

Research Report

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**A Comprehensive Measure of
Warmongering as a multifaceted but primarily unitary trait;
Response sets as a concern in questionnaire construction.**

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Introduction.

This study was conducted to explore two main issues, the detailed content of the trait of warmongering and whether including con-trait items in questionnaire measures of such a trait is necessary to avoid possible response-set bias.

Warmongering:

Warmongering as a psychological trait is defined by the author in this study as the psychological predisposition advocating the development and use of military weaponry to aggressively dominate other groups and nations. Prior studies by the author have demonstrated that this trait can be measured reliably with questionnaire statements reflecting thoughts, beliefs and attitudes of this disposition (McConochie, a, b, c). These studies consistently demonstrate positive correlations between warmongering and religious fundamentalism and with anti-social traits such as right wing authoritarianism, social dominance orientation, social disenfranchisement and violence-proneness. Warmongering correlates negatively with endorsement of human rights, a positive foreign policy, and public democracy serving the best interests of the community overall. In these studies the author has used warmongering scales of 10, 20 and 32 items.

Factor analysis and discussion with other scientists prompted the author to build a more elaborate nine-facet theory of the content of this trait. Specifically, the refined theory proposes nine psychological facets represented by a new 44-item questionnaire that includes items from the 10-item warmongering scale mentioned above. Specifically, the new theory proposes nine facets, as follow:

1. Admiration for military warmongers as aggressive, invasive warriors.
 9. I admire Adolph Hitler, Chancellor of Germany during World War II.
 18. I admire ancient military leaders, such as Genghis Kahn, Attila the Hun, and Alexander the Great.
 27. I admire powerful and clever persons such as Osama Bin Laden and persons who have assassinated political leaders to promote their causes.

34. I admire military subordinates who carry out their orders to kill and exterminate prisoners and civilians, even if breaking some international conventions or laws.
2. Wanting personal military power.
1. I would like to be the leader of a nation with much military power.
 10. I would enjoy being a military commander, designing battle plans.
 19. It is more honorable to serve one's nation as a warrior in combat than as an anti-war protester.
 35. I find military parades exciting and inspiring.
 43. War is a noble and glorious activity.
3. Interest in promoting the development of military might.
2. I endorse organizations that fight for civilian rights to have guns.
 11. Some industries of a nation should always stay strong by building and selling military weapons even in times of peace.
 20. A wise nation will spend more money for a strong military than for a national health care program.
 28. The military is the most important aspect of any government.
 36. A good reason to promote athletic competition and scouting programs in youth is to ready them for military combat.
 40. The government should keep the importance of a strong military on civilian minds, as by sponsoring daily television programs that feature victorious war films and programs.
4. Harshly opposing and suppressing opposition to one's personal military power within one's own group.
3. If I were the leader of a nation, I would be willing to take strong measures to repress persons in my country who opposed me.
 21. If necessary to maintain my power as a leader, I would be willing to imprison and execute anyone I thought was a traitor.
 29. A strong military leader must be ruthless in demanding obedience from his subordinates.
 37. I admire powerful national leaders who eliminated others in their nation on their way to power.
5. Taking pleasure in watching, reading about or participating in hostile actions of a military or quasi-military nature.
4. I think I would enjoy flying a military jet airplane or tank and shooting its cannons.
 13. I like to read or hear true stories of military battles.
 22. I like to watch war movies.
 30. I like to play military games, such as video games involving shooting enemies.
 38. I would like to learn more about how to make bombs or how military weapons work.

6. Endorsing aggressive military actions.
 5. President Bush was justified to invade Iraq to track down Saddam Hussein.
 14. A nation would be justified in invading other nations to stop them from building up powerful weapons.
 23. Nazi Germany was justified in invading Russia in World War II.
 39. Japan was justified in invading the Philippines in World War II.
 41. Military forces in Israel and Palestine have been well justified in invading and killing each other and civilians.

7. Endorsing past warmongering nations.
 6. The Roman Empire was justified in invading neighboring countries to expand its power.
 15. Centuries ago the Spaniards were justified in killing natives in Central and South American to get their silver and gold.
 24. The ancient Inca and Aztec nations were justified in invading neighboring countries to build their power.
 31. The United States was justified in killing off Native American Indians and taking control of their land.

