



Research Report 2033

Improving Muster Rates for the Individual Ready Reserve: Army Reserve Career Counselors Survey

Ava Santos

U.S. Army Research Institute

Jared Peterson

Kansas State University
Consortium Research Fellows Program

Alex Francisco

University of Missouri Kansas City
Consortium Research Fellows Program

Stefanie Stancato

University of Kansas
Consortium Research Fellows Program

October 2021

**United States Army Research Institute
for the Behavioral and Social Sciences**

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Authorized and approved:

**MICHELLE L. Zbylut, Ph.D.
Director**

Technical Review by

Francisco Bermudez, MSG, Army Reserve Careers Group
Carole Davis, CW4, Army Reserve Careers Group
Lee Bedford, PhD, U.S. Army Research Institute

DISPOSITION

This Research Report has been submitted to the
Defense Information Technical Center (DTIC).

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188		
1. REPORT DATE (dd-mm-yy) October 2021		2. REPORT TYPE Final		3. DATES COVERED (from... to) October 2019 – April 2021	
4. TITLE AND SUBTITLE Improving Muster Rates for the Individual Ready Reserve: Army Reserve Career Counselors Survey				5a. CONTRACT OR GRANT NUMBER	
				5b. PROGRAM ELEMENT NUMBER 633007	
6. AUTHOR(S) Ava J. Santos, Jared J. Peterson, Alex J. Francisco, & Stefanie S. Stancato				5c. PROJECT NUMBER A792	
				5d. TASK NUMBER	
				5e. WORK UNIT NUMBER 0901	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Research Institute for the Behavioral and Social Sciences 6000 6th Street Fort Belvoir, Virginia 22060-5610				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Research Institute for the Behavioral and Social Sciences 6000 6th Street (Bldg. 1464 / Mail Stop: 5610) Fort Belvoir, Virginia 22060-5610				10. MONITOR ACRONYM ARI	
				11. MONITOR REPORT NUMBER Research Report 2033	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.					
13. SUPPLEMENTARY NOTES ARI Research POC: Ava Santos, Fort Leavenworth Research Unit					
14. ABSTRACT (<i>Maximum 200 words</i>) The Individual Ready Reserve (IRR) consists of trained Soldiers who, if required, may augment the Army during national emergencies. IRR Soldiers are required to complete annual readiness checks, or musters. In 2019, 87% of IRR Soldiers failed to comply with their muster orders. A non-response to muster orders can detrimentally affect Army readiness. This research report describes the results of a survey and a focus group protocol that were administered to Army Reserve Career Counselors (ARCCs), who counsel IRR Soldiers and administer musters. The survey and focus group protocol asked ARCCs what Soldiers typically knew about their responsibilities to the IRR and what factors ARCCs thought might motivate muster compliance. ARCCs reported that Soldiers typically knew little to nothing about the IRR and that providing relevant information on a regulated schedule regarding the IRR, by a variety of offices, might improve muster rates. Other factors that ARCCs indicated could improve muster rates included: having IRR Soldiers' current contact information, implementing consequences for not attending muster, and providing more flexibility in when and where IRR Soldiers could muster. These factors could also be enabled by improving how Soldiers were educated about the IRR.					
15. SUBJECT TERMS Individual Ready Reserve, Musters, Compliance, Army Reserve Career Counselors					
SECURITY CLASSIFICATION OF			19. LIMITATION OF ABSTRACT Unlimited Unclassified	20. NUMBER OF PAGES 57	21. RESPONSIBLE PERSON Dr. Kingsley C. Ejioogu Acting Chief, Fort Leavenworth Research Unit, (913) 684-9796
16. REPORT Unclassified	17. ABSTRACT Unclassified	18. THIS PAGE Unclassified			

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**Fort Leavenworth Research Unit
Kingsley C. Ejiogu, Acting Chief**

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ACKNOWLEDGMENTS

Many individuals have been instrumental in the development of this research project. Mr. David Sheridan and LTC Angela Allen of the Mobilization Division, Directorate of Manpower and Personnel Management (DMPM), and Ms. Janet Mason and MAJ Timothy Satterthwaite of the Human Resources Command (HRC), provided important background knowledge regarding the Individual Ready Reserve (IRR) and musters. Dr. Angela Karrasch and Dr. Kingsley Ejioogu of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) ensured the scientific soundness of this research. Mr. Maxwell Campbell of the Consortium Fellows Program, Consortium of Universities in the Greater Washington Metropolitan Area, and who also was serving as a member of the Army Reserve Officer Training Corps, enthusiastically served as an Army and IRR subject matter expert (SME). Dr. Brendon Woody, also of the Consortium Fellows Program, lent his time and expertise in coding survey responses. The authors are especially thankful to CSM Ryan Barr, SGM Jack Waddington, and 1LT Jennylee Milanes of the Army Reserve Careers Group (ARCG) for sharing their expertise regarding the Individual Ready Reserve (IRR) and making the data collection possible. Above all, the authors are grateful to the Army Reserve Career Counselors (ARCCs) who completed the surveys and participated in the focus group sessions. During the data collection, it became clear to the authors that ARCCs were dedicated to their roles as counselors and were determined to do right by IRR Soldiers.

IMPROVING MUSTER RATES FOR THE INDIVIDUAL READY RESERVE: ARMY RESERVE CAREER COUNSELOR SURVEYS

EXECUTIVE SUMMARY

Research Requirement:

In the event of a national crisis, the Army may need to augment its population of mobilization-ready Soldiers, and it may do so by drawing from the Individual Ready Reserve (IRR). The IRR consists of Soldiers who were trained during their service in the Active Army, U.S. Army Reserve (USAR), or Army National Guard. IRR Soldiers are required to update their contact information with the Human Resources Command (HRC) and to complete annual readiness checks, otherwise known as musters. The U.S. Army Audit Agency found that in FY18, 84% of IRR Soldiers failed to comply with their muster orders.

Considerable scientific literature exists about the positive effects of education on individuals' compliance with requirements and rules. Currently, there are two times in Soldiers' careers when they are informed about the IRR: during initial enlistment and during pre-separation counseling. It is not clear whether these two instances are enough for IRR Soldiers to remember what the IRR is, when they may be transferred into the IRR, what the IRR requirements are, and why it is important to comply with the IRR requirements.

Procedure:

The Mobilization Division, Directorate of Military Personnel Management (DMPM) requested the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) to conduct a survey that asked about Soldiers' perceptions of and experiences with the IRR. The survey was to help determine whether existing procedures that involved reviewing information about the IRR were enough for Soldiers to know about the IRR and how the IRR may be relevant to them. The survey was also to identify additional opportunities to educate Soldiers about the IRR and to ascertain factors that will motivate IRR Soldiers to comply with muster orders.

The survey was administered to 116 Army Reserve Career Counselors (ARCCs) during their annual Area Leader Training at Fort Knox, KY. ARCCs counsel IRR Soldiers and facilitate musters. In addition, ARI had an opportunity during the same training period to conduct focus group sessions with 21 ARCCs. During these sessions, a subset of the open-ended survey questions were asked, and the ARCCs had opportunities to elaborate and discuss their responses with peers.

Results:

ARCCs reported that Soldiers tended to know nothing or very little about the IRR or that Soldiers had erroneous information about the IRR. ARCCs had the impression that, in the Army, it was mainly ARCCs who communicated with Soldiers regarding the IRR. Majority of ARCCs reported that they had spoken with IRR Soldiers who refused outright to comply with muster orders. These Soldiers told ARCCs that they wanted nothing to do with the Army, they did not

want to muster, they had civilian obligations, or they already finished their Army obligations. More often than not, IRR Soldiers did not respond to ARCCs who reached out to them.

ARCCs reported that sufficient, regular, and timely education about the IRR, administered across a variety of offices, might increase muster compliance. Aside from education, the likelihood of IRR Soldiers mustering might be increased if it was easier for the IRR Soldiers to attend their muster appointments and if the Soldiers could communicate with ARCCs regarding musters.

Utilization and Dissemination of Findings:

The IRR survey administered to ARCCs showed that IRR education has potential to increase muster rates. Results of the survey and focus group protocols provide the Mobilization Division (DMPM), HRC, and Army Reserve Careers Group (ARCG) with scientific data regarding what information should be imparted to Soldiers, when IRR education should take place, how often Soldiers should be educated about the IRR, and who should administer IRR education. Aside from educating Soldiers about the IRR, muster rates may also be increased when ARCCs are more flexible in when and where they can conduct musters and if additional measures can be taken to update IRR Soldiers' contact information.

The IRR can augment the Army's mobilized forces at a fraction of the cost that it would take to train new recruits. Musters are important because they provide the Army with an accurate sense of what the IRR's capabilities are in the event of a national emergency. Improving muster rates improves Army readiness.

IMPROVING MUSTER RATES FOR THE INDIVIDUAL READY RESERVE:
ARMY RESERVE CAREER COUNSELORS SURVEY

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Improving Muster Rates for the Individual Ready Reserve: Army Reserve Career Counselors Survey

The Individual Ready Reserve (IRR) consists of Soldiers who have previously served in the Active Army, U.S. Army Reserve (USAR), or Army National Guard (ARNG). Most Soldiers transfer into the IRR to fulfill their remaining Military Service Obligation (MSO), following completion of their Active Duty Obligation. A much smaller number of Soldiers choose to remain in the IRR after they have already completed their MSO. Aside from being able to fulfill remaining MSOs, benefits of being in the IRR include earning points towards retired reserve pay, being eligible for Veteran's Affairs (VA) services, possessing military identification card privileges, accessing the Veteran's and Military Crisis Hotline, and having opportunities to take part in Inactive Duty Training (IDT).

Soldiers have obligations that must be met as part of being in the IRR. IRR Soldiers are required to notify the Human Resources Command (HRC) of any changes to the Soldiers' contact information and any other changes that may affect their readiness, such as marital or dependency status, changes in job qualifications, and changes to physical or medical conditions. Also, IRR Soldiers are required to complete a Virtual Muster (VM) or a Personnel Accountability Muster (PAM). In a VM, IRR Soldiers log into the Virtual Screening Portal, where they can update their information and answer questions regarding medical readiness. In a PAM, IRR Soldiers meet with an Army Reserve Career Counselor (ARCC) at an Army Reserve Center to update their information and are briefed on any new policies regarding Army benefits or opportunities. During a PAM, IRR Soldiers also log into the Virtual Screening Portal to update their information regarding medical readiness. ARCCs may educate IRR Soldiers on how to answer the medical questionnaire, because it is possible for IRR Soldiers to answer the questions in a way that would code them with a medical disqualifier and impair their ability to go back into service. In such cases, the IRR Soldier needs to undergo a full physical examination and review by the Surgeon General's office in order to be approved to serve again. IRR Soldiers may receive a Muster Duty Allowance (MDA) of \$242.50 (as of 2021) if they complete a PAM, but not when they complete a VM. IRR Soldiers may also be mobilized in order to augment Army units. It is unlikely for IRR Soldiers to be mobilized, in general. Mobilization is more likely to happen if the IRR Soldier has a Military Occupational Specialty (MOS) that is highly in demand. Large-scale mobilizations are rare (Terry et al., 1992). The most recent mobilization involved calling IRR Soldiers with medical specialties to assist in handling the COVID-19 pandemic (Harkins, 2020). Prior to the COVID-19 mobilization, IRR Soldiers were mobilized on a large scale for Operation Desert Storm (Wisher et al., 1991) and Operation Enduring Freedom. The remaining IRR requirements, which are to update one's contact information and readiness status and to attend musters, are minimal compared to the requirements that Soldiers under other classifications have. The lack of drill or training requirements enable IRR Soldiers to work in full-time civilian jobs or attend civilian schools with little to no disruption.

Musters are intended to keep the Army apprised of the IRR's capabilities. Musters inform the Army how many Soldiers the Army can obtain from the IRR, what MOSs can be found in the IRR, and how long it may take to prepare IRR Soldiers for mobilization if there is a need. However, the U.S. Army Audit Agency found that in FY18, 84% of IRR Soldiers who were ordered to muster did not do so (Inspector General, U.S. Department of Defense, 2019). Low

muster rates detrimentally affect Army readiness. As well, low muster rates indicate that IRR Soldiers are not fulfilling an obligation that they are contractually obligated to fulfill.

There are multiple reasons why IRR Soldiers may not attend muster. The following list of reasons were formulated based on information about how the IRR works and scientific literature on compliance. This list of reasons was not intended to be comprehensive, but it captures the most common explanations for why IRR Soldiers might not muster.

1. **Neglecting to update contact information.** Muster orders are sent to IRR Soldiers via mail. If IRR Soldiers do not update their addresses with the HRC, then it is unlikely that the Soldiers will be aware that they have been called to muster. ARCCs may attempt to reach IRR Soldiers by phone or email to follow up on the muster orders, but it is possible that those information avenues may be outdated as well.

There appear to be two common reasons for why IRR Soldiers neglect to update their contact information. At pre-separation, it is not unusual for Soldiers to provide to HRC the contact information for the Soldiers' current living conditions, which is where the Soldiers are stationed at the time. Such information becomes obsolete when the Soldier leaves the duty station. IRR Soldiers may also be encouraged by their peers to omit valid contact information from HRC in order to avoid receiving correspondence from the Army that required action, such as muster orders. IRR Soldiers could make the argument that if they did not receive the order, then they could not be held responsible for failing to comply with the order. However, when IRR Soldiers do not update their contact information with HRC, the Soldiers are considered out of compliance with another IRR requirement. According to the Army People Strategy: Military Implementation Plan (2020), 67% of IRR Soldiers do not have valid contact information with the HRC.

2. **Believing that MSO has been fulfilled.** IRR Soldiers may be transferred into the IRR in order to fulfill their remaining MSOs. However, IRR Soldiers may be under the inaccurate belief that by completing their Active Duty Obligation, they have already fulfilled their MSOs. Consequently, the Soldiers may refuse to muster because they believe that they have satisfactorily completed their military service obligations to the Army. This reason is of particular concern, because it suggests that Soldiers may not be well versed in significant aspects of the contract that the Soldiers signed to join the Army.
3. **Having negative perceptions of the Army.** Soldiers who have negative experiences with the Army may choose not to extend their Active Duty Obligation, and consequently they are transferred into the IRR. There are also Soldiers who may have wanted to continue their Active Duty Obligation, but for various reasons, the Soldiers are transferred into the IRR. Being discharged from the Army under such undesirable circumstances may cause the discharged Soldiers to have negative attitudes towards the Army. Soldiers who have negative perceptions of the Army, for any reason, may refuse to have anything to do with the Army, including complying with muster orders.

Conflicting information existed with respect to Soldiers' eligibility to transfer to the IRR if Soldiers were discharged for unsatisfactory performance or misconduct. AR 635-200

(Personnel Separation - Active Duty Enlisted Administrative Separations) stated that such Soldiers, whether Active Army, USAR, or ARNG, were ineligible for transfer to the IRR. Meanwhile, AR 140-10 (Army Reserve - Assignments, Attachments, Details, and Transfers) stated that such Soldiers in the USAR were eligible for transfer to the IRR if the Soldiers had the potential to provide full service in the event of an IRR mobilization. There are Soldiers who are chaptered out of the Army and are transferred into the IRR to fulfill their remaining MSOs, despite Army regulations that stated otherwise. At the time this report was written, regulatory guidance was being implemented in order to avoid transferring into the IRR those Soldiers who were discharged for unsatisfactory performance or misconduct.

