



U.S. Department of Defense

Factor Rating Interpretation Guide Cohesion

What is Cohesion?

Cohesion assesses whether individuals in a workplace care about each other, share the same mission and goals, and work together effectively.^{1,4}

The following items are used to assess *Cohesion* on the DEOCS using a five-point response scale from *Strongly Disagree* to *Strongly Agree*. Participants are asked to think about the past three months when responding, or to think about their time with their current unit/organization if they joined less than three months ago.

- People in my unit work well as a team.
- People in my unit trust each other.

Note: Survey questions may differ depending on whether the organization is a military unit, Military Service Academy, or civilian organization. Please see the sample survey for each population on the Assessment to Solutions web site (<https://www.defenseculture.mil/Assessment-to-Solutions/A2S-Home/>) for exact wording.

Why is it important?

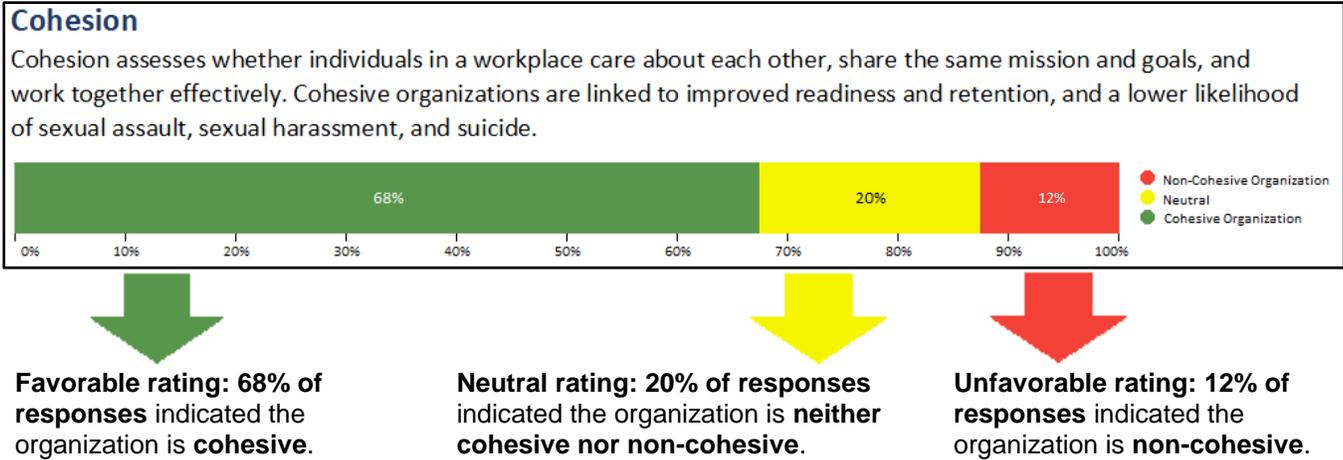
Unit *Cohesion* is a well-studied topic, particularly as it relates to the Military.¹ Specifically, there are several studies that have looked at unit *Cohesion* and its relation to mental health resilience and better overall military readiness.² For example, a study of U.K. Armed Forces examined personnel deployed to high optempo locations in Afghanistan found that individuals who reported strong unit *Cohesion* were more likely to have lower levels of self-reported PTSD symptoms, which the authors argued contributed to better mental health and helped promote military readiness.¹ *Cohesion* has also been found to be a protective factor associated with lower turnover intentions.^{3,4} This coincides with a study that examined the military status of active duty Army soldiers 12 months following a return from Iraq deployment. The study found that while Service members are prone to military attrition early in their career, individuals reporting lower levels of unit support (i.e., *Cohesion*) were more than twice as likely to separate from Service as those reporting higher levels of support from their peers and leaders.⁵

Research also shows that unit *Cohesion* within a military setting is a protective factor against sexual assault, sexual harassment, and suicidal ideation.^{3,6,7,8} For example, a study that looked at Army National Guard Service members who reported at least one deployment found that greater unit *Cohesion* and support was associated with decreased likelihood of experiencing sexual assault and sexual harassment.⁹ A study that looked at U.S. Army soldiers found that while combat exposure was a significant risk factor for suicidal ideation, unit *Cohesion* was a significant protective factor. More specifically, the authors found significant interaction between the two factors (i.e., combat exposure and unit *Cohesion*) indicating that soldiers who experienced greater combat exposure and had higher levels of unit *Cohesion* had relatively lower levels of suicidal ideation, while those who had higher levels of combat exposure and lower unit *Cohesion* were most at risk for suicidal ideation.¹⁰