8. Endorsing war to dominate other peoples, reduce other populations, kill inferior people, or beat competitors.
 7. Using captured enemies for slave labor in time of war is a wise strategy.
 12. Military leaders who start wars and kill many civilians should not be tried as war criminals.
 16. Ethnic cleansing to rid the world of undesirable types of people, is a justified aspect of war.
 25. During war, killing civilians in enemy countries to lower morale is a reasonable military action.
 32. The United States should have stuck it out in South Vietnam until it won the war.

9. Endorsing war for assuring access to natural resources.
 8. My national government should do what best serves our nation's interests, at the expense of other nations, enforced by military action if necessary.
 17. War is God=s and nature=s best way of deciding who should survive.
 26. It is better to have a powerful military than powerful trade agreements.
 33. Our country should go to war whenever we think our access to resources in other countries is threatened.
 42. A good reason for our nation going to war is to kill enemy soldiers and civilians in order to reduce population numbers so there are more resources for the people of our nation.
 44. A good reason for our nation going to war is to assure access to whatever raw materials, such as oil, we need from other nations.

Warmongering hypotheses:

1. The new, expanded 44-item warmongering scale will consist of all items loading on a single primary factor and items loading on one or more of several secondary factors, perhaps as many as nine. The content of the items will thus support the conceptualization of warmongering as a fundamentally unitary trait with several facets, much as human intelligence is a reliably measurable trait with many facets.
2. The 44-item scale will correlate positively with questionnaire measures of other anti-social traits and negatively with measures of pro-social traits, as in prior studies by the author.

Response bias:

Controversy exists among psychologists as to the possible influence of response sets in persons taking questionnaires consisting only of pro-trait items, such as marking all items high or all low for reasons unrelated to the content of the items and thus artificially increasing reliability of scales and correlations between scales (cf Altemeyer, 1981). While concerns about some forms of response bias were laid to rest decades ago by Len Rorer (Rorer, 1964), it has been found that con-trait items that appear to the item writer to be good items may not correlate significantly with pro-trait items measuring the trait in question. This poor correlation has been interpreted to mean that the respondents to the items, the persons taking them in questionnaires, are not responding to the content of the con-trait items but are responding from some sort of response bias.

It has been difficult for the present researcher to follow this logic. Why would a researcher retain con-trait items that don't correlate significantly and negatively with the pro-trait items? How could they be expected to add to the measuring instrument? And if respondents are not responding to the content of con-trait items, why would they be responding to the content of the pro-trait items in the same scale?

The reason that questionnaires with con-trait items often have lower reliability may be that con-trait items are difficult to write and when poorly written don't necessarily measure the exact opposite of the trait measured, *in the eye of the respondent*. Therefore, if a respondent denies that he endorses a con-trait item, he is not necessarily saying he thereby is endorsing the trait the researcher is trying to measure.

It is possible that scales with con-trait items have lower reliability than their all-pro-trait-item counterparts not because the pro-trait version is artificially higher in reliability but because the con-trait version is unnecessarily *lower* in reliability because its con-trait items are simply poorer measures of the trait, and thus result in a less reliable scale.

In short, a researcher may be more successful measuring what he wants to measure rather than measuring its opposite and assuming that if the opposite is denied that the trait is present.

To explore this issue, the present study included two versions of the 44-item warmongering scale, the first with all pro-trait items, and the second with half con-trait items. Then subjects were asked in six questionnaire items which version they found more user friendly, easier to take and less confusing.

Response bias hypotheses:

3. Respondents will find the all pro-trait version of the scale less confusing, more user-friendly and easier to take than the half-con-trait version of the scale.

It is hypothesized that con-trait items require an extra step when answering a questionnaire item. When answering an item in Likert scale format, one must decide *which way to mark an item*, agree or disagree to indicate one's attitude about the underlying trait measured. If all items are pro-trait, then the respondent after a few items develops a sense of what it means to mark the items high versus low, agree versus disagree. If con-trait items are mixed in with pro-trait items, the respondent must switch response direction to remain consistent in reporting his/her attitude. He must figure out "which way is up on this item?" before he responds to it. This can add confusion particularly if negative words are used to create the con-trait item, e.g. "No, None, Never". Double negatives are harder to understand. One has to disagree with a negative statement to indicate agreement with the belief measured. Conversely, one must agree with a negative statement to indicate disagreement with the belief.

4. The con-trait items, reverse-scored, will correlate significantly and positively with the pro-trait items, implying that they are well written and do indeed reflect the opposite of the trait measured.