4. **Having other obligations that make it difficult to muster.** IRR Soldiers may have commitments such as working in full-time civilian jobs or attending civilian schools. It may be prohibitively difficult for IRR Soldiers who have other civilian commitments to take time away from these commitments in order to complete their musters within the time range provided in the muster orders.
5. **Lack of sanctions for not attending muster.** According to the IRR Handbook (U.S. Army Human Resources Command, 2019), IRR Soldiers who do not muster may be discharged early, and their benefits at separation may be adversely affected. However, the U.S. Army Audit Agency found that there were no mechanisms in place that held IRR Soldiers accountable if they did not comply with their muster orders (Inspector General, U.S. Department of Defense, 2019).

People in general are inclined to choose options that require less attention or effort (Tetlock, 1985; Thaler et al., 2013). Choosing not to report to a scheduled muster requires less attention and effort, compared to simply complying with orders. PAMs call for the IRR Soldier to meet with an ARCC at a designated muster center. Even if IRR Soldiers can easily afford to take time away from their civilian commitments, the Soldiers may choose not to do so because of the inconveniences that come with attending infrequent appointments: changing their schedules, making alternative arrangements for their other commitments, making up commitments that they will have missed due to mustering, and traveling to the muster center.

VMs are conducted online and do not require the IRR Soldier to travel to a muster center. Nonetheless, difficulties associated with accessing the Virtual Screening Portal makes the VM experience inconvenient for IRR Soldiers. The Virtual Screening Portal may experience lag, crash, or may be inaccessible during the time IRR Soldiers decide to complete the VM. Also, the Virtual Screening Portal requires DS log-in credentials. DS log-ins are required to be renewed every 30 days, or else they will become invalid, in which case another process must be followed in order to reenable the credentials. Outside of VMs, IRR Soldiers may see little need to renew their DS log-in credentials. When these Soldiers attempt to access the Virtual Screening Portal, the Soldiers will then be required to complete an additional process in order to do the VM.

The presence of accountability, however, changes the dynamics of the decision-making process (Pennington & Schlenker, 1999; Piquero et al., 2011; Thaler et al., 2013). When IRR Soldiers know that ignoring muster orders will result in adverse consequences, the Soldiers may decide that complying with muster orders will ultimately cost less attention and effort compared to ignoring the orders.

Importance of IRR Education

Two of the reasons given for why IRR Soldiers may not muster may be indicative of lack of IRR education for Soldiers. IRR Soldiers may neglect to update their contact information with the HRC if the Soldiers lack information about the IRR. The IRR Soldiers may not be aware that they are required to update their contact information with HRC or that they are required to muster. Furthermore, as Soldiers are transferred into the IRR to fulfill their remaining MSOs, IRR Soldiers who believe that they have already completed their MSOs may not even be aware that they are in the IRR in the first place.

There are two times in Soldiers' careers when they are expected to be educated about the IRR: during the initial enlistment and during pre-separation counseling that comes with the expiration of Soldiers' Active Obligated Service (Expiration – Term of Service [ETS]). During the initial enlistment, the Soldier signs the enlistment contract (DD Form 4, Enlistment/Reenlistment Document - Armed Forces of the United States). The contract specifies how many years the Soldier must spend fulfilling the Active Duty Obligation and how many years the Soldier must spend in the Reserve Component. Recruiters explain to incoming Soldiers that the IRR is one of the ways that Soldiers can fulfill the Reserve Component requirement of their contracts. During pre-separation counseling, Soldiers who will not continue their Active Duty Obligation, have not yet fulfilled their MSOs, and will not join the Selected Reserve (SELRES) are informed that they will be transferred into the IRR.

It is not clear whether Soldiers receive information about the IRR outside of the initial enlistment and pre-separation counseling. It is also unclear whether any information that Soldiers receive during their initial enlistment and pre-separation counseling sufficiently educates the Soldiers about IRR. Sufficient information about the IRR may include knowing what IRR is, conditions under which Soldiers are transferred to the IRR, IRR Soldiers' obligations, and the importance of IRR Soldiers updating their contact information and attending musters. It could be argued, however, that Soldiers may be less likely to remember information about the IRR if they received the information during their initial enlistment and during their pre-separation counseling. Soldiers who are new to the military are presented with large amounts of new information about a variety of topics. When there is information overload, individuals tend to prioritize information that are immediately relevant to them (Myers et al., 2017). For Soldiers who are new to the military, transferring into the IRR is a possibility that may not come up for them until years later. Such Soldiers may therefore be less likely to remember the IRR compared to more immediate events, such as Basic Combat Training (BCT). Soldiers who are about to enter ETS status may also be inundated with large amounts of information, such as benefits briefings and employment assistance workshops, which to these Soldiers may be of more immediate concern compared to the IRR.

There is considerable empirical evidence that shows that educating people about requirements increases the likelihood that they will comply with those requirements. People need to know that the requirements exist, what they need to do in order to comply with the requirements, and why it is in their best interests to comply with the requirements (Weaver, 2013; Winter & May, 2001). The positive effect of education on compliance has been examined extensively in the context of patient adherence to medical guidelines. Patient education increased patient compliance with making appointments with their healthcare providers and using preventive services (Roter et al., 1998). Patient education also improved compliance with medication instructions, across a broad range of illnesses and disease severities (Gold & McClung, 2006). Research that focused on more specific types of illnesses showed that patient education improved compliance with medical guidelines for treating asthma (Janson et al., 2003), cancer (Evans & Redmond, 2018), human immunodeficiency virus (HIV) (Goujard et al., 2003), kidney failure (Alikari et al., 2019), rheumatoid arthritis (Hill et al., 2001), and tuberculosis (TB) (Morisky et al., 1990). Even healthcare providers themselves were more likely to comply with guidelines, such as what should be done in order to reduce healthcare-associated infections, if there were educational programs that improved awareness of the guidelines (Pittet et al., 2000) or reduced ambiguities about the guidelines (Gurses et al., 2008).

The positive effect of education on compliance has been demonstrated in other domains as well. A meta-analysis of the organizational justice literature revealed that when management provided adequate explanations of key events, employees were more likely to cooperate, rather than to withdraw or retaliate (Shaw et al., 2003). Crime control initiatives emphasized how sanction contracts improved compliance if the contracts provided individuals with advance knowledge of consequences for infractions (Taxman et al., 1999). Gamblers who were educated about responsible gambling were more likely to comply with responsible gambling guidelines (Tong et al., 2019). Employees were more likely to comply with their company's information security policies if the company had adequately explained what the information security rules were, why those rules were in place, and the sanctions for not complying with the rules (Lowry et al., 2015). Shared understanding between tax regulatory systems and taxpayers had been emphasized as key in ensuring taxpayers' compliance (Picciotto, 2007). When negotiating treaties, governments engage in iterative discourse with all interested parties as part of ensuring compliance with the treaties (Chayes et al., 1998).

In summary, possible reasons for why IRR Soldiers do not muster suggest that the Soldiers were not sufficiently educated about the IRR. Soldiers are mainly educated about the IRR during their initial enlistment and during their pre-separation counseling, and it is not clear whether those two instances are enough to provide Soldiers the information that they should have regarding the IRR. Furthermore, there has been considerable empirical evidence that has shown that education has improved compliance in a variety of domains (e.g., Gold & McClung, 2006; Gurses et al., 2008; Lowry et al., 2015; Pittet et al., 2000; Roter et al., 1998; Shaw et al., 2003; Taxman et al., 1999). It is possible that education may also improve IRR Soldiers' compliance with the muster requirement.

Link Between Education and Sanctions

The U.S. Army Audit Agency noted that there were no procedures in place to sanction IRR Soldiers who did not comply with their muster orders (Inspector General, U.S. Department of Defense, 2019). It would appear obvious that enforcing the sanctions for not mustering, as listed in the IRR Handbook (U.S. Army Human Resources Command, 2019), would increase muster rates. If sanctions are enforced, IRR Soldiers may be more likely to muster even if they find the experience to be inconvenient. Also, the enforcement of sanctions may increase the likelihood that IRR Soldiers, who have negative perceptions of the Army or are erroneously informed that they have been discharged from the Army, will muster. These IRR Soldiers may decide that it will be in their best interests to temporarily set aside their negative perceptions of the Army, or to double-check their information that they were already discharged from the Army, and muster in order to avoid sanctions for noncompliance. The enforcement of sanctions may also increase the likelihood that IRR Soldiers will update their contact information with HRC. IRR Soldiers may want to ensure that they will receive their muster orders so that they can comply and not worry about sanctions for noncompliance.

The intention of the current project is to investigate how improving IRR education may improve IRR Soldiers' compliance with IRR requirements. Although, intuitively, it would appear that sanctions may also improve IRR Soldiers' compliance with IRR requirements, we are not specifically investigating how sanctions for noncompliance should be enforced in order to be effective. However, education and sanctions intersect in an important way

There has been a considerable amount of literature, however, on one important limitation of sanctions. Procedural justice is a theory of deterrence stating that sanctions will increase compliance if the sanctions are perceived as fair (Taxman et al., 1999). Sanctions that are considered as unfair may even increase noncompliance (Murphy et al., 2009). The importance of fair sanctions in facilitating compliance was demonstrated in a variety of situations, such as business relationships (Fehr & Rockenach, 2003), criminal justice (Sherman, 1993), information security (Lowry et al., 2015), and taxation (Verboon & van Dijke, 2011).

An often-mentioned component of fairness in procedural knowledge literature is the shared understanding of the rules. If an administrative body educates its constituents by explaining the rules that must be followed and describing the consequences for not following the rules, then the constituents are more likely to perceive the rules and sanctions to be fair and to follow the rules. In fact, many empirical studies that showed the positive effects of education on compliance also pointed out that constituents in such cases viewed their administrative bodies as fair, and the empirical studies suggested that this perception of fairness was instrumental in facilitating compliance (see Chayes et al., 1998; Lowry et al., 2015; Picciotto, 2007; Shaw et al., 2003; Taxman et al., 1999). This brings the discussion back to how education may improve compliance. Education helps facilitate shared understanding of the rules. Before employing sanctions as a means of improving muster rates, it is important to first establish that the Army has set up a fair situation with the IRR Soldiers by effectively educating them on what the IRR is and the requirements and benefits of being in the IRR. Otherwise, sanctioning IRR Soldiers for not mustering may fail to improve compliance, or worse, increase noncompliance, if IRR Soldiers feel that they have not received sufficient information about muster requirements.

Aside from proper education prior to enforcing sanctions, sanctions for noncompliance should fulfill other conditions in order to be effective, such as sufficient certainty and appropriate severity (Trevino, 1992). However, it would be premature to establish the specifics of sanctions that will help improve muster rates when it has not yet been established that IRR Soldiers have been properly educated about the IRR.

Study Description

The Mobilization Division, Directorate of Military Personnel Management (DMPM) requested that the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) conduct a survey that will:

1. Gauge what Soldiers typically know about the IRR
2. Identify opportunities to effectively educate Soldiers about the IRR
3. Recommend additional ways to improve muster rates

It is possible that the status quo, educating Soldiers about the IRR during the initial enlistment and during the pre-separation counseling, may be enough to provide Soldiers what they need to know regarding the IRR. It is also possible that IRR Soldiers do not comply with IRR requirements due to reasons other than lack of information about the IRR. For example, IRR Soldiers may know that they are required to update their contact information with the HRC and that they should muster, but they choose not to do so. As another example, IRR Soldiers may know that they are in the IRR in order to complete their MSOs, but they may claim that they have already completed their MSOs as an excuse to avoid mustering. However, both of these hypothetical scenarios presuppose that Soldiers have all the information that they should have regarding the IRR. A survey that gauges what Soldiers typically know about the IRR will better ascertain whether IRR education during the initial enlistment and during pre-separation counseling are sufficient. If the results suggest otherwise, then improving IRR education may be the sensible first step in the Army's attempts to improve muster rates.

ARI will administer surveys about the IRR to various populations to triangulate and obtain an accurate sense of what Soldiers know about the IRR. The survey will be administered to various types of counselors to determine what Soldiers under their guidance know about the IRR and how the Soldiers acquire such information. There will be four different counselor groups:

1. **Army Reserve Career Counselors (ARCCs)**, who counsel IRR Soldiers. ARCCs are also the ones who administer musters.
2. **Army Career Counselors (ACCs)**, who guide Active Component Soldiers through their Army careers and cover issues such as job counseling, retention, reenlistment, and other opportunities in the military.
3. **Reserve Component Career Counselors (RCCCs)**, who counsel Soldiers at pre-separation. Soldiers near ETS, but have not yet fulfilled their MSOs, are informed that they will be transferred into the IRR.

4. **Informal mentors**, such as squad leaders, platoon leaders, platoon sergeants, and company commanders are in positions to informally counsel Soldiers who are yet to complete their MSOs and may be transferred into the IRR at separation.

In addition, ARI will administer surveys to three different groups of Active Army Soldiers to determine what Soldiers typically know about the IRR at various points in their Army careers. There will be three different Active Army Soldier groups:

1. **Newly enlisted Soldiers**, those who have joined the Army within the past year.
2. **Mid-career Soldiers**, those who have been in the Army for at least one year and have not officially declared that they are separating from the Army.
3. **Transitioning Soldiers**, those who have officially declared that they are separating from the Army.

Each group has a unique perspective on Soldiers and how Soldiers perceive the IRR, and each group will have its own research report that describes the data and discusses the results.

Even though ARI's research endeavor is to provide informed recommendations on how to increase IRR Soldiers' muster rates, ARI is unable to collect data from IRR Soldiers. IRR Soldiers are a very valuable source of information with respect to improving muster rates. However, resource constraints limit the ability of ARI to administer an IRR survey to this population. For example, insufficiency of needed personnel and budget constrain ARI's ability to mail the survey to enough IRR Soldiers required to achieve adequate statistical power. However, ARI has formulated a version of the survey that can be administered to IRR Soldiers, in case there is another survey team with the resources to administer the survey. Another thing of note is that ARI will collect data from informal mentors, newly enlisted Soldiers, mid-career Soldiers, and transitioning Soldiers in the Active Army. ARI will be unable to collect data from the USAR and ARNG. This limitation is also due to the lack of resources for ARI to administer the survey to USAR and ARNG. ARI has also prepared versions of the surveys for informal mentors, newly enlisted Soldiers, mid-career Soldiers, and transitioning Soldiers in USAR and ARNG, in the event that there are other survey teams that will be able to administer those surveys.

This report focuses on the survey that ARI administered to ARCCs. In addition, researchers had the opportunity to conduct two focus group sessions with ARCCs, where the researchers asked a subset of the survey questions and the participating ARCCs had opportunities to elaborate on their answers and talk about their answers with other ARCCs in the same session. The ARCCs' discussions during these focus group sessions are documented in this report as well.

ARCCs are in a unique participant group because they are the most informed out of all the groups regarding the IRR, and they are the ones who primarily communicate with Soldiers who are already in the IRR. ARCCs work under the Army Reserve Careers Group (ARCG). Outside the IRR, ARCCs counsel other USAR Soldiers as well. Although HRC generates muster orders, it is ARCG that is tasked to actually schedule and conduct the musters. ARCG has two missions for ARCCs with respect to IRR Soldiers: counsel IRR Soldiers on available Army resources and transfer IRR Soldiers into the USAR. ARCCs can fulfill both missions when they

call or email IRR Soldiers and when they facilitate musters. Due to ARCCs' first-hand experience with IRR Soldiers and musters, ARCCs will provide valuable input on what and when information must be conveyed to Soldiers regarding the IRR in order to increase muster rates. ARCCs' knowledgeable about the IRR also makes them a significant source of information regarding other possible methods, aside from IRR education, that can be used in order to increase muster rates. It is likely that ARCCs themselves, being the ones who facilitate musters, have identified methods that increase the likelihood that IRR Soldiers will attend muster appointments.

