorce rates. Karney and Crown (2011) asked “If we were unable to find much evidence for

negative effects of deployments on marriages using the best methods that have been applied to this question to date, why is it that the belief in these effects continues to be so widespread?” (p. 41). Karney and Crown’s (2007, 2011) research and its null findings have been cited extensively (Allen, Rhoades, Stanley, & Markman, 2010, 2011; Allen, Rhoades, Markman & Stanley, 2015; Allen, Stanley, Rhoades, Markman, & Loew, 2011; Anderson, Johnson, Nelson Goff, Cline, Lyon, & Gurss, 2011; Anderson, Stith, Johnson, Strachman-Miller, Amanor-Boadu, & Linkh, 2013; Andres, 2014; Becvar, 2012; Behnke, MacDermid, Anderson, & Weiss, 2010; Cigrang, Talcott, Tatum, Baker, Cassidy, & Smith Slep, 2014; Cigrang, Talcott, Baker, Cassidy, Sonnek, & Smith Slep, 2014; Crow & Myers-Bowman, 2011; De Burgh, White, Fear, & Iversen, 2011; Gewirtz, McMorris, Hanson, & Davis, 2014; Gewirtz & Youssef, 2016; Heyman, Smith Slep, Sabathne, Eckardt Erlanger, Hus, & Sonnek, 2015; Hogan & Seifert, 2010; Huebner et al., 2009; Kanzler, McCorkindale, & Kanzler, 2011; Karakurt, Christiansen, MacDermid Wadsworth, & Weiss, 2012; Keeling, Wessely, Dandeker, Jones, & Fear, 2015; Kees & Rosenblum, 2015; Kline, Ciccone, Falca-Dodson, Black, & Losonczy, 2011; Knobloch & Theiss, 2012; Lacks, Lamson, Lewis, White, & Russoniello, 2015; Laser & Stephens, 2011; Lewis, Lamson, & Leseuer, 2012; Link & Palinkas, 2013; London, Allen, & Wilmoth, 2012; MacDermid & Riggs, 2016; MacDermid Wadsworth & Southwell, 2011; Marini, Collins, & MacDermid Wadsworth, 2018; McLeland, Sutton, & Schumm, 2008; Melvin, Wenzel, & Jennings, 2014; Negrusa & Negrusa, 2014; Negrusa, Negrusa, & Hosek, 2014; Nelson Goff, Summers, Hartman, Billings, Chevalier, & Monk, 2015; Orthner & Rose, 2009; Rossetto, 2013; Rowe, Murphy, Wessely, & Fear, 2013; Paley, Lester, & Mogil, 2013; Riviere, Merrill,

Thomas, Wilk, & Bliese, 2012; Ross, 2016; Sayers, 2011; Sayers, Farrow, Ross, & Oslin, 2009; Scherrer, Widner, Shroff, Matthieu, Balan, van den Berk-Clark, & Price, 2014; Segal et al., 2015; Schlomer, Hawkins, Wiggs, Bosch, Casper, Card, & Borden, 2012; Stanley, Allen, Markman, Rhoades, & Prentice, 2010; Trump, Lamson, Lewis, & Muse, 2015; Wang, Seelig, MacDermid Wadsworth, McMaster, Alcaraz, & Crum-Cianflone, 2015). Not unlike other large human organizations, the Pentagon does not need any more bad news than it is already getting, so the Karney and Crown research was probably to the liking of the Pentagon and thus to the organization bearing the good news, the RAND corporation. One can easily imagine someone in the Pentagon asking for RAND to keep being funded because of their “great research”. While a crude test, one can compare the google scholar citation rates for Karney and Crown (2011) versus Schumm, Roy, and Theodore (2012), both book chapters published at nearly the same time, the former finding more favorable results and the latter less so; the result, as of 21 December 2018, was 51 versus 8, one of which was a self-citation while the other occurred in an article in the journal of which the senior author is the editor. Thus, the result could easily have been a “score” of 51-6. A great class discussion could probably be focused on possible reasons for such a disparity.