5. If the con-trait items correlate significantly with the pro-trait items, and form a reliable measure of the trait, the half-con-trait measure of warmongering will be as valid as the all-pro-trait version in terms of their correlations with other variables. The all-pro-trait version will not be more valid than the con-trait version.

6. Data will support the notion that respondents are responding to the content of con-trait items and are not responding to any significant degree in a merely mechanical fashion independent of the content.

Method.

A 201-item research instrument was prepared, including demographic variables, voting behavior in the 2004 Presidential election, political party affiliation, etc. and measures of the following:

5 items: U.S. should get out of Iraq

5 items: Endorsement of 5 types of government, "Pro-democracy".

6 items: Endorsement of increased citizen participation in government decisions.

4 items: Endorsement of a positive foreign policy.

4 items: Endorsement of resource conservation.

- 2 items: People should cooperate or compete.
- 30 items: Religious beliefs (fundamentalism and kindly religious beliefs).
- 3 items: Religiousness.
- 6 items: Personal valuing of religion.
- 16 items: Human rights endorsement.
- A. 44 items: Warmongering endorsement, all pro-trait items.
- B. 44 items: Warmongering endorsement, 21 con-trait items.
- 6 items: Test batch preference (A or B, above).
- 4 items: Political party type preferences.
- 5 items: Interest in a new type of political party serving the best interests of the community overall as opposed to special interest groups.

This instrument was administered to 42 community college students over the Internet from the author's web site politicalpsychologyresearch.com. The students earned school course credit simply for participating. They received their personal scores on the traits measured immediately after completing the questionnaire, via the author's web site. Their scores were kept confidential. Their professor only received the list of persons who participated. The students also received electronically a 3-page summary of the study findings for their edification. The process went very smoothly, overall, with no problems suggesting complications that would distort research data gathered in this manner.

Results.

Warmongering:

All pro-trait item version.

Hypothesis #1 related findings:

The 44-item warmongering scale had an alpha reliability of .96 in this study. The trait did not correlate significantly with age, gender or years of education.

All 44 of the items in the pro-trait version of the warmongering scale correlated at the .01 level or better with the total score for the 44 items. Factor analysis calling for a single factor with Varimax rotation yielded a factor that accounted for 41 percent of the variance. All but four of the 44 items correlated .50 or higher with this factor. The others correlated .24, .39, .43 and .46.

When several factors were called for, 11 factors emerged with Eigenvalues greater than 1.0, the second and subsequent factors each accounting for 9 percent or less of variance. The 11 factors collectively accounted for 83% of the variance. Each of these factors had loadings of .50 or higher for one or more of the 44 items, as presented below. 40 of the items loaded on only one factor. Item 8 loaded on two factors.

Warmongering Scale Facet Factors

	Factor label	% of variance	Load- ing	Item core meaning.
1	General warmongering endorsement	41	.64 .71 .62 .54 .80 .59 .76 .64 .67	5. Bush was justified invading Iraq 12. Warmongers should not to be tried as war criminals. 14. Preemptive war to prevent weapons buildups is okay. 18. Ancient warmongering leaders admired. 19. Warrior service to nation is honorable. 20. Military spending is better than health care spending. 26. Military spending better than other international relations spending. 28. Military most important aspect of government. 35. Military parades exciting and inspiring.
2	Nationalistic warmongering	9	.69 .52 .72 .85 .87 .71	6. Roman Empire justified in warmongering. 8. My nation at expense of other nations. 23. Nazi Germany was justified invading Russia. 24. Incas and Aztec warmongering justified. 39. Japan warmongering justified. 41. Israel and Palestine warmongering justified.
3	Selfish cruelty	6	.74 .59 .62 .51 .54 .69	9. Admiration for Hitler. 25. Killing civilians in war to lower morale. 33. War if access to resources threatened. 36. Athletics and scouting to prepare combatants. 37. Leaders who eliminate local competition. 42. War to reduce populations for own gain.
4	Vicarious warmongering pleasure	5	.78 .83 .82	13. Enjoy reading true war stories. 22. Like to watch war movies. 30. Like to play war video games.
5	Killing helpless, weak.	4	.76 .59 .74 .53	15. Spanish warmongering for gold endorsed. 27. Political assassins endorsed. 31. Killing off American Indians endorsed. 34. Military killing of prisoners endorsed.
6	Weapon love.	4	.81 .85 .62	2. Civilian gun access endorsement. 4. Enjoyment of fighters/ shooting cannons. 38. Interest in bombs and weapons.
7	Vengeance.	3	.69 .72	21. Imprison and execute traitors. 32. U.S. should have stuck it out in Vietnam
8	Battle planning	3	.71	10. Would like to design battle plans.
9	Nationalism	3	.77 .51	1. Would like to be powerful national leader. 8. My nation at expense of other nations.