Method

Participants

The survey was administered to 116 ARCCs during their annual Area Leader Training at Fort Knox, KY. Males comprised 75% of the participants. Most participants were master sergeants (MSGs [52%]) or sergeants first class (SFCs [46%]), with a few sergeants major (SGMs [3%]). As Area Leaders, the participants had several years of experience as ARCCs ($M = 8.66$, $SD = 4.68$). Table 1 shows variations in the participants' experiences as ARCCs, based on rank.

Table 1

Means (M) and Standard Deviations (SD) of Years Participants Worked as ARCCs, by Rank

Rank	M	SD
SGM	17	9.54
MSG	9.46	4.39
SFC	7.23	3.98

There were two focus group sessions, and 21 ARCCs participated in these sessions. These sessions were also conducted during the ARCC's annual Area Leader Training at Fort Knox, KY. Session 1 had 10 participants, and Session 2 had 11 participants. Males comprised 52% of the participants. Participants were mostly SFCs (57%) and MSGs (43%) with solid experience as ARCCs ($M = 8.7$ years, $SD = 4.11$ years). Participants in Session 1 had a bit less experience as ARCCs ($M = 7.33$ years, $SD = 5.09$ years) than participants in Session 2 ($M = 9.82$ years, $SD = 2.89$ years).

Materials

The survey contained a mix of open-ended and multiple-choice questions (see Appendix A). There were 26 questions and 8 sub-questions, for a total of 34 questions. There were four general types of questions:

1. **Soldiers' knowledge about the IRR** asked ARCCs what Soldiers typically knew about the IRR in the absence of someone from ARCG speaking with the Soldiers. These questions should help identify gaps in Soldiers' knowledge about the IRR. This category of questions also asked about the attitudes of IRR Soldiers towards the Army and the IRR.

2. **How the Army communicated with Soldiers regarding the IRR** asked about Soldiers' communication preferences and recommended times and methods to educate Soldiers about the IRR. This category of questions also asked ARCCs about their perceptions of how the Army communicated with Soldiers regarding the IRR. These questions should identify additional opportunities to effectively educate Soldiers about the IRR.
3. **The category of questions on muster orders** asked about ARCCs' experiences facilitating musters, including reasons IRR Soldiers gave ARCCs for the Soldiers not mustering. This category of questions also asked about factors that IRR Soldiers said would motivate them to muster, and what ARCCs did in order to get IRR Soldiers to muster.
4. **Training on IRR education** asked ARCCs how they could be better trained to work with IRR Soldiers. Given that ARCCs are the primary point of contact for IRR Soldiers, improving ARCCs' abilities to work with IRR Soldiers means that the Army improves its ability to maintain connections with IRR Soldiers.

The focus group contained a subset of the open-ended survey questions (see Appendix B). Similar to the survey, the focus group questions asked ARCCs how much Soldiers typically knew about IRR, how the Army communicated with IRR Soldiers, how muster orders were handled, and how the Army could help ARCCs work better with IRR Soldiers.

Procedure

ARCCs took several classes during their Annual Area Leader Training. Instructors for three different classes set aside time in their classes so that researchers could administer the survey to the participants. Researchers informed ARCCs that the survey was a research project, and that its results would be used to inform the Mobilization Division, DMPM, about what could be done to improve muster rates. Researchers also reviewed the Project Summary with the ARCCs. The Project Summary described what ARCCs would be asked to do as participants in the research project. The Project Summary also explained to ARCCs that participation was voluntary and that Personally Identifiable Information (PII) would not be linked to survey responses. After answering any questions that ARCCs had about the survey, the researchers distributed the survey. Participants took 20 to 40 minutes to complete the survey.

Focus group sessions were conducted in a conference room. Akin to the survey, researchers informed ARCCs that the session was part of a research project and reviewed the Project Summary. After answering any questions that ARCCs had about the focus group session, the researchers started the session. The focus group sessions were audio-recorded. Each session took approximately 1 hour.

Results

This section is organized into four subsections. The subsections correspond to the four general types of questions that were asked in both the surveys and the focus groups. In each subsection, the survey results were reported first, followed by the results of the focus group discussions.

For each open-ended survey question, researchers reviewed participant responses for common themes. Categories were formulated to organize and summarize the broad spectrum of responses. Responses were then sorted into appropriate categories. For each question, two researchers reviewed the responses, formulated categories independently, and compared results with each other to reconcile categorization drifts. A similar procedure was used to sort responses into categories in order to obtain satisfactory interrater agreement.

Audio recordings of the two focus group sessions were transcribed and analyzed for predominant responses within sessions and across sessions.

It is important to keep in mind that the data reported here were based on ARCCs' responses. Parts of the survey asked ARCCs to report on their perceptions of typical IRR Soldiers' reactions. IRR Soldiers' actual reactions may or may not be consistent with ARCCs' perceptions of what those reactions were. Nevertheless, accounts of ARCCs' experiences working with IRR Soldiers bear consideration when identifying opportunities to effectively educate Soldiers about the IRR and how to improve muster rates. ARCCs are the primary Army personnel who communicate with IRR Soldiers regarding the IRR. ARCCs are the ones who educate IRR Soldiers about the IRR, and they are also the ones who conduct musters.

Soldiers' Knowledge About the IRR

More than half of ARCCs (52%) stated that they knew nothing or little about the IRR before they became ARCCs. Another 45% of ARCCs reported that they had incomplete understanding of what IRR was. Examples of such incomplete understanding reported by the ARCCs were: only knowing that IRR was an alternative to the Component of the individual ARCC, understanding that IRR Soldiers could be mobilized, and that IRR Soldiers had unpaid status in the Army. Table 2 lists the types of information that ARCCs knew about the IRR before they became ARCCs.

Table 2
ARCCs' Knowledge About the IRR Before Becoming ARCCs

Response	Frequency	Percentage
Nothing/very little	67	52%
Alternative to the Component I was currently in	22	17%
Can be mobilized	17	13%
Above-average understanding	6	4%
Other information about the IRR	19	15%
– Unpaid status		
– Loss of benefits		
– Can keep options open		

Note. 90% interrater agreement.

Half of ARCCs (50%) reported that IRR Soldiers typically knew nothing about the IRR prior to speaking to an ARCC. Another 28% of ARCCs pointed out that IRR Soldiers' knowledge about the IRR were significantly lacking or inaccurate. Examples of such nonexistent or inaccurate knowledge about IRR included: IRR Soldiers not knowing that they had an 8-year

MSO, not knowing what their obligations were to the IRR, not knowing the purpose of their being in the IRR, believing that they were already completely discharged from the Army, and having the impression that IRR obligations were nonexistent or optional. Nine percent of ARCCs noted that IRR Soldiers' knowledgeable about the IRR depends on which Component the IRR Soldiers came from. Specifically, IRR Soldiers who came from the USAR tend to be more knowledgeable about the IRR compared to IRR Soldiers who came from the Active Army or ARNG. Table 3 lists the types of information that Soldiers knew about the IRR when they transferred into the IRR and before they talked to an ARCC.

Table 3

Soldiers' Knowledge About the IRR Before Talking to ARCCs, According to ARCCs

Response	Frequency	Percentage
Nothing/very little	77	50%
What the IRR Soldiers did not know ^a	27	17%
Inaccurate information	17	11%
An aspect of the contract	16	10%
Depends on the Component or other circumstance	14	9%
More information beyond basic	4	2%

Note. 92% interrater agreement.

^aThe specific question posed to the ARCCs was *In your experience, what does an average Soldier know about the IRR when the Soldier transfers to the IRR and before the Soldier talks to an Army Reserve Career Counselor?* Some ARCCs responded to this question by specifying information that the IRR Soldiers should be expected to know but did not know.

When talking to an IRR Soldier for the first time, 76% of ARCCs indicated that they had to explain what the IRR was, inform the IRR Soldier that he/she was in the IRR, and what being in the IRR meant. During this initial interaction, 16% of ARCCs also explained opportunities for IRR Soldiers to transfer to the USAR. Notably, ARCCs had to fulfill two different missions when they were communicating with IRR Soldiers. The first mission was to counsel IRR Soldiers. The second mission was to motivate the IRR Soldier to transfer into the USAR. Table 4 lists the types of information that ARCCs covered during their first meetings with IRR Soldiers.

Table 4

IRR Information ARCCs Covered During First Meetings with IRR Soldiers

Response	Frequency	Percentage
IRR Soldier's obligation to the IRR	68	34%
IRR Soldier's status in the Army	36	18%
Transfer opportunities	32	16%
Benefits of the IRR	26	13%
Introduction to the IRR and the ARCC	22	11%
Other information about the IRR	18	9%

Note. 86% interrater agreement.

ARCCs were asked about their experiences on how typical IRR Soldiers perceived the Army. Response options were on a scale of 1 to 7 (1 = *very unfavorably*; 7 = *very favorably*). ARCCs reported that the typical IRR Soldier tended to have a negative to neutral perception of

the Army ($M = 3.47$, $SD = 1.04$). ARCCs also reported that there were more IRR Soldiers with negative perceptions of the Army (51%) than IRR Soldiers with positive perceptions of the Army (16%). Figure 1 illustrates how typical IRR Soldiers perceived the Army, according to ARCCs.

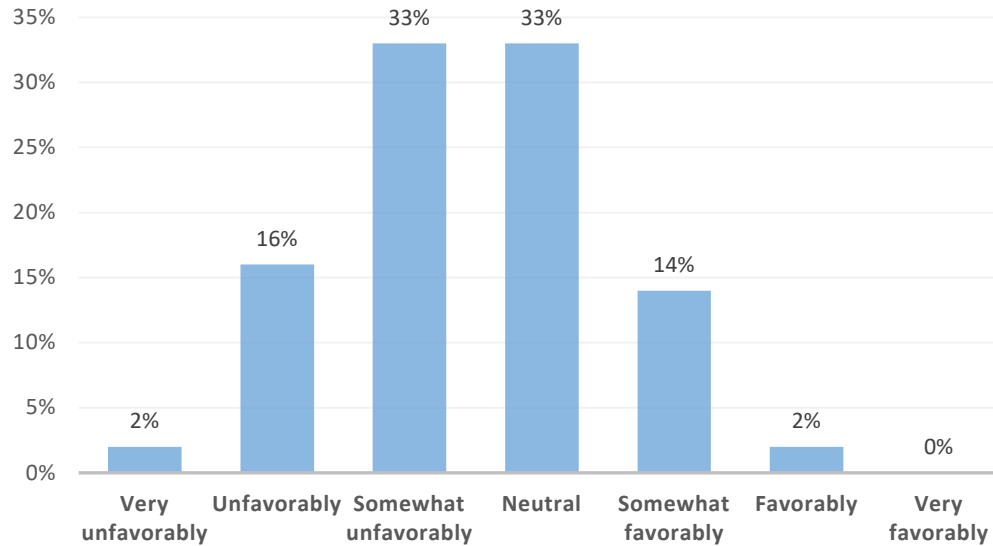


Figure 1. *Typical IRR Soldiers' perceptions of the Army, according to ARCCs.*

Using the same scale of 1 to 7, ARCCs were asked how typical IRR Soldiers perceived the IRR if they knew what the IRR was. ARCCs responded that the typical IRR Soldier tended to have negative to neutral perception of the IRR ($M = 3.45$, $SD = 1.19$). As reported by the ARCCs, there were more IRR Soldiers with negative perceptions of the IRR (42%) than IRR Soldiers with positive perceptions of the IRR (12%). Figure 2 illustrates how typical IRR Soldiers perceived the IRR, according to ARCCs.

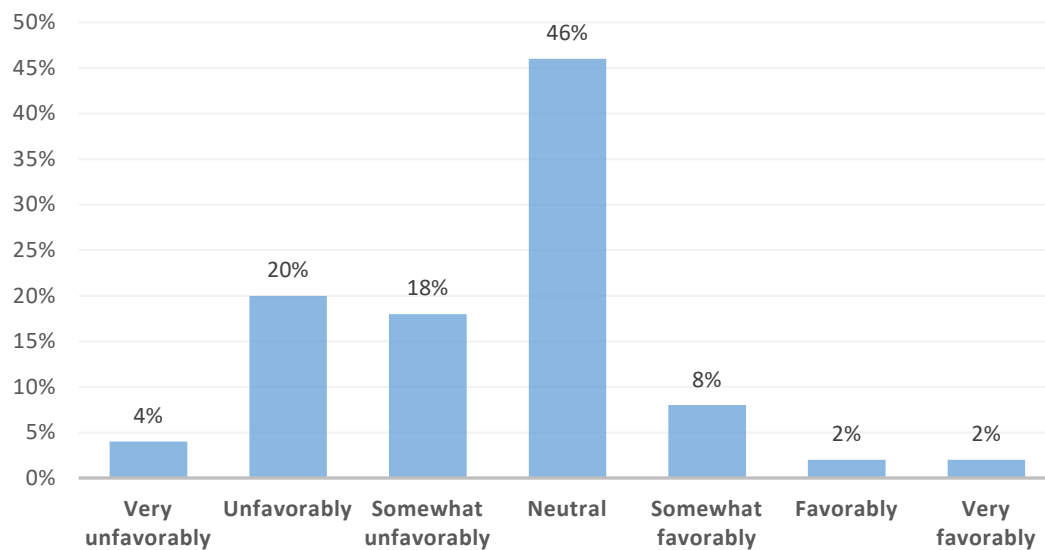


Figure 2. *Typical IRR Soldiers' perceptions of the IRR, according to ARCCs.*

Focus group participants reported that Soldiers who transferred into the IRR tended to know little about the IRR and the continued obligations of the IRR Soldiers to the Army. Some Soldiers knew that they were in the IRR, but they did not understand that they were part of USAR. Often, Soldiers also had wrong information about the IRR. For example, some Soldiers would misunderstand the IRR as a classification that did not have any requirements. Many IRR Soldiers also mistakenly believed that getting muster orders automatically meant that the IRR Soldiers were being activated. This misunderstanding resulted in some of the IRR Soldiers stopping all forms of communication with the Army. However, IRR Soldiers' knowledge about the IRR also varied by IRR Soldiers' Army component of origin. Specifically, IRR Soldiers who came from the USAR were more aware of what the IRR was and their obligations due to those Soldiers' pre-separation counseling. IRR Soldiers from the Active Army and ARNG were less likely to know about the IRR, and these Soldiers might believe that they were already completely discharged from the Army. ARCCs explained that Soldiers who were transferring into the IRR from the Active Army and ARNG received their DD214 (Certificate of Release or Discharge from Active Duty) and NGB22 (National Guard Report of Separation and Record of Service), respectively. These documents informed Soldiers that they were released from Active Duty status. IRR Soldiers would then see the word *released* and believe that they had been completely discharged from the Army and would have no further military obligation. On the other hand, Soldiers who were transferring into the IRR from the USAR would receive an order of the transfer, instead of a document that informed them that they had been released from Active Duty status.

In summary, ARCCs indicated that Soldiers typically knew little to nothing about the IRR or that Soldiers had inaccurate information about the IRR. Common misconceptions that Soldiers had about the IRR were that IRR Soldiers were considered to be completely discharged from the Army and that there were no obligations involved with being in the IRR. However, the amount of information that Soldiers had about the IRR varied depending on the Army components where the Soldiers completed their Active Duty Obligations. Soldiers from USAR were more knowledgeable about the IRR compared to Soldiers from the Active Army and ARNG. ARCCs admitted that they themselves knew very little about the IRR before they became ARCCs. Because IRR Soldiers were unlikely to have much information about the IRR to begin with, it fell upon the ARCCs to explain to the Soldiers in detail what the IRR was, to explain that the Soldier was in the IRR, and to explain the obligations that came with being in the IRR. Many times, it was only when the IRR Soldiers met with ARCCs that the Soldiers realized that they were in the IRR and that they had not yet completed their MSOs. According to ARCCs, the typical IRR Soldier was more likely to have a negative, rather than positive, perception of the Army. IRR Soldiers who knew about the IRR also tended to have a negative to neutral perception of the IRR. Far fewer ARCCs reported that they found IRR Soldiers had positive perceptions of the IRR.