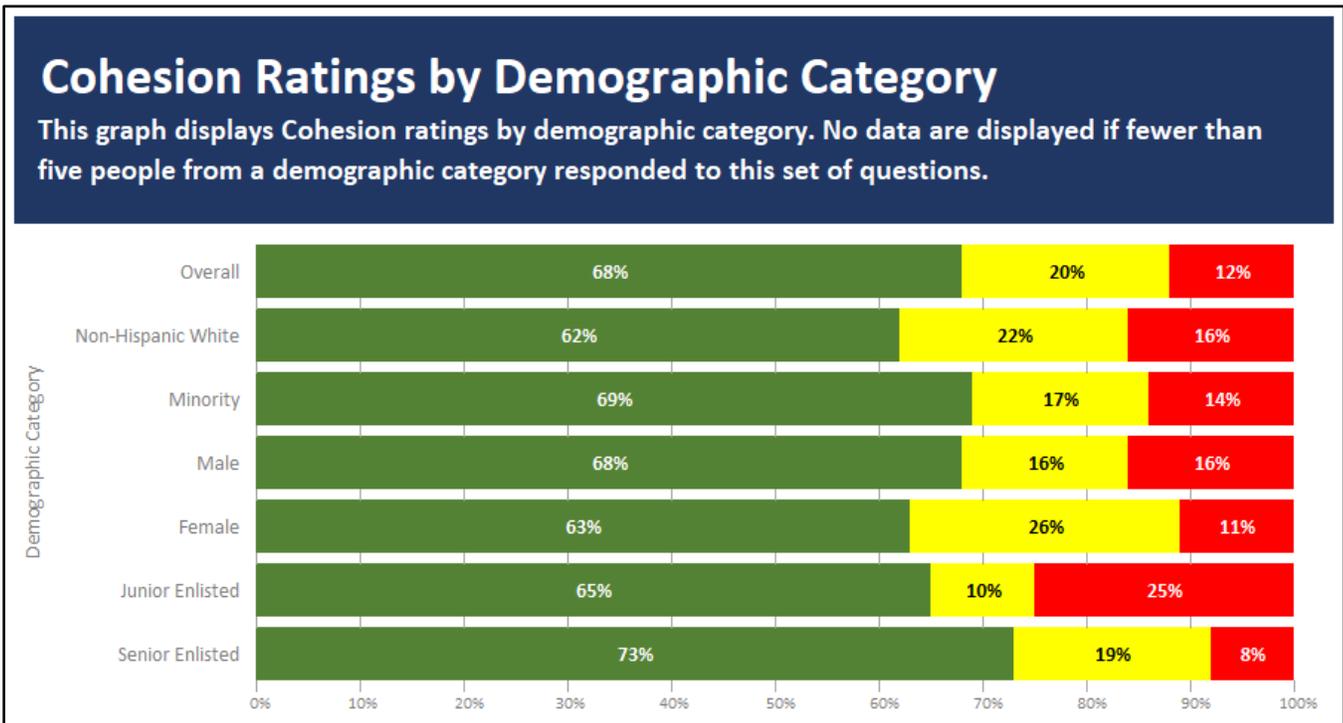
For more information on how to review your DEOCS results with these key outcomes in mind, please see the “Strategic Target Outcome Guide” in the Quick Links menu of the DEOCS dashboard.

How do I read my factor ratings?

The DEOCS dashboard displays results for *Cohesion* in a stacked bar graph showing ratings for **Cohesive Organization**, **Neutral**, and **Non-Cohesive Organization**. Because *Cohesion* is a factor that is measured by multiple questions, you should interpret the results as “X% of responses” (not participants). An example is shown below:



For the graph showing results by demographic categories, the percentages represent the percentage of responses from each demographic category that were favorable, neutral, or unfavorable.



The first bar will always show the overall results and will be the same percentages that are shown in the stacked bar graph. The next bars will represent various demographic categories for your organization. These results can help determine whether some groups of people in your organization have particularly high or low perceptions of climate factors. In addition, you may have different categories than in the example above. If your organization did not have any participants from a particular demographic category or had fewer than five participants from a particular category, you would not see those categories in your graph. For more

information on how the demographic groups are created, please see the “Data Overview” in the Quick Links menu of the DEOCS dashboard.

In this example, the favorable ratings (marked in green) can be interpreted as:

- 62% of responses from non-Hispanic White participants indicated the organization is cohesive, while 69% of responses from minority participants indicated the organization is cohesive;
- 68% of responses from male participants indicated the organization is cohesive, while 63% of responses from female participants indicated the organization is cohesive;
- 65% of responses from junior enlisted participants indicated the organization is cohesive, while 73% of responses from senior enlisted participants indicated the organization is cohesive.