Yet, some research prior to Karney and Crown (2007) had found lower levels of marital satisfaction or higher rates of divorce. Rosen and Durand (2000) in a survey of 776 soldiers had found that 7% had divorced after deploying and returning from Operation Desert Shield/Storm (ODS/S) with 14% more considering divorce (5% had been considering divorce before that deployment). Schumm, Bell, and Gade (2000) found a 21% divorce rate over two years associated with a mid-

1990’s peacekeeping deployment of a few hundred Reserve Component personnel to the Middle East; as noted, they also found even stronger break-up rates for the non-married. Other researchers had found significant associations between deployment conditions and lower marital quality (Adler-Baeder, Pittman, & Taylor, 2005; Burrell, Adams, Durand, & Castro, 2006; McLeland & Sutton, 2005; McLeland, Sutton, & Schumm, 2008; Pittman, Kerpelman, & McFadyen, 2004). Thus, the negative evidence regarding deployments and marriage was and remains far from fiction.

“Lost” Ideas

Furthermore, what Karney and Crown (2007) could not know was that when Bell and Schumm (2000) wrote that paper, they knew they had contrary data but the leadership at the Army Research Institute had told them they were not free to publish it. Thus, Bell and Schumm (2000) did not mention some of the available research on deployments and divorce that only later were published after Dr. Bell had died and Dr. Schumm had retired from the Army and was no longer working for ARI (Schumm, Roy, & Theodore, 2012). Thus, such research ideas were “lost” for almost two decades.

As detailed elsewhere (Schumm, Roy, and Theodore, 2012), in 1991-1992, the U.S. Army Research Institute implemented a Survey of Total Army Military Personnel (STAMP), obtaining a 50.7% response rate, for 6,516 officers and 4,741 enlisted personnel. We analyzed data for active duty respondents (a separate survey was conducted for Reserve Component personnel) who had been married as of August 1, 1990. Our independent variables included gender, race (white/minority), ethnicity (Hispanic/Not Hispanic), rank (officer/enlisted), deployment status

(deployed overseas during ODS/S, did not deploy), marital status (first marriage/remarriage), marital instability as of August 1990 (marriage “in trouble” or not), and marital satisfaction as of August 1990, a single item with seven response categories. The survey also asked about current marital satisfaction (after ODS/S) and if the respondent had divorced since August 1990 (we also had data on dating and engaged respondents, not reported here). Instability after ODS/S was predicted by remarriage (odds ratio = 1.35, $p < .05$), enlisted rank (2.08, $p < .001$), female gender (1.98, $p < .001$); predeployment instability (12.73, $p < .001$), and having been deployed (1.77, $p < .001$). Deployment was associated with significantly higher divorce rates for both women (14.1%/6.7%) and men (5.4%/3.5%). For those with an unstable marriage before the deployment, deployment did not make a significant difference (28.8%/25.0%). For those with a stable marriage the difference was smaller but significant (3.7%/1.9%). Under the best of circumstances (male officers in first and stable marriages) deployment made a small but significant difference (1.9%/0.7%). Under the worst of conditions (female enlisted in unstable marriages), deployment made a difference of 61.5%/34.4% ($p < .10$). 109 of the 158 respondents who reported divorce blamed it on ODS/S specifically. Without the 109, the divorce rate would have been 2.2% for the deployed while for the non-deployed, the divorce rate was 4.4%. However, for those who did not divorce, deployment status did not predict post-deployment marital satisfaction, similar to what was found for a later (1995) deployment (Schumm, Bell, & Gade, 2000). Another aspect of “lost” ideas is that a few years ago we heard that when the government scholar in charge of the STAMP data retired, not long after, that data disappeared, possibly never to be seen again.

Likewise, Karney and Trail (2017) were probably not aware of a study of 223 Army officers from Fort Leavenworth (Theodore, Weber, & Schumm, 2011) that had found results similar to theirs; total deployment time since 2001 was not related to divorce rates but was related to marital stress levels ($r = .19$, $p < .01$), their marriage being “in trouble” ($r = .18$, $p < .05$), and thinking about getting a divorce ($r = .17$, $p < .05$). Likewise, we similarly found that recency of a deployment was related to marital stress ($r = .22$, $p < .01$), marriage in trouble ($r = .15$, $p < .05$), and thinking about divorce ($r = .16$, $p < .08$). Comparing those who had deployed since 2001 to those who had never deployed, the former were more likely to have a very stressed marriage (36%), see their marriage as in trouble (16%), and be thinking about divorce (12%) versus 11%, 7%, and 4% for the latter (although only the first comparison was significant, $p < .01$). Again, similarly to Karney and Trail (2017), we detected a curvilinear trend in which those with no deployments or several deployments were doing better in their family life while those with one or two recent deployments were not doing as well. Those in the middle of a stress situation may be more responsive to family life education or other interventions (DuPree, Whiting, & Harris, 2016; James, Kennedy, & Schumm, 1986; Schumm, Turek, & McCarthy, 2003).