How the Army Communicated with Soldiers Regarding the IRR

When ARCCs were asked what method could best communicate to Soldiers that the Soldiers might have a possible obligation to the IRR, 61% of ARCCs named specific forms of communication, such as classes, in-person meetings, emails, phone calls, and text messages.

Education was also mentioned, with 23% of ARCCs specifying education at transition and 7% of ARCCs specifying education during Soldiers' Active Duty Obligation. Table 5 lists the methods that could best communicate to Soldiers that they might have a possible obligation to the IRR.

Table 5

Recommended Methods to Communicate to Soldiers About Possible IRR Obligations

Response	Frequency	Percentage
Specific forms of communication	77	61%
– Classes		
– In-person meetings		
– Emails		
– Phone calls		
– Text messages		
Education at transition	29	23%
Education during Soldiers' Active Duty Obligation	9	7%
Immediate contact with ARCC	7	5%
Other	5	4%

Note. 90% interrater agreement.

ARCCs reported a variety of methods by which IRR Soldiers preferred to be contacted by the Army. Forty-one percent of the ARCCs reported that soldiers preferred to be contacted via text messages; 17% reported that Soldiers preferred to be contacted via phone calls; and another 17% reported that Soldiers preferred to be contacted via emails. Mail was not as preferred as other forms of communication. Just 7% of ARCCs reported that Soldiers preferred to be contacted via mail. Figure 3 illustrates ARCCs' preferred methods of contact for Army correspondence. ARCC respondents in the survey could select up to two responses.

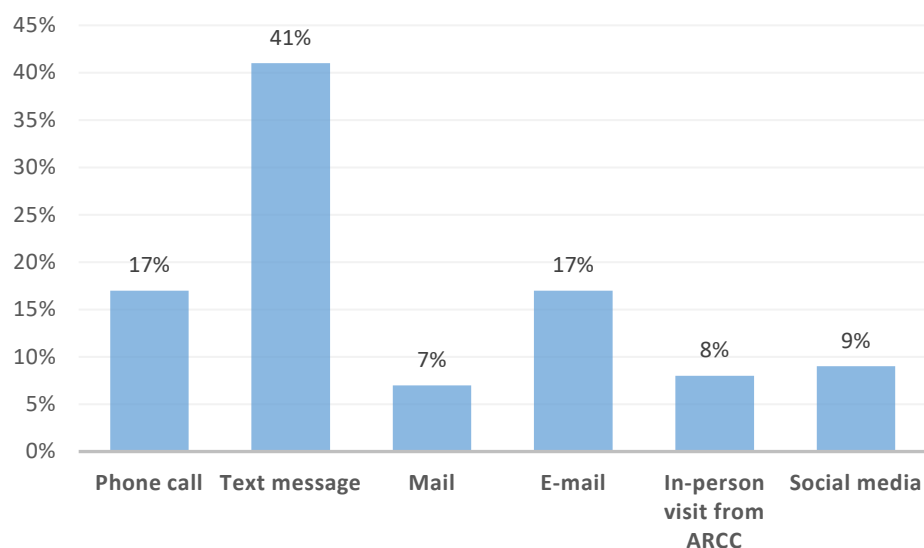


Figure 3. *Soldiers' preferred methods of contact for Army correspondence*

Among ARCCs who identified social media as Soldiers' preferred mode of communication (9% of ARCCs), majority of the ARCCs (77%) specified that Facebook was the social medium of choice. Figure 4 illustrates ARCCs' responses about Soldiers' preferred social media for Army correspondence.

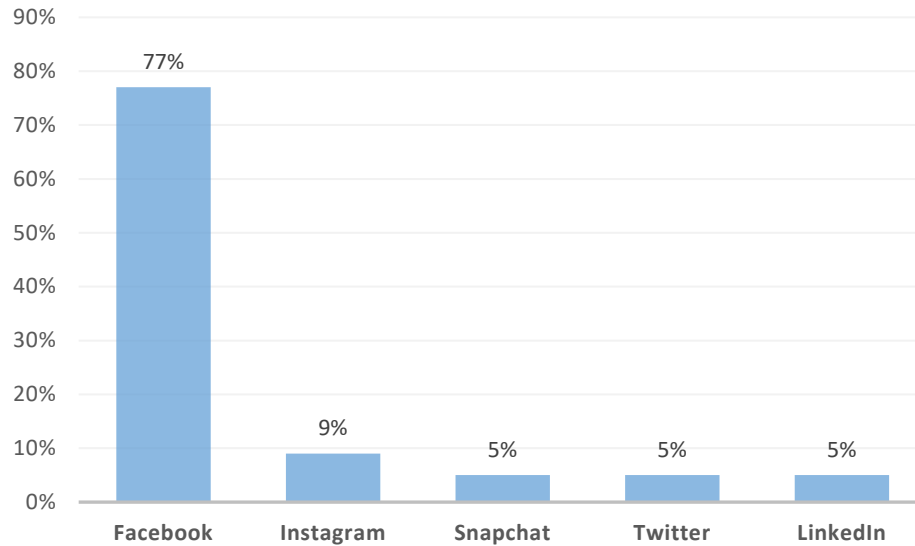


Figure 4. *Soldiers' preferred social media for Army correspondence*

ARCCs were asked to indicate whether it would be helpful for Soldiers to be given information about the Soldiers' possible obligations to the IRR during enlistment, service, and transition into the IRR. Responses were provided using a Likert scale (1 = *not at all helpful* to 5 = *very helpful*). According to ARCCs, it would be somewhat helpful to educate Soldiers about the IRR during enlistment ($M = 3.16$, $SD = 1.52$). There was considerable variability in responses for this time period, with 44% of responses indicating that it would be helpful or very helpful and 41% of responses indicating that it would be not at all helpful or slightly helpful. The modal response was *very helpful* (30%). Figure 5 illustrates how helpful ARCCs thought it would be to provide information about the IRR to Soldiers during the Soldiers' enlistment.

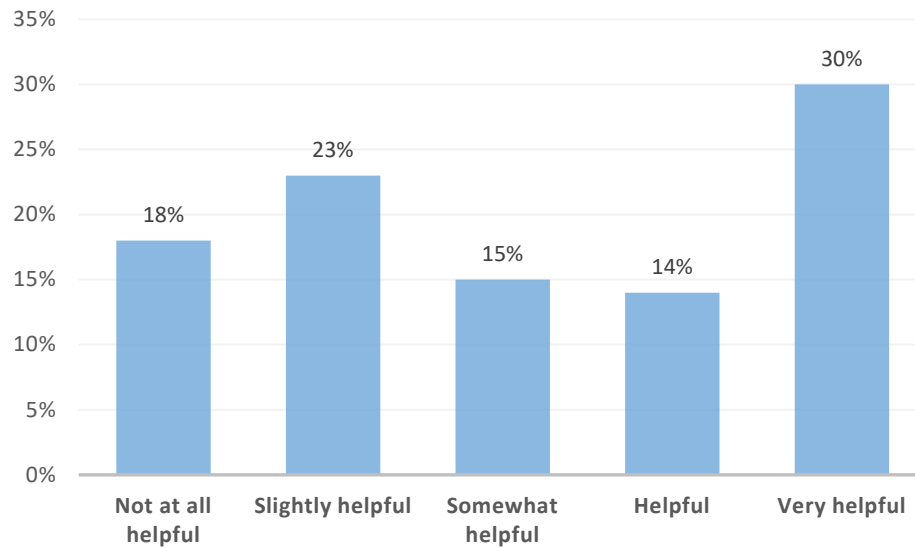


Figure 5. *Helpfulness of providing Soldiers, during enlistment, information about their possible obligations to the IRR*

According to ARCCs, it would be helpful to educate Soldiers about the IRR during service ($M = 3.92$, $SD = 1.12$). There was not as much variability in responses for this time period, compared to how helpful IRR education was perceived by ARCCs if it was given during enlistment. Only 3% of ARCCs found IRR education during service to be not at all helpful, and the number of responses progressively increased as the scale progressed. The modal response was *very helpful* (39%). Figure 6 shows how helpful ARCCs thought it would be to provide Soldiers, during service, information about their possible obligations to the IRR.

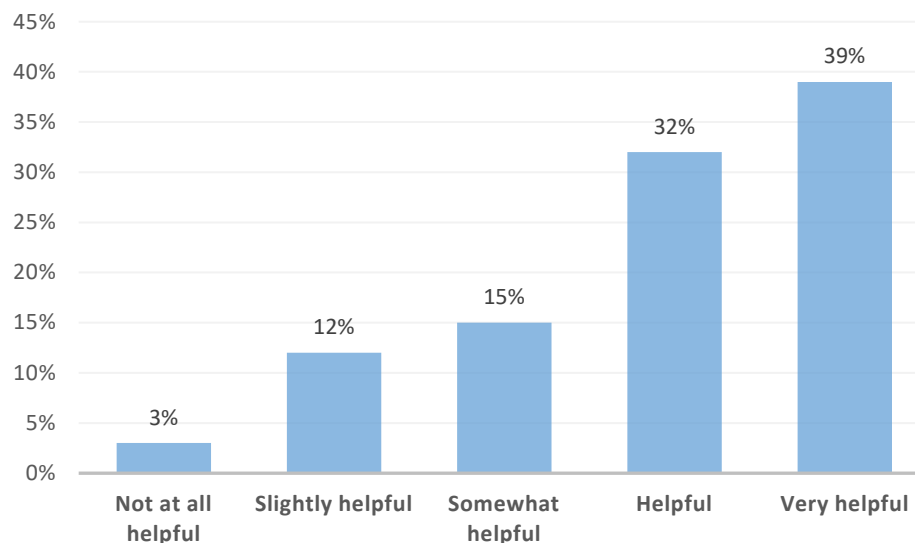


Figure 6. *Helpfulness of providing Soldiers, during service, information about their possible obligations to the IRR*

IRR education was perceived by ARCCs to be very helpful if it was given during Soldiers' transition into the IRR ($M = 4.78$, $SD = 0.57$). This had the least amount of variability in responses when compared to IRR education during enlistment and during service, with 84% of ARCCs reporting that IRR education during this time period would be very helpful. The next most frequent response was *helpful* (11%). No survey respondent selected the *not at all helpful* option (0%). Figure 7 illustrates how helpful ARCCs thought it would be to provide Soldiers, during transition into the IRR, information about their obligations to the IRR.

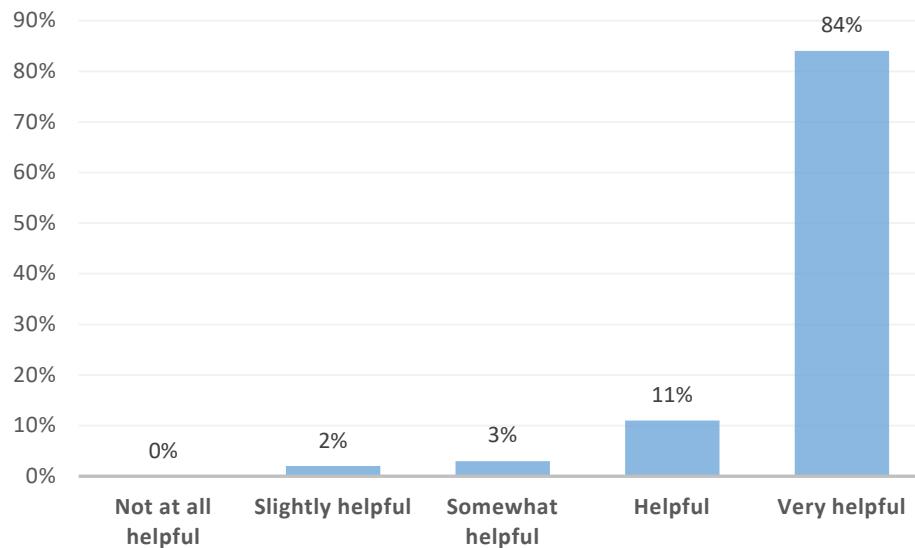


Figure 7. *Helpfulness of providing Soldiers, during transition into the IRR, information about their obligations to the IRR*

A repeated measures Analysis of Variance (ANOVA) indicated that there were significant differences in helpfulness among the three different time periods (providing Soldiers information about their possible obligations to the IRR during enlistment, during service, and during transition), $F(2, 416) = 53.05$, $MSE = 0.98$, $p < 0.001$. Tests of within-subjects contrasts showed that it was more helpful to educate Soldiers about the IRR during service compared to during enlistment ($p < 0.001$), more helpful during transition compared to during service ($p < 0.001$), and more helpful during transition compared to during enlistment ($p < 0.001$). ARCCs viewed IRR education as more helpful the closer Soldiers get to transitioning from the Active Army. Figure 8 illustrates the differences in mean helpfulness ratings of IRR education provided to Soldiers during enlistment, service, and transition.

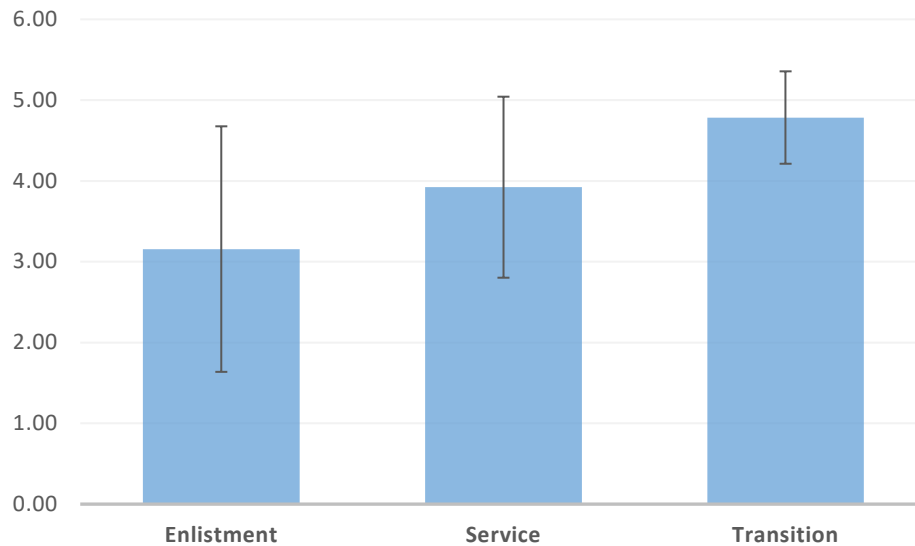


Figure 8. Differences in ARCCs' mean helpfulness ratings of IRR education provided to Soldiers during enlistment, service, and transition.

ARCCs were asked to rate the importance that they thought the Army placed on maintaining communications with IRR Soldiers, using a Likert scale (1 = *not at all important* to 5 = *very important*). In general, ARCCs responded that the Army placed some importance on maintaining communications with IRR Soldiers ($M = 3.05$, $SD = 1.32$), with 38% responding with *important* or *very important* and 31% responding with *not at all important* or *slightly important*. The modal response was *slightly important* (30%). Figure 9 illustrates ARCCs' perceptions of the importance that the Army placed on maintaining communications with IRR Soldiers.