10	Cruel self-aggrandizement	3	.67 .53 .50	7. Slave labor okay in time of war. 29. Ruthlessness in leaders okay. 44. War for resources we need.
11	Survival of fittest	2	.72 .55	16. Ethnic cleansing endorsed. 17. War for natural selection.

This factor analysis data is considered to support hypothesis #1, that warmongering is a psychological trait that is in one sense uni-dimensional and in another sense multi-faceted. Items in a measure of the trait all are tightly interrelated, justifying the trait as a unitary psychological concept, "warmongering" or "warmongering endorsement". Detailed analysis of the trait reveals that it is made up of many facets that spring logically from the central concept.

Note: The 10-item warmongering scale, included from prior studies, correlated .86 with the other 34 items in the all pro-trait measure of warmongering. The Alpha reliability of the 10-item scale was .88 in this study

Hypothesis #2 related findings.

The trait of warmongering correlated with the other traits measured as follow:

Pearson Product Moment Correlations between Warmongering and other Traits.

Correlation	Trait
-.42**	U. S. Should get out of Iraq
-.27	Citizens should participate more directly in government decisions.
-.56**	The U.S. should have a positive, helpful foreign policy.
-.38*	Democratic forms of government are better than authoritarian ones.
-.61**	Natural resources should be conserved and recycled.
-.67**	People should cooperate more than compete with each other.
.31*	Religious fundamentalism.
-.29	Kindly religious beliefs.
-.07	Religiousness.
.01	Personal valuing of religion.
-.54**	Human rights endorsement.
-.31*	Interest in a new type of political party serving the community overall.
.34*	Voted for Bush in 2004
-.38*	Voted for Kerry in 2004

All of the statistically significant correlations between warmongering and the other traits are consistent with findings from prior studies, in support of hypothesis #2. Persons higher on warmongering tend to be higher also on religious fundamentalism but lower on a wide range of pro-social traits, such as endorsement of human rights and a positive foreign policy. Higher warmongering scores are associated with voting for Bush (.34*) rather than Kerry (-.38*) in 2004.

Response Set Issues.

The second major focus of this study was questions about the best way to measure traits in general. There is debate in psychology about how important it is to include in questionnaires items that measure the opposite of what you want to measure, to guard against persons getting high scores on the trait by simply marking things high in a mechanical fashion without paying attention to the item content, or, conversely, getting low scores on the trait by marking everything low. The present study presented the warmongering questionnaire items twice. The first version consisted of all pro-trait items (endorsing the items meant you endorse warmongering attitudes). Then, a second version was presented, with half of the 44 items being “con-trait”, measuring the opposite of warmongering attitudes.

Then, respondents were asked in 6 questions which version they found easier, more user-friendly.

Hypothesis #3 related findings.

The results are presented below of data on which form of test the users preferred:

Percent of Persons Agreeing or Strongly Agreeing with Questionnaire Format Options

Percent who agreed or strongly agreed with item.	Item. The first batch was all pro-trait items. The second batch contained 21 con-trait items (every other item).
64.2%	"The first batch was easier to complete."
16.7%	"The second batch was easier to complete."
16.7%	"The first batch was more confusing."
62.4%	"The second batch was more confusing."
56.1%	"The first batch was more user friendly."
19.1%	"The second batch was more user friendly."

This data is interpreted to mean that the majority of participants clearly preferred the first version of all pro-trait items. This supports hypothesis #3.

Hypothesis # 4 related data.

Another question debated among psychologists is why questionnaires with con-trait items tend to have lower reliability than questionnaires with all pro-trait items. The present researcher thinks it is because con-trait items are often confusing, thus serving as poorer measures of the trait in question. Researchers agree that writing good con-trait items tends to be rather difficult.

In the present study, the con-trait items turned out to be relatively good ones. 16 of the 21 con-trait items correlated significantly with the total score for the 23 pro-trait items in the same scale. The mean correlation for all 21 con-trait items, reverse-scored, was .42.