Military information can also be “lost” with respect to the history of military operations. Many Americans still probably view the military disaster at Pearl Harbor in December 1941 a result of the treachery of Japan, conducting a sneak attack on a quiet, peaceful navy base. However, a careful analysis of ship movements has indicated that the United States Navy was working almost as hard as the Japanese Navy at ambushing its enemy (at Wake, at Midway, then at Pearl Harbor) prior to December 7th, 1941. Our statistical analysis has indicated

that the U.S. Navy deployed its most modern ships into battle prior to December 7th, leaving the “rust buckets” at Pearl Harbor in case it was attacked (Schumm, Webb, Castelo, Akagi, Jensen, Ditto, Spencer-Carver, & Brown, 2002).

Control of Data

In some cases, the military may insist on controlling your data. One of our doctoral students agreed to this procedure only to find out that toward the end of the data collection, the military staff controlling the data had decided to destroy all demographic variables in that data set. The loss of those variables did not preclude the student from completing his dissertation successfully, but it did preclude publishing his dissertation (Theodore, 2011) because most editors and reviewers expect a researcher to be able to describe the sample under study. Furthermore, many tests of theory involve predicting a variable X from demographic variables and then predicting variable Y from variable X and the demographic variables. Without any demographic variables available, such theoretical models cannot be tested, for either the mediating effect of variable X or the direct/indirect effects of the demographic variables. Not only does destruction of demographic data preclude testing the main effects of demographic variables, it also precludes testing any potential interaction effects among the demographic variables or with any mediating variables (i.e., variable X).

Another researcher with whom we were acquainted had made arrangements to analyze military data on a military computer but when it appeared that the results might not be to the liking of the military leadership involved, his password to the computer and, hence, to the data, was changed, blocking any further access to the data for analysis or publication by that unfortunate researcher.

Sometimes apparent control does not translate into actual control, however. At one site, we observed as pre-tests and post-tests were administered. The plan was for each soldier to put both tests into the same envelope, allowing us to have linked data between pre-test and post-test. However, the envelopes disappeared between the sponsor's office and the event site and we were unable to link data from the pre-tests and post-tests, a design flaw that reduced the statistical power of our future analyses and made comparison difficult with linked data from other sites.

Politically Unacceptable Results

Sometimes you may find very interesting, but politically unacceptable results. Back in 1996, when I was working at the U. S. Army Research Institute for Social and Behavioral Sciences, I had discovered that the divorce rate associated with deployment to the first Persian Gulf War was extraordinarily high (~ 70%) over two years for the same subgroup of service members in two different sets of data. The head of ARI told me that such results could not be published because of the damage that could be done by the press if they found out.

In a similar manner, we did some research on the proposed changes to the “don't ask, don't tell” policy and found incredible gaps in support (e.g., 90% of lesbian officers in favor; 90% of white, male, junior enlisted members against), but we were slow to even try to publish the results knowing that any pro-military reviewers/editors might well save themselves a great deal of political trouble by rejecting a paper with such controversial content. However, those results showed us that answering some questions about the military depends substantially on which subgroups (or their relative percentages of the total sample) are surveyed. Even in December 2016, policies encouraged by President Obama (e.g.,

repeal of “don’t ask, don’t tell”, gender integration within combat units, and transgender service) remained unpopular with 18-41% disapproval compared to 12-24% approval (Shane & Altman, 2017). Yet when one of us dared to question the wisdom of the DADT policy in part (not in the whole), much criticism ensued (Schumm, 2004).

Control of Information

If the military’s attitude were ‘bring on the facts so we can solve problems’, then it would be easier for researchers to collaborate with the military. However, my experience has been that the military is very cautious about potential “bad news”. This can bias what gets published. For example, Bruce Bell and I published at least two studies (Bell & Schumm, 2000; Schumm *et al.*, 1996) that minimized the potential impact of deployments on divorce rates. Yet we knew, at the time, that we had data, from a large random sample with a 50% response rate, that showed a significant relationship between deployment for the first Persian Gulf War and higher divorce rates – but, as noted, the Army did not give us the freedom to publish that adverse information. At the same time, in one case, when our data involved mostly Reserve Component soldiers on a very narrowly defined type of overseas non-combat deployment, the Army did not block publication, likely because any conclusions we drew could only be applied to a very narrow type of deployment (Schumm, Bell, & Gade, 2000). Yet even with that data set, we did not describe the results in terms of a 21% divorce rate but rather a marital stability rate of 79% (p. 819) as our way of minimizing the chances of the paper not passing review with those who checked papers before submission to scholarly journals. It might be that we only got that article past the military censors because we

disguised the fact of the instability in how we worded the outcomes.