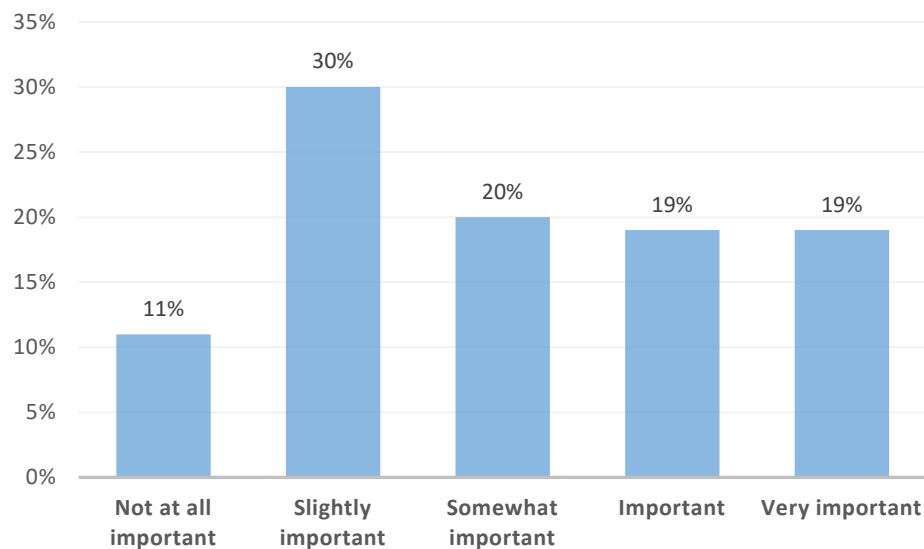


Figure 9. ARCCs' perceptions of the importance that the Army placed on maintaining communications with IRR Soldiers

When ARCCs were asked to specify when they saw the Army place importance on maintaining communications with IRR Soldiers, 21% of ARCCs responded that it was when muster orders were given and 18% responded that it was ARCG's mission to maintain communications with IRR Soldiers. Another 18% of ARCCs named specific years, which appeared to correspond to times when there were noticeable increases in the number of IRR Soldiers who were called back or when the survey respondent started working as an ARCC. We found that 83% of the responses alluded to ARCCs working as counselors to IRR Soldiers, suggesting that ARCCs had the impression that they themselves were mainly the ones placing importance on maintaining communications with IRR Soldiers on behalf of the Army. Table 6 lists the times when ARCCs saw the Army place importance on maintaining communications with IRR Soldiers.

Table 6

Times When ARCCs Saw the Army Place Importance on Maintaining Communications with IRR Soldiers

Response	Frequency	Percentage
When muster orders are given	15	21%
Part of ARCG's mission	13	18%
Specific years given	14	18%
– Noticeable increase in the number of IRR Soldiers getting called back		
– When respondent started working as an ARCC		
Working as an ARCC	10	14%
Orders to increase IRR transfers	9	12%
During time of need	6	8%
When Soldiers are transitioning into the IRR	5	7%

Note. 97% interrater agreement.

Aside from the question of *when*, ARCCs were also asked *how* they saw that the Army placed importance on maintaining communications with IRR Soldiers. ARCCs' responses to *how* had similarities to their responses to *when*, with 49% pointing to increased emphasis on their mission to communicate with IRR Soldiers, such as getting tasked to reach out to more IRR Soldiers and getting more resources that would allow them to reach out to more IRR Soldiers. Forty-five percent of the ARCCs pointed to increased focus on musters. The remaining responses were classified as *other*. Our researchers who coded and categorized responses for this question had 94% interrater agreement. The top two categories made up the vast majority of the responses (94%). This result suggested that, for ARCCs, it was mainly because of them that the Army could maintain communications with IRR Soldiers.

ARCCs were asked to elaborate why they thought the Army placed importance or did not place importance on maintaining communications with IRR Soldiers. Responses to this question were first sorted into two general groups: respondents who indicated why they thought that the Army placed importance on maintaining communications with IRR Soldiers and respondents who indicated why they thought that the Army did not place importance on maintaining communications with IRR Soldiers. Of the ARCCs who saw that the Army placed importance on maintaining communications with IRR Soldiers, 77% responded that it was because IRR

Soldiers increased the total strength of the Army, and 23% responded that was because ARCG had a mission to maintain communications with IRR Soldiers. Our researchers who coded and categorized this group of responses had 95% interrater agreement. These two categories of responses showed that ARCCs interpreted the question *why* in two different ways. One interpretation was that the question was asking for justification, hence the response category *IRR Soldiers increase the total strength of the Army*. Another interpretation was that the question was asking for evidence, hence the response category *ARCG had a mission to maintain communications with IRR Soldiers*. The ARCCs who saw that the Army did not place importance on maintaining communications with IRR Soldiers all interpreted the question as asking for evidence, and 39% answered that the Army did not invest much into the IRR, 37% answered that things that must be communicated to IRR Soldiers were not being communicated, and 24% answered that there was a perception of the IRR as an afterthought for the Army. The coders who categorized this group of responses had 94% interrater agreement.

When ARCCs were prompted to think back to the IRR Soldiers that the ARCCs reached out to at least once, 63% of ARCCs responded that none or less than half of the IRR Soldiers responded, and 21% of ARCCs responded that more than half, but not everyone, responded. The modal response was *less than half*, and no ARCC selected the response *all of them*. More often than not, IRR Soldiers did not respond to the ARCCs who reached out to them. Figure 10 illustrates the proportion of IRR Soldiers who responded to ARCCs.

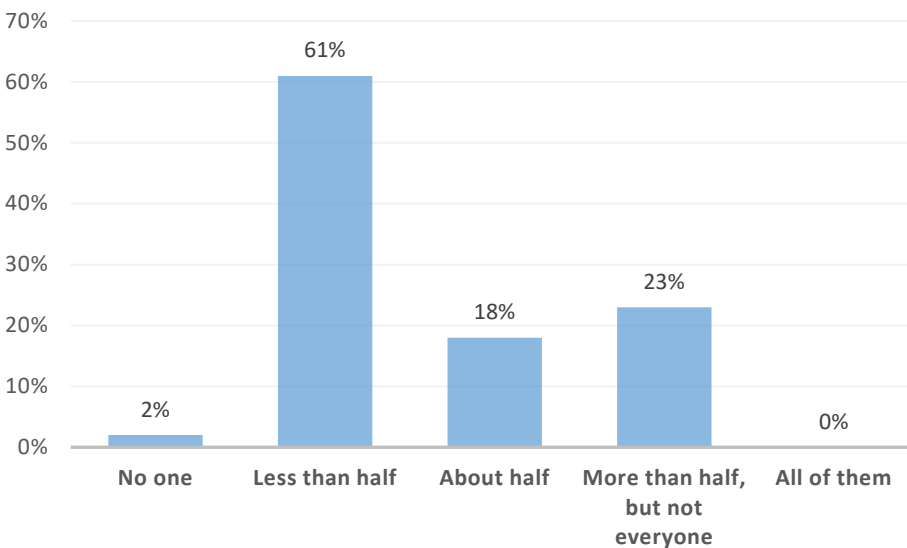


Figure 10. *Proportion of IRR Soldiers who responded to ARCCs*

The last question about how the Army communicated with Soldiers regarding their possible IRR obligations asked ARCCs how the Army could improve in that regard. Education made up the top two categories, with 32% of ARCCs specifying education at separation and 14% specifying pre-separation education. Also, 14% recommended increasing the frequency of musters. ARCCs provided a wide variety of recommendations in response to this question. Table 7 lists the methods that could help the Army improve its communications with Soldiers regarding their possible obligations to the IRR.

Table 7

Recommended Methods to Improve the Army's Communications with Soldiers Regarding Possible IRR Obligations

Response	Frequency	Percentage
Education at separation	46	32%
Education pre-separation	20	14%
Increase frequency of musters	20	14%
Marketing	11	7%
Establish accountability	10	7%
Combine communications with VA benefits	6	4%
Other	32	22%
– Having a better system for updating contact information		
– Adjusting culture so that option to transfer to the IRR is more acceptable		
– Have every Soldier meet with the ARCC as part of the transition process		
– Provide better benefits for being in the IRR		
– Continue musters		

Note. 89% interrater agreement.

Participants in both focus group sessions agreed that the Army should communicate more information about the IRR to Soldiers. ARCCs pointed out that soon after IRR Soldiers entered the Army and signed their contracts, information overload likely caused the Soldiers to forget any discussions about the IRR. It might be better to reiterate information about the IRR throughout the Soldiers' military career. ARCCs also noted that obligations to the IRR and terms of MSOs should specifically be stressed when Soldiers were transitioning into the IRR and should be included in the Soldiers' separation orders. In both focus group sessions, participants recommended that Soldiers be required to meet their designated ARCC during the pre-separation process, in order to put a face to the name and help establish the connection between the Soldier and the ARCC.

In summary, according to ARCCs, IRR education might improve muster rates as well as IRR Soldiers' compliance with other IRR requirements. Such education could be conducted via classes, briefings, in-person meetings, or emails. In addition, IRR education might be more effective in improving compliance with muster orders if the education was administered multiple times throughout Soldiers' careers. The closer the Soldier got to ETS, the more effective IRR education would be in conveying to the Soldier what the IRR was and what IRR Soldiers' obligations were.

According to ARCCs, Soldiers preferred to be contacted by the Army using text messages, followed by preferences to be contacted by the Army via phone calls and via emails. Text messages and phone calls might not be the optimal media for delivering comprehensive information that Soldiers should have about the IRR. However, text messages and phone calls might be effective for sending muster reminders. ARCCs themselves were already reaching out to IRR Soldiers via phone and email to establish connections and to remind Soldiers about their muster orders. More often than not, however, IRR Soldiers did not reply. There was an

impression among ARCCs that they were mainly the ones who communicated with IRR Soldiers on behalf of the Army. Aside from having ARCCs counsel IRR Soldiers and facilitate musters, the Army did not appear to put much resources into the IRR. It might be helpful to have an additional office, or at least additional resources, to help remind IRR Soldiers that they are required to comply with their muster orders.

Muster Orders

The survey asked ARCCs how IRR Soldiers typically viewed the opportunities to return to the Active Army, ARNG, or USAR, based on the same scale of 1 to 7. When this survey question was formulated, the researchers had an impression that ARCCs' recruitment efforts during musters may involve reenlisting IRR Soldiers into any Army component. After this survey was administered, the researchers learned about ARCCs' mission to transfer IRR Soldiers specifically into USAR, and that ARCCs may spend time during musters discussing with IRR Soldiers opportunities primarily within the USAR. ARCCs answered that IRR Soldiers typically had negative to neutral views regarding opportunities to return to the Army ($M = 3.74$, $SD = 1.16$). According to ARCCs, there appeared to be more IRR Soldiers who viewed these opportunities negatively (37%), than positively (25%). Responses clustered around the middle of the scale, with a fair number of ARCCs responding with *somewhat unfavorably* (23%), *neutral* (28%), and *somewhat favorably* (18%). Figure 11 illustrates how IRR Soldiers typically perceived the opportunities to return to the USAR, according to ARCCs.

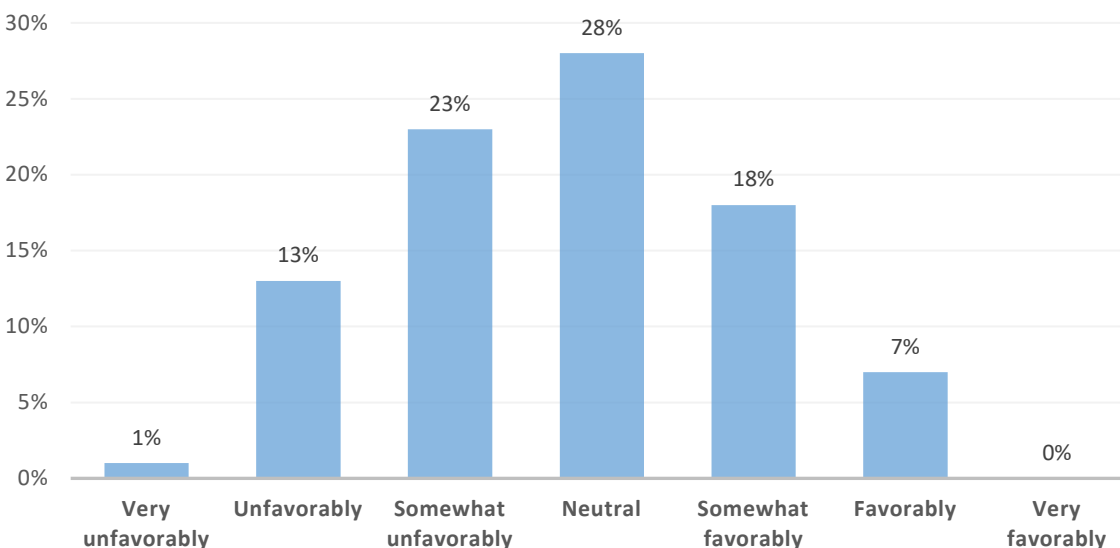


Figure 11. IRR Soldiers' typical perceptions of the opportunities to return to the USAR, according to ARCCs.

Majority of ARCCs surveyed (62%) reported that they experienced contacting an IRR Soldier to attend a PAM and the Soldier refused outright to comply with the muster order. On the other hand, 38% of ARCCs reported that they did not have this experience. As a follow-up, ARCCs who answered *yes* to this question were asked what reasons IRR Soldiers provided when the Soldiers refused to muster. There was considerable variability in the responses. ARCCs' modal response was that the IRR Soldiers wanted nothing to do with the Army (25%), followed

by unwillingness to muster (18%), civilian obligations (16%), and the Soldiers believing that they already finished their Army obligations (14%). Table 8 lists the reasons that IRR Soldiers provided for refusing to comply with muster orders.

Table 8

Reasons IRR Soldiers Provided for Refusing to Comply with Muster Orders

Response	Frequency	Percentage
Wanted nothing to do with the Army	30	25%
Unwilling to muster	21	18%
Civilian obligations	20	16%
Already finished Army obligation	17	14%
Transportation issues	10	8%
Other	23	19%
– Not receiving the muster order		
– Tired of the Army contacting them		
– Money not enough		
– Disability		
– Did not want to be recruited		
– Muster order is fake		

Note. 88% interrater agreement.

According to 35% of the ARCCs, IRR Soldiers who refused outright to comply with muster orders indicated that nothing could get the Soldiers to muster. On the other hand, 22% of the ARCCs responded that IRR Soldiers who refused outright to comply with muster orders indicated that they would muster if there were penalties for not mustering. Such penalties included: adverse effect on the Soldier's discharge status due to failure to muster, the Soldier being subject to disciplinary action under the Uniform Code of Military Justice (UCMJ), the Soldier getting arrested by the police, or the Soldier losing their benefits. Table 9 lists the factors that IRR Soldiers indicated would get them to muster.

Table 9

Factors that IRR Soldiers Said Would Get Them to Muster

Response	Frequency	Percentage
Nothing could get them to muster	22	35%
Sanctions for not mustering	15	22%
More incentives	11	17%
Easier to attend appointment	11	17%
Other	6	9%

Note. 88% interrater agreement.