This is considered to support hypothesis #4.

However, the corresponding mean for the correlations of the 21 pro-trait items that these con-trait items were designed to measure "backwards" was much higher, .60. This is the correlation between the items and the total score made up of the remaining 23 pro-trait items in the all pro-trait first version of the 44-item warmongering scale.

This data is considered to indicate that the con-trait items, good as they were, were not as good for measuring warmongering as the original pro-trait items they were carefully written to replace in a con-trait (opposite) direction.

Hypothesis #5 related data.

In spite of the lower correlation between the con-trait items compared to their opposites (.42 versus .60, immediately above), the reliability of the con-trait version of the test was .95, virtually the same as in the pro-trait version (.96). As a result, we might expect both versions of the test to be equally valid. Indeed, this is the case, as indicated in the correlations below:

Pearson Product Moment Correlations between Two Versions of the 44-item Warmongering Scale and Other Traits

Trait	All pro-trait version.	Half con-trait version.
U.S. Out of Iraq	-.42**	-.47**
Citizen particip. in government	-.27	-.30
Positive foreign policy	-.56**	-.57**
Pro public democracy	-.38*	-.35*
Resource conservation	-.61**	-.58**
Cooperation versus competition	-.67**	-.67**
Religious fundamentalism	.31*	.40**
Kindly religious beliefs	-.29	-.28
Religiousness	-.07	.08
Personal valuing of religion	.01	.08
Human rights endorsement	-.54**	-.59**

These results are considered to support hypothesis #5. The half-con-trait version of the test is as reliable and valid as the pro-trait version. The all pro-trait version does not yield "artificially" or artificially higher reliability or validity than its corresponding half-con-trait version. Response bias does not appear to be significantly increasing the reliability or validity of the all-pro-trait version over the half-con-trait version.

Hypothesis #6 related information.

Hypothesis #6 was: Data will support the notion that respondents are responding to the content of con-trait items and are not responding to any significant degree in a merely mechanical fashion independent of the content.

The students participating in this study clearly seemed to be responding to the content of the con-trait items. They consistently judged the half-con-trait version of the test less desirable than the all-pro-trait version. The only difference between these versions was the content of half the items. If they did not respond to the content, they would not have perceived this difference or reported consistently on it.

Secondly, if they had not responded to the content of the con-trait items, these items would have correlated zero with the pro-trait items in the test. They correlated significantly with the pro-trait items.

Thirdly, the students seemed to have responded to all of the content in all of the traits measured in the study. The correlations between most traits are not zero. Most of them are significant and in directions consistent with many prior studies.

Fourthly, the range of scores between the con-trait items was larger than for the pro-trait items. 16 of the 23 pro-trait items ranged less than 5 points, with Strongly Agree missing, consistent with the fact that most people get low scores on warmongering. For all but one of the 21 con-trait items, however, the distribution of scores ranged from 1 to 5, consistent with the fact that the students found the con-trait items more confusing.

Finally, it is difficult to imagine how or why students would selectively ignore the content of every other item in the half-con-trait version of the scale, ignoring the content of the con-trait items only. They had reason to respond to the content because they were going to receive personal scores on the questionnaire traits, which they did. Thus, it is reasonable to assume they responded to the content to get meaningful personal scores, if for no other reason.

Conclusion.

The several hypotheses of this study seem supported. Warmongering appears to be a robust and meaningful psychological trait with tightly interrelated dimensions or facets that flow logically from a core definition of the trait.

Response bias does not seem to affect scores on this trait regardless of whether it is measured with all pro-trait items or half con-trait items. Indeed, the evidence suggests that for the sake of building and maintaining a good attitude in research subjects, presenting questionnaire items in an all pro-trait format or primarily pro-trait format is preferable to a half-con-trait format. This would seem especially important when conducting studies that require very long questionnaires, as did the present one (over 200

items). Maintaining good rapport with research subjects helps maximize motivation and concentration in lengthy projects.

As long as research questionnaires are administered to groups of persons who are interested and motivated in the issues studied, it seems more reasonable to expect them to be responding to the content of the items rather than in terms of some possible conscious or subconscious response bias unrelated to the content.

Until and unless data suggests strange and unexpected distortion of responses to a given questionnaire, it seems that researchers should be more concerned about alienating research subjects with confusing and unfriendly questionnaire formats involving con-trait items than about guarding against amorphous response set issues.

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