Thus, on one hand, researchers had data suggesting small to no effects of deployments on military families in terms of divorce rates (Karney & Crown, 2007, 2011). On the other hand, data that did suggest substantial effects of deployments on military families was either suppressed (Schumm, Roy, & Theodore, 2012) or disguised (Schumm, Bell, & Gade, 2000). While many scholars were citing the former reports on the assumption that deployments had not been much of a problem, at least in terms of divorce, the key question should have been “Why are some deployments associated with higher divorce rates while others are not?” There could be several plausible answers. The expectations of military families, especially of Reserve Component personnel, might have changed (Schumm, Jurich, Stever, Sanders, Castelo, & Bollman, 1998). Military leadership during some deployments might have been more effective at making families feel supported and important (Allen, Rhoades, Stanley, & Markman, 2011). Some deployments consist of soldiers from the same unit who have known each other, while other deployments may consist of filler personnel who may have never met anyone else before (which was largely the case for the deployment in Schumm, Bell, and Gade, 2000). Family support/readiness programs or other interventions might have been better for some deployments than others (Bates, Fallesen, Huey, Packard, Ryan..... & Bowles, 2013; Bowles, Pollock, Moore, MacDermid Wadsworth; Cato.... & Bates, 2015; Laser & Stephens, 2011; Scherrer, Widner, Shroff, Matthieu, Balan, van den Berk-Clark, & Price, 2014) and may have improved over time (MacDermid Wadsworth & Southwell, 2011). Some deployments might have had greater political support and a greater sense of meaning for families involved

(Bergmann, Renshaw, Allen, Markman, & Stanley, 2014). The composition of families involved with deployments might be different for some deployments than for others; deployed women service members might have different experiences than deployed men (Gewirtz, McMorris, Hanson, & Davis, 2014; Kanzler, McCorkindale, & Kanzler, 2011; Segal & Lane, 2016), while dual military couple families might differ from other military families (Lacks, Lamson, Lewis, White, & Russoniello, 2015). Some deployments may have involved greater stress (e.g., PTSD) for service members (Allen, Rhoades, Stanley, & Markman, 2010). Deployments might not only impact adult family members, but also children in the family (Chartrand, Frank, White, & Shope, 2008; MacDermid Wadsworth, Bailey, & Coppola, 2016; Sheppard, Malatras, & Israel, 2010; White, De Burgh, Fear, & Iverson, 2011).

For example, deployments that were longer or involved greater exposure to traumatic events might have stronger associations with relationship problems for service members (De Burgh, White, Fear, & Iverson, 2011; Forbes, Jones, Woodhead, Greenberg, Harrison, White, Wessely, & Fear, 2012; Rowe, Murphy, Wessely, & Fear, 2013). Deployments by Reserve Component personnel might differ in consequences compared to those for Active Component personnel (Gewirtz, Polusny, DeGarmo, Khaylis, & Erbes, 2010; Khaylis, Polusny, Erbes, Gewirtz, & Rath, 2011). Some deployments might have involved greater exposure to toxins (White, Steele, O'Callaghan, Sullivan, Binns..... Grashow, 2016). Longer deployments might be more stressful (Keeling, Wessely, Dandeker, Jones, & Fear, 2015). How families coped with deployment stressors could be very important (Aducci, Baptist, George, Barros, & Nelson Goff, 2011; Nelson Goff, Summers, Billings, Chevalier,

Hermes, Perkins, Walker, Wick, & Monk, 2015). It's also possible that divorces in the military may be associated with adverse outcomes in other aspects of life (Wang, Seelig, MacDermid Wadsworth, McMaster, Alcaraz, & Crum-Cianflone, 2015). But the correct answer was *not* "No deployments have ever featured a higher rate of divorce".

One relevant story I encountered while teaching about military families at Fort Riley in the summer of 2006 was how a junior officer had begged an Army General to tell the U.S. Congress the truth, that long deployments were hurting Army families. The General agreed to do so. However, his actual testimony was reported to me to have omitted any such information, much to the junior officer's disappointment. The logistical and personnel management of soldiers overseas was much less complex if you could bank on longer deployments, at least in the short run. Asking the military to overlook such important short-term benefits for the sake of better long-term outcomes for families was asking more than some in leadership positions could apparently handle.