Based on prior experiences and observations, ARCCs described the factors or situations that enabled IRR Soldiers to complete PAMs. Majority of ARCCs (60%) indicated that IRR Soldiers were more likely to comply with muster orders if it was easier to attend the muster appointment, such as having the muster location close by or having the flexibility to schedule appointments around work. With regard to other factors that helped get IRR Soldiers to muster, 16% of ARCCs specified MDA while 11% of ARCCs indicated the factor as IRR Soldiers

understanding what musters were, such as knowing that musters were required and that mustering was not synonymous with deployment. Other ARCCs (11%) indicated the factor as the ARCC contacting the IRR Soldier. There were several other factors named by the ARCCs; however, these other factors were mentioned by much smaller proportions of ARCCs. Table 10 lists the factors that typically enabled IRR Soldiers to complete PAMs, based on ARCCs' experiences.

Table 10

Factors that Enabled IRR Soldiers to Complete PAMs

Response	Frequency	Percentage
Easier to attend appointment	38	60%
MDA	26	16%
Understanding what musters were	18	11%
ARCC could contact the IRR Soldier	17	11%
Motivated to do the right thing	14	9%
Other	22	14%
– Ability to get an IRR ID		
– Effective communication techniques		
– Enforcing sanctions		
– Emphasis on musters at transition		
– Positive experiences with the military		

Note. 93% interrater agreement

The question of what factors typically enabled IRR Soldiers to successfully complete VMs was brought up in the survey as well. Forty-four percent of the ARCCs specified resolving technological issues. Among the technological issues, 25% of the ARCCs specified a functional Virtual Screening Portal, 10% specified the issue of IRR Soldiers having valid DS logon credentials, and 9% specified the issue of IRR Soldiers having computers and internet access. The rest of the responses were similar to ARCCs' responses for factors that enabled IRR Soldiers to complete PAMs. Such factors included: getting ARCC assistance (specified by 19% of the ARCC respondents; *ARCC could contact the IRR Soldier* for PAMs); having enough time to complete the muster (specified by 14% of ARCCs; *easier to attend appointment* for PAMs); having a sense of obligation (specified by 7% of ARCCs; *motivated to do the right thing* for PAMs); and being aware of muster orders (specified by 3% of ARCCs; *understanding what musters were* for PAMs). There were several other factors named by the ARCCs; however, these other factors were mentioned by much smaller proportions of ARCCs.

Table 11

Factors that Enabled IRR Soldiers to Complete VMs

Response	Frequency	Percentage
Website has to be functional	23	25%
ARCC assistance	18	19%
Enough time to complete the muster	13	14%
IRR Soldier has valid DS logon credentials	9	10%
IRR Soldier has computer and internet access	9	9%

Sense of obligation	7	7%
IRR Soldier is aware of muster orders	3	3%
Other	12%	13%
– Payment		
– Opportunities in the Army		
– Sanctions enforced		
– Computer skills		
– Knowledge of IRR benefits		

Note. 95% interrater agreement.

A separate survey question asked ARCCs what they did to increase the likelihood of a successful muster. The researchers' intent with this question was to ascertain whether ARCCs employed methods that would improve the chances that IRR Soldiers would complete the muster session. After this survey was administered, the researchers learned that ARCCs might define *successful muster* in two different ways. To an ARCC, a muster might be successful if the IRR Soldier completed the muster session or if the Soldier transferred into the USAR. Most answers to this question were responses to either one interpretation of *successful muster* or the other interpretation of *successful muster*. The answers *discussed muster obligations* (21% of ARCCs), *made contact* (21% of ARCCs), and *flexibility in muster scheduling* (5% of ARCCs) could be inferred as responses by ARCCs to the question of what could get IRR Soldiers to muster. *Discussed muster obligations* entailed explaining to IRR Soldiers that they were required to muster as part of being in the IRR. *Made contact* referred to ARCCs communicating with IRR Soldiers by phone or email to set up muster appointments, reminding IRR Soldiers that they had muster appointments, and answering any questions that IRR Soldiers had about musters. *Flexibility in muster scheduling* involved ARCCs making it easier for IRR Soldiers to attend their muster appointments by having the session outside regular work hours and in locations that were easier for IRR Soldiers to travel to. The answers *reviewed information in advance* (27% of ARCCs) and *discussed transfer options* (18%) could be inferred as responses by ARCCs to the question of what could get IRR Soldiers to transfer to the USAR. *Reviewed information in advance* involved ARCCs reviewing the IRR Soldiers' records in order to provide the Soldiers with relevant USAR transfer opportunities. *Discussed transfer options* might take place before or during the muster appointment, and it increased the likelihood that the IRR Soldier may transfer into the USAR during the muster appointment. It was not clear whether the answer *built rapport* (16% of ARCCs) was in response to the question of what could get IRR Soldiers to muster or to the question of what could get IRR Soldiers to transfer to the USAR. The answer *built rapport* could refer to establishing a connection with IRR Soldiers via phone or email prior to the muster in order to increase the likelihood that the Soldiers would attend the muster appointment. It could also be that the answer *built rapport* referred to establishing a connection with IRR Soldiers before or during the muster to raise the probability that the Soldiers would transfer to the USAR. Table 12 lists ARCCs' methods to increase the likelihood of a successful muster.

Table 12
ARCCS' Methods to Increase Muster Rates

Response	Frequency	Percentage
Discussed muster obligations	31	21%
Made contact	31	21%

Reviewed information in advance	27	19%
Discussed transfer options	26	18%
Built rapport	23	16%
Flexibility in muster scheduling	7	5%

Note. 86% interrater agreement.

When ARCCs were asked if they had any additional comments regarding the IRR or the muster process, much of the responses pertained to the muster process and reaching out to IRR Soldiers. The most frequent response (by 27% of ARCCs) was that musters were good, followed by statements (by 15% of ARCCs) about how there needed to be improvements in managing contact information, disseminating information about the IRR (8% of ARCCs), updating IRR Soldiers' eligibility to serve (8% of ARCCs), and holding IRR Soldiers accountable for not mustering (7% of ARCCs). Suggestions by ARCCs to limit the IRR to Soldiers who were eligible to serve might have stemmed from concerns that IRR Soldiers who were deemed ineligible to serve could not serve in the event of a mobilization, and ARCCs would spend time talking to an IRR Soldier about USAR transfer opportunities only to find out later that the IRR Soldier was ineligible for these opportunities. Table 13 lists the additional comments that ARCCs had about the IRR or the muster process.

Table 13

Additional Comments About the IRR or Musters

Response	Frequency	Percentage
Musters were good	15	27%
Need better management of contact information	8	15%
Need better dissemination of IRR information	5	9%
Should filter who could be in the IRR	5	8%
IRR Soldiers should be held accountable for not mustering	4	7%
Other	18	34%
– Easier for IRR Soldiers to transfer into the USAR in terms of incentives, processes, and resources that ARCCs can use		
– Focus on retaining Soldiers throughout the Soldier's career		
– Low returns of investment for the IRR and musters		
– Seek out regular direct input from ARCG		

Note. 97% interrater agreement.

Among the focus group participants, three themes emerged with respect to discussions about muster orders. First, inaccurate contact information for IRR Soldiers caused ARCCs to spend large amounts of time trying to track down the Soldiers for PAMs. ARCCs were consequently stretched thin with respect to attending to the IRR Soldiers assigned under their guidance while fulfilling the ARCCs' other job missions. It was important not only that ARCCs obtained contact information IRR Soldiers provided but also that ARCCs verified contact information IRR Soldiers provided. When ARCCs had accurate contact information for IRR Soldiers, they could call the Soldiers to discuss what the muster order was and what the Soldier needed to do to complete the muster. This call would also provide ARCCs the opportunity to dispel any myths that IRR Soldiers had about musters. Focus group participants also described how challenging it was for them to bring IRR Soldiers to muster when there were no

mechanisms in place to enforce sanctions for noncompliance. There were IRR Soldiers who would ask ARCCs what would happen if the Soldiers did not comply with their muster orders. This question placed ARCCs in a precarious position because there were no mechanisms in place to sanction IRR Soldiers who did not comply with their muster orders. There were also IRR Soldiers who shared information with each other online and knew that there were no sanctions for noncompliance. These Soldiers would tell their ARCCs that they would not muster and that they knew that there would be no consequences for their refusal. Finally, in both focus group sessions, ARCCs indicated that being flexible about when and where the muster could be held helped them increase their muster rates. This might mean that the ARCC would travel to meet IRR Soldiers at locations that were convenient for the Soldiers, or that the ARCC would meet Soldiers on their lunch breaks. Such flexibility on the ARCC's part meant that the IRR Soldiers would not be required to expend and lose resources of their own. Other methods that ARCCs found effective in getting IRR Soldiers to muster were explaining that the Soldiers were legally obligated to muster and explaining the benefits of mustering.

In summary, ARCCs reported that many IRR Soldiers had negative perceptions of the IRR and the Army that might have increased their likelihood to ignore muster orders. However, ARCCs reported that there were also many IRR Soldiers who were open to mustering if there were flexibilities in scheduling musters and if they were sufficiently educated about the IRR. Flexibilities in scheduling musters involved making it easier for the IRR Soldier to travel to the muster center and to fit the appointment in their schedules.

Being sufficiently educated about the IRR involved IRR Soldiers understanding that they might have been transferred into the IRR because they had not yet fulfilled their MSOs, that they were required to muster as part of being in the IRR, and what would happen during musters, which did not include getting deployed. Moreover, sufficient IRR education could impress upon Soldiers that it was important for them to update their contact information with HRC when they were in the IRR. IRR Soldiers who had current contact information with HRC could be reached by ARCCs to schedule musters and to answer any questions about the IRR, which also increased the likelihood that the Soldiers would comply with their muster orders. The subject of sanctions was also brought up by ARCCs as a possible way to motivate IRR Soldiers to muster. However, ARCCs did not bring up the subject of sanctions as often as the subjects of flexibilities in scheduling musters and of IRR education.

Training on IRR Education

There was a wide range of responses when ARCCs were asked to describe the training that they received, as ARCCs, about the IRR. Many ARCCs (41%) reported that they learned on the job (OTJ). A smaller number (19%) responded that they learned about the IRR from their 79V schoolhouse or from training materials (9%). 79V is the ARCCs' Military Occupational Specialty (MOS) code. ARCCs who said that they were trained at the schoolhouse often added that they learned the most on the job. In the *other* category, 10% of ARCCs said that they did not receive much training, and 6% said that they did not receive formal training. Due to the ambiguity in how the question was worded, 8% of the respondents interpreted the question as a request to list specific details about the IRR that were taught to ARCCs. Table 14 lists the training that ARCCs received about the IRR.

Table 14*Training ARCCs Received About the IRR*

Response	Frequency	Percentage
OTJ	58	41%
79V schoolhouse	27	19%
Training materials	13	9%
Specific information about how the IRR works	12	8%
Sales training	10	7%
No formal training	9	6%
Other	15	10%
– A lot		
– Not much		
– It changed over the years		
– Websites		
– Slideshows		

Note. 92% interrater agreement.

When asked how their training about the IRR could be improved, 38% of ARCCs requested training on knowing in general how the IRR worked, what resources to consult about the IRR, and having IRR training in the 79V schoolhouse. That some ARCCs reported that they were trained about the IRR in the 79V schoolhouse, and that there was a general recommendation to have IRR training in the 79V schoolhouse, suggested that training about the IRR in the 79V schoolhouse might have been implemented recently, and earlier cohorts might not have received such training. In addition, ARCCs (17%) alluded to their mission to transfer IRR Soldiers into the USAR by saying that they would like training in recruitment. ARCCs (10%) also suggested OTJ training in the form of formal mentorships and having dedicated time at the beginning of their jobs to focus on learning about how to work with IRR Soldiers. Table 15 lists ARCCs' suggestions for improving the training that they received about the IRR.

Table 15*Suggestions for Improving ARCCs' Training About the IRR*

Response	Frequency	Percentage
Training on how the IRR works	34	38%
Training in recruitment	15	17%
Cross-training with other units for consistency	9	10%
OTJ training	9	10%
Training in general communication skills	6	7%
– Effective communication		
– Making connections		
– Interviewing		
Regular and recurring training	5	5%
Training in coaching and counseling	4	4%
Other	10	10%
– Training in different formats		
– Updated IRR handbook		

- Online training
- Classes
- Discussion forums
- More training in general

Note. 97% interrater agreement.

Forty-two percent of ARCCs reported that the Army's ineffective communications with the IRR made it especially challenging for ARCCs to fulfill their duties as counselors to IRR Soldiers. Ineffective communications involved having outdated contact information for IRR Soldiers and IRR Soldiers being insufficiently educated about the IRR during their pre-separation counseling. Other factors that ARCCs reported as making their jobs as IRR counselors challenging were: IRR Soldiers' negative attitudes about the Army (16% of ARCCs), issues dealing with transfers (16% of ARCCs), and general administrative issues, such as getting inaccurate information from other offices and difficulties working with information systems (12%). Table 16 lists the factors that ARCCs reported made it challenging for them to counsel IRR Soldiers.

Table 16

Factors that Made It Challenging for ARCCs to Counsel IRR Soldiers

Response	Frequency	Percentage
Army's ineffective communications where the IRR is concerned	56	42%
IRR Soldiers' negative attitudes about the Army	22	16%
Issues dealing with transfers	21	16%
General administrative issues	16	12%
ARCCs needed more training	4	3%
Multiple mission sets	3	2%
Other	13	9%

Note. 91% interrater agreement.

According to 33% of the ARCCs, the Army could first and foremost help them address the challenges that they faced in their jobs as ARCCs by improving its management of IRR Soldiers' contact information. Other common responses from the ARCCs were: 15% identified improving training for ARCCs; 11% mentioned filtering who could be in the IRR; and 10% mentioned educating the whole Army about the IRR. Table 17 lists how the Army could help ARCCs address the challenges that they face as IRR counselors.

Table 17

Ways the Army Could Help ARCCs Address the Challenges as IRR Counselors

Response	Frequency	Percentage
Improving management of contact information	28	33%
Improving training for ARCCs	12	15%
Filtering who could be in the IRR	9	11%
Educating the whole Army better about the IRR	8	10%
Making reenlistment target numbers more attainable	6	7%
Increasing IRR advertising	6	7%
Making incentives available to more IRR Soldiers	6	7%

Increasing staffing	3	3%
Eliminating unnecessary tasks	2	2%
Time pressure for IRR Soldiers to transfer	1	2%
Other	20	24%
– Administrative office issues		
– Sanctioning IRR Soldiers who did not fulfill their obligations		
– Transition counselors properly briefing IRR Soldiers		

In the focus groups, two themes emerged with respect to how the Army could better help ARCCs counsel IRR Soldiers. First, ARCCs should be trained more regarding the IRR. ARCCs explained that when IRR Soldiers received contradictory information across multiple ARCCs, the Soldiers got confused and viewed ARCCs as less credible, and any negative perceptions that they might have had about the Army were exacerbated. Second, ARCCs stressed that Soldiers who were ineligible for transfer to USAR should not be put in the IRR. Doing so filled the IRR population with members who were no longer eligible to serve from an Active Duty standpoint.

In summary, ARCCs typically started learning about the IRR when they started working as ARCCs. They recommended more training on understanding how the IRR worked and on improving their communication skills in order to better counsel and recruit IRR Soldiers. Communication issues in general made ARCCs' jobs more challenging, such as having outdated contact information for IRR Soldiers, IRR Soldiers not being sufficiently educated about the IRR at transition, getting inaccurate information from other offices, and being the main Army personnel who communicate with IRR Soldiers. The Army could help ARCCs address challenges that they face in their jobs by improving management of contact information, information that affect IRR Soldiers' eligibility to serve, and information that the whole Army receives about the IRR.