The neutral ratings (marked in yellow) can be interpreted as:

- 22% of responses from non-Hispanic White participants indicated the organization is neither cohesive nor non-cohesive, while 17% of responses from minority participants indicated the organization is neither cohesive nor non-cohesive;
- 16% of responses from male participants indicated the organization is neither cohesive nor non-cohesive, while 26% of responses from female participants indicated the organization is neither cohesive nor non-cohesive;
- 10% of responses from junior enlisted participants indicated the organization is neither cohesive nor non-cohesive, while 19% of responses from senior enlisted participants indicated the organization is neither cohesive nor non-cohesive.

The unfavorable ratings (marked in red) can be interpreted as:

- 16% of responses from non-Hispanic White participants indicated the organization is not cohesive, while 14% of responses from minority participants indicated the organization is not cohesive;
- 16% of responses from male participants indicated the organization is not cohesive, while 11% of responses from female participants indicated the organization is not cohesive;
- 25% of responses from junior enlisted participants indicated the organization is not cohesive, while 8% of responses from senior enlisted participants indicated the organization is not cohesive.

You may also see trends over time for your *Cohesion* favorable rating if there are previous surveys with the same unit identification code (UIC) and the same commander/leader.

When applicable, trends over time are available in the dashboard by clicking on this icon: . They also appear in the PDF reports as a table. Even if your report includes trends over time, the results may not be comparable in certain circumstances. It is important to understand differences in roster size and roster composition at different time points as these items may impact comparability of trend results. Take a close look at the number of participants registered, surveys returned, and the response rate for any surveys for which trends are available to report; use caution when comparing trends over time if there are big differences in these numbers between surveys. Other things, such as deployments or changes in policy, may also make trends less comparable. For more information on factor rating trends, please see the “Data Overview” in the Quick Links menu of the DEOCS dashboard.

Finally, you may see an alert  for your *Cohesion* ratings. This means that your unit’s/organization’s favorable rating for *Cohesion* is **very low** compared to the other favorable ratings for this factor from all other units/organizations that completed a DEOCS. When

applicable, this alert icon appears in the dashboard inside the “Protective Factors – Favorable Ratings” heading; click on the icon to see if *Cohesion* is listed in the table. The alert icon may also appear in the *Cohesion* section of the PDF reports. To identify whether your *Cohesion* ratings receive an alert, cut-off scores were created by rank-ordering all favorable ratings for this factor. If your favorable rating for *Cohesion* is below the cut-off score, this icon will appear in your report. There are unique cut-off scores for each factor. Because of this, you may notice that some of the factors for which you have an alert have very different ratings. For more information on how these alerts are created, please see the “Data Overview” in the Quick Links menu of the DEOCS dashboard.

How are my unit’s/organization’s ratings created?

Cohesion ratings are created by combining responses to two questions from a five-point *Strongly Agree* to *Strongly Disagree* scale, as shown in the example below.

Cohesion Questions	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total
People in my unit work well as a team.	3% (3)	8% (9)	15% (17)	35% (39)	39% (43)	100% (111)
People in my unit trust each other.	2% (2)	12% (13)	25% (27)	34% (37)	28% (31)	100% (110)
	Non-Cohesive Organization		Neutral	Cohesive Organization		Total responses 221
	$(3+9+2+13) / 221 =$ 12%		$(17+27) / 221 =$ 20%	$(39+43+37+31) / 221 =$ 68%		

The table above displays the percentage of responses (and number of responses in parentheses) for each question across the five response options (*Strongly Disagree*, *Disagree*, *Neither Agree nor Disagree*, *Agree*, and *Strongly Agree*). For the first question, nine participants selected *Disagree*; this represents 8% of participants that responded to this question ($9/111 = .081$ or 8%).

Note that percentages are calculated out of the total number of participants responding to that question and not the total number of participants taking the survey. Participants can skip questions, so you may notice that total responses to questions vary. In the above example, 111 people responded to the first question so all percentages in this row use 111 as the denominator. Only 110 people responded to the second question, so all percentages in this row use 110 as the denominator. In addition, factor ratings may not always add to 100% due to rounding.