Another possible example of bias was featured in an article on the possible effects of units having had gay or lesbian unit members (Kaplan & Rosenmann, 2012) in the past five years, which was weakly measured by "yes", "unsure", and "no". The article concluded that there were no such effects. However, a careful reanalysis of the data in the article (the authors did not agree to release their original data) suggested that there might have been adverse effects on unit social cohesion (Schumm, 2015, pp. 22-24). The key to the different findings was keeping or omitting the "unsure" group. Retaining the "unsure" group led to nonsignificant findings while omitting the "unsure" group led to at least one medium ($d > .50$, $p < .01$) effect size with 12/13 (91%) effect sizes (7 for which

$d \geq .20$) indicating lower social cohesion in combat units that had been involved with a gay member. Because of the ambiguous nature of the key independent variable, it is difficult to say exactly how the outcome in terms of unit social cohesion was influenced, but to argue there were absolutely no effects does not seem as plausible given our analysis of the data. Nonetheless, Kaplan and Rosenmann (2012) have been cited as empirical support for having GLB service members serve openly in militaries around the world (Evans, 2016, p. 27; Goldbach & Castro, 2016; Lehtonen, 2015; Polchar, Swejjs, Marten, & Galdiga, 2014, p. 31; also see Kaplan & Rosenmann, 2014; Rosenmann, 2016).

Targets of Opportunity

Despite some of the challenges of research with military families, there can be surprising opportunities. In one case, a private firm was hiring teachers to help with reintegration training for a brigade returning from Iraq in early 2006; I was hired for the summer with them. They were doing some program evaluation and I slipped in a two page survey under their rubric of program evaluation. With only two pages available, I had to be especially efficient in questionnaire design and clear in my theory. Another thing we did which helped was to publish from the data relatively quickly to preserve the most important information about the methodology and sample characteristics (Schumm, Crock, Likcani, Akagi, & Bosch, 2008). Even though there is much more that could be published from the data, at least we have the one publication to refer back to in the future.

In other situations, surveys can be conducted under the rubric of evaluating chaplains' programs or MWR programs, which was the basis for two of our studies

(Theodore, Weber, & Schumm, 2011; Pratt, 2016). When the senior author was mobilized for the first Gulf War, a key question was whether troops could be sent home early to their families or whether they were needed to manage the return of equipment to the United States; as a senior staff officer I argued for sending the troops home early but afterward published several articles that statistically evaluated that decision (Peschke & Schumm, 1993; Schumm & Peschke, 1993a, b; Schumm, Peschke, & Cone, 1992; Schumm & Webb, 1995). Sometimes you might be able to interview veterans about their wartime or deployment experiences and publish the results (Hendrix, Jurich, & Schumm, 1994, 1995; Hendrix & Schumm, 1990; Korte, Schumm, Mayberry, Tilford, & Duckett, 1995).

CONCLUSIONS

Although some scholars may have moral objections to doing research on anything related to the military, military family research can offer scholars a wealth of data that is relevant to understanding how a wide variety of stressors might influence both military and other families. Sometimes a chance to engage in military family research will appear unexpectedly as a target of opportunity; at other times, it may be sought as part of government sponsored grant initiatives. Often military family research requires human subjects approval from both civilian and government sources, which can represent a barrier to conducting such research. However, there may be fewer scholars seeking funding for military family research because of the known complications; thus, there may be more dollars per scholar available than in other areas of research. Family theory remains critical to research on military families even though some military researchers might be less familiar with family theory than family

scholars. The military is properly concerned about maintaining the privacy of service members and of their families; tensions may occur between the need for privacy and the researcher's need to define population and sample characteristics, as well as to obtain high response rates through systematic follow-up of potential survey respondents. Researchers may need to retain their data as they are received to avoid unexpected data deletions that can occur by accident or intentionally if military sponsors decide they don't like the possible implications of results from the data. The uncertain work schedules and future assignments of military personnel can limit the effectiveness of long-term follow-ups in military family research. As a large, worldwide organization, the U.S. military is not eager to hear or find bad news. Researchers may find an easier path to publication for research that sounds like "good news", while research that seems like "bad news" may be suppressed in a variety of ways. Thus, researchers need to be careful to avoid assuming that a search of the literature will yield all the military family research that has been done, especially with respect to controversial issues. Some research on military families that is important may never be published unless certain conditions prevail. Citations rates may not always be a good indication of how valid research results were. Because of the complexities of military life and military family life it may be very useful to bring military personnel or veterans into your research group when developing and testing theories about military family life.

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