Discussion

The Army Audit Agency found that in FY18, 84% of IRR Soldiers did not comply with their muster orders (Inspector General, U.S. Department of Defense, 2019). Education has been shown to improve compliance with requirements in a variety of domains, such as crime control (Taxman et al., 1999), gambling (Tong et al., 2019), healthcare (Gold & McClung, 2006; Gurses et al., 2008; Pittet et al., 2000; Roter et al., 1998), information security (Lowry et al., 2015), organizational justice (Shaw et al., 2003), taxation (Picciotto, 2007), and treaties (Chayes et al., 1998). Currently, Soldiers are informed about the IRR during their initial enlistments and during pre-separation counseling. It is not clear whether these two instances are enough to sufficiently educate Soldiers about the IRR. This report focuses on the survey and the focus group protocol that ARI administered to ARCCs. ARCCs counsel IRR Soldiers and administer musters. The survey and focus group protocol asked ARCCs what Soldiers typically knew about the IRR, to identify opportunities to effectively educate Soldiers about the IRR, and to recommend additional ways to improve muster rates.

According to ARCCs, Soldiers typically knew very little or nothing about the IRR or had inaccurate information about the IRR. This drawback suggests that the IRR information that Soldiers receive during their initial enlistments and pre-separation counseling may not be

sufficient. Initial enlistments and pre-separation counseling typically involve the Soldiers processing a large and diverse amount of information, and it is possible that information about the IRR is overlooked, easily forgotten, or remembered incorrectly. It is possible that many IRR Soldiers truly process that they are in the IRR only when an ARCC contacts the Soldiers for their first time. In this initial interaction, ARCCs find themselves in the position of having to explain to IRR Soldiers that the Soldiers have not yet completed their MSOs, that the Soldiers are still under contract with the Army and therefore still have obligations to the Army, which include mustering. The general perception among ARCCs is that only ARCG and ARCCs communicate IRR information to Soldiers.

ARCCs in this research recommended additional IRR education in order to improve muster rates. IRR education may increase muster rates if the education is:

1. **Emphasizing what the IRR is and why Soldiers may be transferred into the IRR, as well as the importance of mustering, updating contact information, and consequences of not fulfilling IRR obligations.** This point is consistent with the scientific literature indicating that education can increase compliance with requirements if it lays out the requirements, explains what need to be done in order to comply with the requirements, and describes why it is important to comply with the requirements (Weaver, 2013; Winter & May, 2001).
2. **Implemented before Soldiers transfer into the IRR,** so that when the Soldiers make career plans, they will remember to consider how they can fulfill their IRR requirements if they have remaining MSOs after they have completed their Active Duty Obligations.
3. **Regularly reinforced throughout Soldiers' Army careers.** It may be difficult for Soldiers to remember the IRR when they have years left in their Active Duty Obligations, but they need to be cognizant about the IRR because it is one of the common ways that they can fulfill their MSOs. Regular reminders will increase the likelihood that Soldiers will remember what the IRR is and what they are required to do if they are transferred into the IRR.

IRR education should increase in frequency when Soldiers get closer to completing their initial Active Duty Obligation. During the transition process, it may be helpful for multiple types of units to talk to the Soldiers multiple times about the IRR and to involve ARCG in the process. For example, ACCs and RCCCs could discuss the IRR with Soldiers during individual counseling sessions, and an ARCC could conduct group briefings about the IRR. The group briefings may be more detailed than the individual counseling sessions and may outline the IRR program definition, how to manage the transition into the IRR, IRR responsibilities and expectations, consequences for non-compliance, POCs in relation to the IRR, and benefits available to IRR Soldiers. Interactions with ARCCs during the transition process may provide Soldiers a more concrete idea of what the IRR is and that IRR requirements should be taken seriously by Soldiers.

4. **Administered by a variety of units, such as recruiters, informal mentors, transition counselors, and ARCCs.** Multiple sources explaining what the IRR is and what its requirements are may provide Soldiers an impression that the IRR is important to the Army, as well as reinforce among Soldiers the credibility and importance of complying with IRR requirements.

Sufficient, regular, and timely education about the IRR, administered by a variety of offices, may provide IRR Soldiers with considerable advance notice of what the IRR requirements are and may increase the Soldiers' perceptions that IRR requirements are fair. As prior empirical studies in other domains have shown, perceptions of fairness facilitate compliance with requirements (see Chayes et al., 1998; Lowry et al., 2015; Picciotto, 2007; Shaw et al., 2003; Taxman et al., 1999).

Aside from mustering, IRR Soldiers are also required to update their contact information with HRC. Currently, 67% of IRR Soldiers do not have current contact information with HRC, as reported in the Army People Strategy: Military Implementation Plan (U.S. Department of the Army, 2020). This situation poses a problem because muster orders are sent by mail, and if HRC does not have current contact information for IRR Soldiers, then the Soldiers will not be aware that it is time for them to muster. IRR Soldiers cannot comply with muster orders if they do not know that such orders have been issued to them in the first place. IRR Soldiers who have been educated sufficiently about the IRR will be more likely to be aware that they should keep their contact information with HRC current and consequently receive their muster orders.

With respect to the medium that can best deliver IRR education, ARCCs indicated that classes, briefings, in-person meetings, and emails all have potential to be effective. ARCCs also found that Soldiers preferred to be contacted by the Army using text messages, phone calls, and emails. While it may be difficult to sufficiently educate Soldiers about the IRR using these three modes of communication, the modes may work well as means to remind IRR Soldiers about muster orders. ARCCs have already been reaching out to IRR Soldiers by phone and email, and they reported that being able to do so helped them increase muster rates. ARCCs use phone calls and email messages to establish connections with IRR Soldiers, remind IRR Soldiers of their muster appointments, and make arrangements that will help IRR Soldiers attend their muster appointments, and provide technical assistance in VMs. However, reaching out to IRR Soldiers can only be made possible if ARCCs have the Soldiers' current contact information. This outcome relates to how IRR education can remind IRR Soldiers to keep their contact information with HRC current, which enables ARCCs to reach out to the Soldiers and to arrange for the Soldiers to attend their muster sessions.

Notably, muster orders are sent by mail. However, ARCCs observed that mail was the least preferred form of communication among Soldiers. Soldiers tended to prefer text messages, phone calls, and emails. If Soldiers did not prefer a particular form of communication, they might not pay as much attention to information that were sent through that particular form of communication. Muster rates may be increased if muster orders are sent via Soldiers' more preferred form of communication. However, there are challenges with changing the method in which the muster order is primarily communicated. Text messages may not be an appropriate avenue for muster orders due to the length of the muster order. Phone calls may also not be an

appropriate avenue because it does not provide a paper documentation. Email allows for lengthy messages and document attachments, but many institutions, including parts of the federal government, do not regard emails to be a secure form of communication. Even though mail is Soldiers' least preferred form of communication, ARCCs currently have the ability to increase the likelihood that IRR Soldiers will pay attention to mailed muster orders by following up with the IRR Soldiers via text messages, phone calls, and emails. All these attempts to ensure that the IRR Soldier receives the muster order, however, are futile if HRC does not have accurate contact information for the Soldier.

There is a significant number of IRR Soldiers who are willing to muster, but issues such as transportation and scheduling pose obstacles. ARCCs reported that making it logistically easier for IRR Soldiers to attend the appointment, such as conducting the muster closer to where the Soldiers are outside regular work hours, was by far the most effective method to get the Soldier to complete musters. This method was more effective at improving muster rates compared to other methods, such as providing MDAs and explaining to IRR Soldiers why musters are important. Not all ARCCs provide this flexibility in scheduling due to variations in workloads and the need to prioritize certain tasks over others. If all ARCCs will be expected to provide IRR Soldiers considerable flexibility in where and when musters can take place, then ARCCs' overall workload may need to be adjusted accordingly. In a similar vein, ARCCs also alluded to how making it logistically easier for IRR Soldiers to do VMs increased the likelihood that the Soldiers would complete the VM. Examples of ways reported by ARCCs to make VM logistically easier for IRR Soldiers included: having a functional website, ARCC assistance, and having enough time to complete the muster. Making musters easier to attend hinges on ARCCs having current contact information for IRR Soldiers. If ARCCs can reach IRR Soldiers by phone or email, they can work together to identify locations and times when the Soldiers are able to muster.

ARCCs indicated that, based on their experiences, many IRR Soldiers had negative to neutral perceptions of the IRR and the Army. A majority of ARCCs reported contacting IRR Soldiers about muster orders and the Soldiers refused outright to comply with the muster orders. These IRR Soldiers cited reasons such as: wanting nothing to do with the Army, just not wanting to muster, having civilian obligations, and believing that they already finished their Army obligations. IRR education can increase muster rates in that the education will disabuse Soldiers of the notion that they have automatically completed their MSOs after their ETS. It is not guaranteed that IRR education will increase the likelihood that IRR Soldiers that have negative perceptions of the IRR and the Army will comply with muster orders. ARCCs reported that many of the IRR Soldiers who refused outright to muster stated that nothing could get them to muster. If education does not motivate these Soldiers to muster, then perhaps that would be the time to enforce sanctions for not mustering. ARCCs indicated that enforcing sanctions for not mustering may improve muster rates. In focus groups, ARCCs described how IRR Soldiers stated that they would not muster and that they knew that there would be no consequences for their refusal. However, sanction enforcement should be explored only after it is clear that Soldiers are sufficiently educated about the IRR. Education about requirements increases perceptions of the requirements' fairness, and perceptions of fairness increase the effectiveness of sanctions on compliance (Chayes et al., 1998; Lowry et al., 2015; Picciotto, 2007; Shaw et al., 2003; Taxman et al., 1999).

IRR education can improve muster rates in a variety of ways beyond making it clear to IRR Soldiers that mustering is an obligation that the Soldiers have as part of being in the IRR (see Figure 12). IRR education will also make it clear to IRR Soldiers that updating their contact information is another obligation that they have. IRR education and updating Soldiers' contact information will lead to the following beneficial outcomes: allow the Soldiers to receive their muster orders; enable ARCCs to reach the Soldiers and schedule muster sessions; enable ARCCs to remind Soldiers of muster orders and answer any questions the Soldiers have. IRR education can also be considered as providing Soldiers a fair warning that being in the IRR comes with obligations. This perception of fairness increases the likelihood that any sanctions will be effective in eliciting compliance.

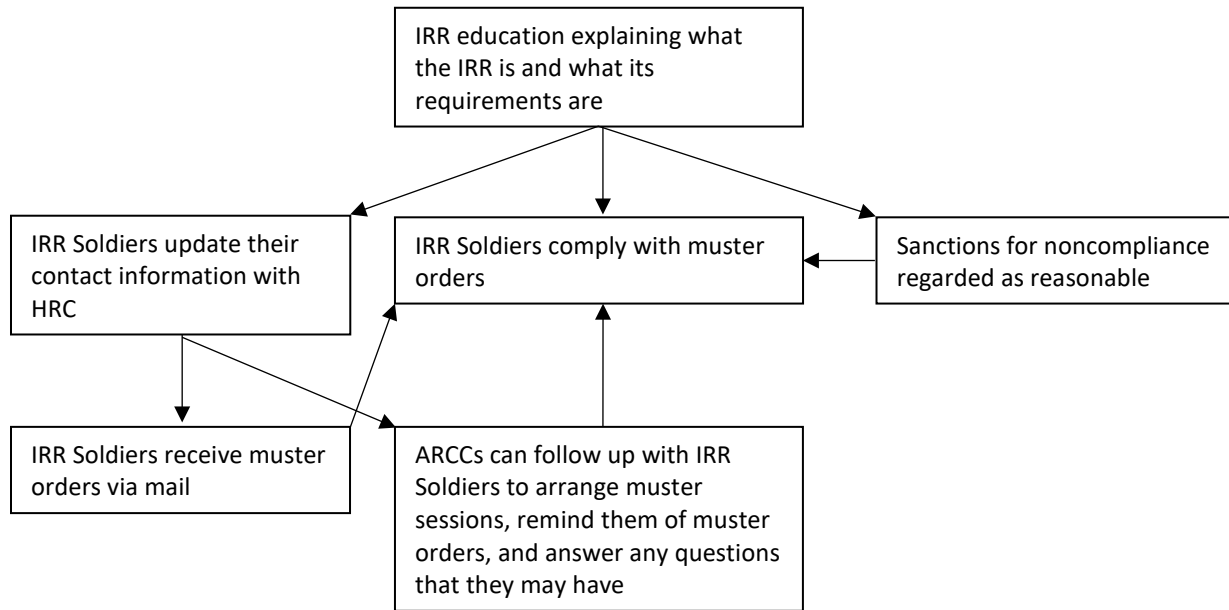


Figure 12. *Diagram of the different ways that IRR education can increase muster rates.*

Limitations

An important limitation with respect to this survey and focus group protocol is that discussions about IRR Soldiers' attitudes and responses were based on only ARCCs' experiences with the Soldiers. ARCCs' responses are nonetheless important. Apart from surveying IRR Soldiers themselves, this research was the closest that researchers could get to current IRR Soldiers' perceptions of and experiences with the IRR. Moreover, the research problem is that muster rates are currently low, and ARCCs as muster facilitators are in the position to observe what factors enable IRR Soldiers to muster.

Over the course of analyzing and documenting the results of this data collection, we identified questions that we could have asked ARCCs and that would have been informative with respect to identifying opportunities to effectively educate Soldiers about the IRR. One question could have been: *If you knew something about the IRR before you became an ARCC, how did you get that information?* Another question could have been: *Based on your experiences working*

with IRR Soldiers, where did IRR Soldiers get their information about the IRR before they transferred into the IRR? These two questions would have helped us better ascertain whether Soldiers actually get information about the IRR outside of their initial enlistment briefings and pre-separation counseling. These two questions were included in surveys that are administered to other participant groups.

Summary and Conclusion

ARI will continue to administer IRR surveys to other Soldier populations in order to find out what they typically know about the IRR and their views on what can get IRR Soldiers to muster. ARI will survey other noncommissioned officers (NCOs) and officers who are in positions to advise Soldiers that are likely to be in the IRR. These other NCOs and officers include ACCs, RCCCs, and informal mentors. ARI will also survey Soldiers at various points in their Army career, specifically newly enlisted Soldiers, midcareer Soldiers, and transitioning Soldiers. Information gleaned from these populations will be combined with the information collected from ARCCs in order to provide a comprehensive sense of how much Soldiers know about the IRR and what can be done to improve muster rates.

The IRR is a significant source of trained Soldiers in the event of a national crisis that requires augmenting the population of mobilization-ready Soldiers. When IRR Soldiers do not muster, the Army has a less accurate sense of the IRR's capabilities. It is important that Soldiers understand the entirety of their MSOs, including how their Active Duty Obligation may be followed by service in the IRR and what IRR service entails. This understanding may be facilitated by IRR education that is sufficient, regular, timely, and administered by a variety of offices.