- The **unfavorable** rating, named **Non-Cohesive Organization**, is a combination of all responses of *Strongly Disagree* and *Disagree* from **both** questions in the *Cohesion* scale.
 - For this example, three people strongly disagreed with the first question, while nine disagreed. In addition, two people strongly disagreed with the second question and 13 disagreed. In total, 27 responses were either *Strongly Disagree* or *Disagree* to these two questions ($3+9+2+13 = 27$).
 - To produce an overall score for **Non-Cohesive Organization** representing unfavorable reactions to these two questions, the total number of responses

(27) is divided by the total number of people who responded to both *Cohesion* questions. 111 people responded to the first question, and 110 the second, for a total of 221 responses to both questions. **This produces a Non-Cohesive Organization rating of 12% ($27 / 221 = .1222$).**

- To create the **Neutral** rating, the same process above is followed, except the score is created from only one response option. The *Neither Agree nor Disagree* responses are added from questions.
 - For this example, there are 44 *Neither Agree nor Disagree* responses across both questions ($17+27 = 44$). This total is divided by the total number of responses to all of the questions ($44 / 221 = .1991$). **This rounds to a Neutral rating of 20%.**
- To create the **favorable** rating, named **Cohesive Organization**, the *Strongly Agree* and *Agree* responses are combined.
 - For this example, that is $39+43+37+31 = 150$ total responses of either *Strongly Agree* or *Agree*. This total is divided by the total number of responses to all of the questions ($150 / 221 = .6787$). **This rounds to a Cohesive Organization rating of 68%.**

How do I know if my factor ratings are good or bad?

The DEOCS team is working on a data-driven approach that will help you understand what a rating means for an organization's likelihood of positive or negative outcomes. In the meantime, we recommend using the following strategies to help put your *Cohesion* ratings into context and understand whether actions should be taken to address low favorable ratings:

1. If applicable, review the information in the alert icon  to see if your *Cohesion* ratings are called out. This icon would appear in the dashboard and in the PDF reports if your unit's/organization's favorable rating for *Cohesion* is very low compared to all other units/organizations that completed a DEOCS. You should consider taking action to raise this rating.
2. Look at the Item Summary table on the *Cohesion* details page to understand which questions may be driving your favorable rating. This factor is created from two questions, so compare the percentage of participants who selected *Strongly Agree* or *Agree* to each question. If there is one question that has a lower percentage of participants who selected *Strongly Agree* or *Agree*, this question is the one driving a lower favorable rating and could help you pinpoint more specific actions to increase your favorable rating for *Cohesion*.
3. Examine the bar graph showing the overall favorable rating for *Cohesion* and the favorable ratings by various demographic groups. Look at each group's rating in relation to the overall unit/organization rating. If any groups have particularly low favorable ratings for *Cohesion*, this could help you plan actions to increase your favorable rating within areas of your organization.
4. If applicable, review your *Cohesion* favorable rating trends over time. You can view these trends by clicking on this icon  in the dashboard; they also appear as a table in the PDF reports. Take note if your ratings are going down over time. You may need to take action to reverse this trend.

Factor Improvement Tools for Cohesion

The following resources may be useful as you make plans or take action to improve your *Cohesion* ratings. Each resource listing contains a description, a link, and the relevant audience. Some resources may be more appropriate for the commander/leader, unit/organization personnel, survey administrators, or the Integrated Primary Prevention Workforce (IPPW); the relevant audience advises which group may benefit from use of the recommended resource.

- **Building Team Cohesion in Military Units.** Provides tips on building cohesion within military units.
<https://www.hprc-online.org/total-force-fitness/gotmysix/resources/building-team-cohesion-military-units>
Audience: Commander/Leader, unit personnel, survey admin, IPPW
- **Team Building and Unit Cohesion.** Relates cohesion to team building in military units.
[https://www.armyupress.army.mil/Journals/NCO-Journal/Archives/2019/October/Team-Building-and-Unit-Cohesion/%20\(opinion%20piece,%20but%20still%20think%20it%20works/](https://www.armyupress.army.mil/Journals/NCO-Journal/Archives/2019/October/Team-Building-and-Unit-Cohesion/%20(opinion%20piece,%20but%20still%20think%20it%20works/)
Audience: Commander/Leader, unit personnel, survey admin, IPPW
- **Transformational Leadership and Group Potency in Small Military Units.** Journal article about transformational leadership and cohesion as it relates to military readiness.
<https://www.sciencedirect.com/science/article/pii/S1576596216300147>
Audience: Commander/Leader, survey admin, IPPW
- **Unit Cohesion and Military Performance.** Report on military performance and unit cohesion.
https://www.law.berkeley.edu/files/csls/Unit_Cohesion_and_Military_Performance_Ch5_MacCoun_Hix.pdf
Audience: Commander/Leader, unit personnel, survey admin, IPPW

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