References

- Alikari, V., Tsironi, M., Matziou, V., Tzavella, F., Stathoulis, J., Babatsikou, F., Fradelos, E., & Zyga, S. (2018). The impact of education on knowledge, adherence and quality of life among patients on haemodialysis. *Quality of Life Research*, 28(1), 73-83. <https://doi.org/10.1007/s11136-018-1989-y>
- Chayes, A., Chayes, A.H., & Mitchell, R.B. (1998). Managing compliance: A comparative perspective. In E.B. Weiss & H. Jacobson (Eds.), *Engaging Countries: Strengthening Compliance with International Environmental Accords* (pp. 39-62). MIT Press.
- Evans, E.W., & Redmond, E.C. (2018). Food safety knowledge and self-reported food-handling practices in cancer treatment. *Oncology Nursing Forum*, 45(5), E98-E110. <https://doi.org/10.1188/18.ONF.E98-E110>
- Fehr, E., & Rockenbach, B. (2003). Detrimental effects of sanctions on human altruism. *Nature*, 422, 137-140. <https://doi.org/10.1038/nature01474>
- Harkins, G. (2020, 13 April). *In the IRR? The military may want you back if you served in one of these jobs*. Military.com. <https://www.military.com/daily-news/2020/04/13/irr-military-may-want-you-back-if-you-served-one-these-jobs.html>
- Headquarters, Department of the Army. (2016, December 19). *Personnel separation - Active duty enlisted administrative separations* (Army Regulation 635-200). Washington, DC: Author.
- Headquarters, Department of the Army. (2018, April 25). *Army Reserve - Assignments, attachments, details, and transfers* (Army Regulation 140-10). Washington, DC: Author.
- Hill, J., Bird, H., & Johnson, S. (2001). Effect of patient education on adherence to drug treatment for rheumatoid arthritis: A randomized controlled trial. *Annals of the Rheumatic Diseases*, 60(9), 869-875. <http://pubmed.ncbi.nlm.nih.gov>
- Gold, D.T., & McClung, B. (2006). Approaches to patient education: Emphasizing the long-term value of compliance and persistence. *The American Journal of Medicine*, 119(4A), 325-375. <https://doi.org/10.1016/j.amjmed.2005.12.021>
- Goujard, C., Bernard, N., Sohier, N., Peyramond, D., Lancon, F., Chwalow, J., Arnould, B., & Delfaissy, J. (2003). Impact of a patient education program on adherence to HIV medication. *Journal of Acquired Immune Deficiency Syndromes*, 34(2), 191-194. <https://doi.org/10.1097/00126334-200310010-00009>
- Gurses, A.P., Seidl, K.L., Vaidya, V., Bochicchio, G., Harris, A.D., Hebden, J., & Xiao, Y. (2008). Systems ambiguity and guideline compliance: A qualitative study of how intensive care units follow evidence-based guidelines to reduce healthcare-associated

- infections. *Quality & Safety in Health Care*, 17(5), 351-359.
<https://doi.org/10.1136/qshc.2006.021709>
- Inspector General, U.S. Department of Defense. (2019). *Semiannual report to the Congress, April 1, 2019 through September 30, 2019*.
<https://media.defense.gov/2019/Dec/10/2002222381/-1/-1/1/DOD%20OIG%20SEMIANNUAL%20REPORT%20TO%20THE%20CONGRESS%20APRIL%201,%202019%20TO%20SEPTEMBER%2030,%202019.PDF>
- Janson, S.L., Fahy, J.V., Covnington, J.K., Paul, S.M., Gold, W.M., & Boushey, H.A. (2003). Effects of individual self-management education on clinical, biological, and adherence outcomes in asthma. *The American Journal of Medicine*, 115(8), 620-626.
<https://doi.org/10.1016/j.amjmed.2003.07.008>
- Lowry, P.B., Posey, C., Bennett, R.J., & Roberts, T.L. (2015). Leveraging fairness and reactance theories to deter reactive computer abuse following enhanced organizational information security policies: An empirical study of the influence of counterfactual reasoning and organizational trust. *Information Systems Journal*, 25, 193-230.
<https://doi.org/10.1111/isj.12063>
- Morisky, D.E., Malotte, C.K., Choi, P., Davidson, P., Rigler, S., Sugland, B., & Langer, M. (1990). A patient education program to improve adherence rates with antituberculosis drug regimens. *Health Education Quarterly*, 17(3), 253-267.
<https://doi.org/10.1177/109019819001700303>
- Murphy, K., Tyler, T.R., & Curtis, A. (2009). Nurturing regulatory compliance: Is procedural justice effective when people question the legitimacy of the law? *Regulation & Governance*, 3, 1-26. <https://doi.org/10.1111/j.1748-5991.2009.01043.x>
- Myers, N.E., Stokes, M.G., & Nobre, A.C. (2017). Prioritizing information during working memory: Beyond sustained internal attention. *Trends in Cognitive Sciences*, 21(6), 449-461. <https://doi.org/10.1016/j.tics.2017.03.010>
- Pennington, J.P., & Schlenker, B.R. (1999). Accountability for consequential decisions: Justifying ethical judgments to audiences. *Personality and Social Psychology Bulletin*, 25(9), 1067-1081. <https://doi.org/10.1177/01461672992512001>
- Picciotto, S. (2007). Constructing compliance: Game playing, tax law, and the regulatory state. *Law & Policy*, 29(1). <https://doi.org/10.1111/j.1467-9930.2007.00243.x>
- Piquero, A.R., Paternoster, R., Pogarsky, G., & Loughran, T. (2011). Elaborating the individual difference component in deterrence theory. *Annual Review of Law and Social Science*, 7, 335-360. <https://doi.org/10.1146/annurev-lawsocsci-102510-105404>
- Pittet, D., Hugonnet, S., Harbarth, S., Mourouga, Ph., Sauvan, V., Touveneau, S., & Perneger, T.V. (2000). Effectiveness of a hospital-wide programme to improve compliance with

- hand hygiene. *Lancet*, 356(9238), 1307-1312. [https://doi.org/10.1016/s0140-6736\(00\)02814-2](https://doi.org/10.1016/s0140-6736(00)02814-2)
- Roter, D.L., Hall, J.A., Merisca, R., Nordstrom, B., Cretin, D., & Svarstad, B. (1998). Effectiveness of interventions to improve patient compliance: A meta-analysis. *Medical Care*, 36(8), 1138-1161. <https://doi.org/10.1097/00005650-199808000-00004>
- Shaw, J.C., Wild, E., & Colquitt, J.A. (2003). To justify or excuse?: A meta-analytic review of the effects of explanations. *Journal of Applied Psychology*, 88(3), 444-458. <https://doi.org/10.1037/0021-9010.88.3.444>
- Sherman, L.W. (1993). Defiance, deterrence, and irrelevance: A theory of the criminal sanction. *Journal of Research in Crime and Delinquency*, 30(4), 445-473. <https://doi.org/10.1177/0022427893030004006>
- Taxman, F.S., Soule, D., & Gelb, A. (1999). Graduated sanctions: Stepping into accountable systems and offenders. *The Prison Journal*, 79(2), 182-204. <https://doi.org/abs/10.1177/0032885599079002004>
- Terry, P.M., Evans, K.L., Heller, F.H., & Sukenik, H.K. (1992). *The mobilization of Individual Ready Reserve (IRR) infantrymen during Operation Desert Storm* (Research Report 1610). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Tetlock, P.E. (1985). Accountability: The neglected social context of judgment and choice. *Research in Organizational Behavior*, 7, 297-332. <https://www.journals.elsevier.com/research-in-organizational-behavior>
- Thaler, R.H., Sunstein, C.R., & Balz, J.P. (2013). Choice architecture. In E. Shafir (Ed.), *The behavioral foundations of public policy* (pp. 428-439). Princeton University Press.
- Tong, K., Chen, J.H., & Wu, A.M.S. (2019). Application of health belief model to practice of responsible gambling. *Journal of Gambling Studies*, 35, 1047-1062. <https://doi.org/10.1007/s10899-019-09871-y>
- Trevino, L.K. (1992). The social effects of punishment in organizations: A justice perspective. *The Academy of Management Review*, 17(4), 647-676. <https://doi.org/10.2307/258803>
- U.S. Army Human Resources Command. (2019). *Individual Ready Reserve orientation handbook*. Author.
- U.S. Department of the Army. (2020, 9 October). *Army People Strategy: Military Implementation Plan*. Author.

- Verboon, P., & van Dijke, M. (2011). When do severe sanctions enhance compliance? The role of procedural fairness. *Journal of Economic Psychology*, 32, 120-130.
<https://doi.org/10.1016/j.joep.2010.09.007>
- Weaver, R.K. (2013). Compliance regimes and barriers to behavioral change. *Governance: An International Journal of Policy, Administration, and Institutions*, 27(2), 243-265.
<https://doi.org/10.1111/gove.12032>
- Winter, S.C., & May, P.J. (2001). Motivation for compliance with environmental regulations. 20(4), 675-698. <https://doi.org/10.1002/pam.1023>
- Wisher, R.A., Sabol, M.A., Sukenik, H.K., & Kern, K.P. (1991). *Individual Ready Reserve (IRR) call-up: Skill decay* (Research Report 1595). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Appendix A

IRR Survey Administered to ARCCs

We would like to learn more about your perceptions and experiences regarding Military Service Obligations (MSOs). Indicate your response to each question below by writing your answer in the space provided or by checking the response option that best indicates your answer.

1. What is your rank?
2. What is your gender?
 - ☐ Male
 - ☐ Female
3. How many months have you been working as an Army Reserve Career Counselor?
4. Prior to becoming an Army Reserve Career Counselor, what did you know about the Individual Ready Reserve (IRR)?
5. In your experience, what does an average Soldier know about the IRR when the Soldier transfers to the IRR and before the Soldier talks to an Army Reserve Career Counselor?
6. When you contact an IRR Soldier for the first time, what do you tell the Soldier about the IRR?
7. As an Army Reserve Career Counselor, what do you do specifically to increase the likelihood of a successful muster?
8. In general, how effective are your methods as an Army Reserve Career Counselor in trying to increase the chances of successful musters?
 - ☐ 1 = Not at all effective
 - ☐ 2 = Slightly effective
 - ☐ 3 = Somewhat effective
 - ☐ 4 = Effective
 - ☐ 5 = Very effective
9. In your experience, how do Soldiers prefer to be contacted by the Army? Choose up to 2 answers:
 - ☐ Phone call
 - ☐ Text message
 - ☐ Mail
 - ☐ Email
 - ☐ Social media – If so, which media sites?
 - ☐ In-person visit from Career Counselor

☐ Other (please specify)

10. For each of the phrases below, please indicate how helpful you think it would be for Soldiers to be given information about their possible obligations to the IRR:

a. During time of enlistment

☐ 1 = Not at all helpful

☐ 2 = Slightly helpful

☐ 3 = Somewhat helpful

☐ 4 = Helpful

☐ 5 = Very helpful

b. During service in the Active Army, Army National Guard, or U.S. Army Reserve

☐ 1 = Not at all helpful

☐ 2 = Slightly helpful

☐ 3 = Somewhat helpful

☐ 4 = Helpful

☐ 5 = Very helpful

c. During transition into the IRR

☐ 1 = Not at all helpful

☐ 2 = Slightly helpful

☐ 3 = Somewhat helpful

☐ 4 = Helpful

☐ 5 = Very helpful

11. What method can best communicate to Soldiers that they may have a possible obligation to the IRR?

12. Rate the importance you think the Army places on maintaining communications with IRR Soldiers.

☐ 1 = Not at all important – GO TO QUESTION 12C

☐ 2 = Slightly important – GO TO QUESTION 12C

☐ 3 = Somewhat important

☐ 4 = Important

☐ 5 = Very important

a. Please indicate when you saw the Army place importance on maintaining communications with IRR Soldiers.

b. Please indicate how you saw the Army place importance on maintaining communications with IRR Soldiers.

- c. Please elaborate on why you think the Army places or does not place importance on maintaining communications with IRR Soldiers.
- 13. How can the Army improve its communications with Soldiers regarding their possible obligations to the IRR?
- 14. Have you ever contacted an IRR Soldier to attend PAM and the Soldier refused outright to comply with the muster order?
 - ☐ Yes
 - ☐ No
 - a. If yes, what reasons did the Soldier give for refusing to comply with the muster order?
 - b. If yes, what factors or situations did the Soldier(s) indicate would get them to muster?
- 15. Based on your experience and observations, what factors or situations typically enable an IRR Soldier to successfully attend a PAM?
- 16. Based on your experience and observations, what factors or situations typically enable an IRR Soldier to successfully complete a Virtual Muster?
- 17. In your experience, how does the typical IRR Soldier perceive the IRR?
 - ☐ 1 = Very favorably
 - ☐ 2 = Unfavorably
 - ☐ 3 = Somewhat unfavorably
 - ☐ 4 = Neutral
 - ☐ 5 = Somewhat favorably
 - ☐ 6 = Favorably
 - ☐ 7 = Very favorably
- 18. In your experience, how does the typical IRR Soldier perceive the Army?
 - ☐ 1 = Very favorably
 - ☐ 2 = Unfavorably
 - ☐ 3 = Somewhat unfavorably
 - ☐ 4 = Neutral
 - ☐ 5 = Somewhat favorably
 - ☐ 6 = Favorably
 - ☐ 7 = Very favorably
- 19. Think about the IRR Soldiers assigned to you that you reached out to at least once. How many of this group responded to you at least once?
 - ☐ No one

- ☐ Less than half
- ☐ About half
- ☐ More than half, but not everyone
- ☐ All of them

20. Please describe the training that you, as an Army Reserve Career Counselor, received about the IRR.
21. What suggestions do you have about improving the training that Army Reserve Career Counselors receive about the IRR?
22. What are the factors that make it challenging for you to fulfill your job as an Army Reserve Career Counselor?
23. How can the Army help you address the challenges you face in your job as an Army Reserve Career Counselor?
24. How much of each PAM is dedicated to opportunities to return to the Active Army, Army National Guard, or U.S. Army Reserve?
- ☐ None
 - ☐ Less than half
 - ☐ About half
 - ☐ More than half
25. How do IRR Soldiers typically view the opportunities to return to the Active Army, Army National Guard, or U.S. Army Reserve?
- ☐ 1 = Very unfavorably
 - ☐ 2 = Unfavorably
 - ☐ 3 = Somewhat unfavorably
 - ☐ 4 = Neutral
 - ☐ 5 = Somewhat favorably
 - ☐ 6 = Favorably
 - ☐ 7 = Very favorably
26. Please provide any additional comments regarding the IRR or the muster process.

Appendix B

IRR Focus Group Protocol

We would like to learn more about your perceptions and experiences regarding Military Service Obligations (MSOs).

1. How many months have you been working as an Army Reserve Career Counselor?
2. When the average Soldier transfers to the IRR and before the Soldier talks to an Army Reserve Career Counselor, what does the Soldier know about the IRR?
3. As an Army Reserve Career Counselor, what do you do specifically to increase the likelihood of a successful muster?
4. Would it be helpful for Soldiers to know about their possible obligations to the IRR during their time of enlistment?

Would it be helpful for Soldiers to know about their possible obligations to the IRR their service in the Active Army, Army National Guard, or U.S. Army Reserve?

Would it be helpful for Soldiers to know about their possible obligations to the IRR during transition?

5. What is the importance you think the Army places on maintaining communications with Soldiers regarding their possible obligations to the IRR? Would you say very important, important, somewhat important, slightly important, or not at all important?

Please elaborate on why you think the Army places or does not place importance on maintaining communications with Soldiers regarding their possible obligations to the IRR.

[Ask only Soldiers who answered with at least “somewhat important”] How have you seen the Army place importance on maintaining communications with Soldiers regarding their possible obligations to the IRR?

How can the Army improve its communications with Soldiers regarding their possible obligations to the IRR?

6. Have you ever contacted an IRR Soldier to attend PAM and the Soldier refused outright to comply with the muster order?

If yes, what reasons did the Soldier give for refusing to comply with the muster order?

7. Based on your experience and observations, what factors or situations typically enable an IRR Soldier to successfully attend PAM?

8. Based on your experience and observations, what factors or situations typically enable an IRR Soldier to successfully complete a Virtual Muster?
9. How can the Army help you address the challenges you face in your job as an Army Reserve Career Counselor?
10. What percentage of each PAM is dedicated to opportunities to return to the Active Army, Army National Guard, or U.S. Army Reserve? [If participants hesitate to give percentages, follow up with: “Would you say none of it, less than half, about half, or more than half?”]