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THE EFFECTS OF CONSPIRACY THEORY SPREAD BY LEADERS DURING TIMES OF WAR: THE ROLE OF GENDER ON FOLLOWER PERCEPTIONS OF LEADER EFFECTIVENESS AND WARMTH

Հովհաննես Զիջյան

ՊԱՏԵՐԱԶՄԻ ԺԱՄԱՆԱԿ ԱՌԱՋՆՈՐԴՆԵՐԻ ԿՈՂՄԻՑ ՏԱՐԱԾՎՈՂ ԴԱՎԱԴՐՈՒԹՅԱՆ ՏԵՍՈՒԹՅՈՒՆՆԵՐԻ ԱԶԴԵՑՈՒԹՅՈՒՆՆԵՐԸ ՀԵՏԵՎՈՐԴՆԵՐԻ ՎՐԱ. ԱՌԱՋՆՈՐԴԻ ՍԵՌԻ ԱԶԴԵՑՈՒԹՅՈՒՆԸ ՆՐԱ ՎՐԱ, ԹԵ ԻՆՉՊԵՍ ԵՆ ՀԵՏԵՎՈՐԴՆԵՐԸ ԸՆԿԱԼՈՒՄ ԱՌԱՋՆՈՐԴԻ ԱՐԴՅՈՒՆԱՎԵՏՈՒԹՅՈՒՆԸ ԵՎ ԶԵՐՄՈՒԹՅՈՒՆԸ

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THE EFFECTS OF CONSPIRACY THEORY SPREAD BY LEADERS DURING TIMES OF WAR: THE ROLE OF GENDER ON FOLLOWER PERCEPTIONS OF LEADER EFFECTIVENESS AND WARMTH

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Abstract

This paper investigates whether the spread of conspiracy theories by leaders during times of war has an effect on perceived leader effectiveness and warmth by followers additionally takes into account the role of gender in this exchange. Analysis demonstrates that the gender of the leader had no significant effect on followers' perceived effectiveness or warmth in all the conditions. Furthermore, conspiracy spread did not have a significant interaction with perceived effectiveness, however, conspiracy-spreading leaders were perceived as less warm compared to neutral leaders. The results led to the conclusion that based on our sample taken from the Armenian population, the leader's gender does not play a role in perceived effectiveness when delivering bad news during times of crisis.

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Introduction

The spread of conspiracy theories has been prevalent for many years: however, recent global events, such as the COVID pandemic, which fueled distrust in governmental institutions have also contributed to a rise of a new wave of conspiracy theory spread². The common definition of conspiracy theories is the conviction that a group of actors meets in secret agreement with the purpose of attaining some malevolent goal³. Conspiracy theories have been used as a tool by leaders who aided them in guiding their subordinates in a potentially reputation-benefiting direction while at the

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² Kuźelewska, Elżbieta, and Mariusz Tomaszuk. "Rise of Conspiracy Theories in the Pandemic Times." *International Journal for the Semiotics of Law - Revue internationale de Sémiotique juridique* 35, no. 6 (2022): 2375.

³ Jeffrey M. Bale, "Political Paranoia v. Political Realism: On Distinguishing between Bogus Conspiracy Theories and Genuine Conspiratorial Politics," *Patterns of Prejudice* 41, no. 1 (February 1, 2007): 45–60.

same time creating societal challenges, pitting humans against humans and putting their words and ideologies into irreconcilable conflict⁴. This spread of conspiracy can have diverse effects on the perception that leaders receive: The systematical spread of conspiracy theories by leaders seems to affect followers' perceptions of their competence. A relevant example of such an effect could be seen after Joe Biden's projected victory over Donald Trump in the 2020 elections in the United States. Radical right-wing supporters used social media to fuel potential irrational reasons as to why Joe Biden won the election; one of such accusations was fraud. Despite the lack of proof, the unverified claims circulated online with equal vigor until more than 60% of Republicans were said to think that the election was rigged and that Biden won due to widespread voter fraud⁵. In this scenario, the leader (Donald Trump) did not inhibit these reactions from the public, but did quite the contrary, by fueling such accusations against the Election Board and the Democratic Party to benefit his own perception from his supporters⁶. It seemed that spreading conspiracies did not harm his reputation among his followers nor prevent him from having an impact.

Although previous studies have suggested that people who believe in conspiracy theories may be negatively evaluated (e.g., people tend to perceive those who believe in conspiracy theories as gullible)⁷, other studies have argued that leaders strategically use conspiracy theories as a tool to strengthen their political power⁸. The most recent case worth mentioning is the 2020 Nagorno-Karabakh war, which took place at the height of the COVID pandemic. The media was flooded with misinformation about the virus, and conspiracy theories were taking over the informational landscape⁹.

⁴ Jessica D'Amico, "Conspiracy Theories and Social Media: How Online Disinformation Poses a Formidable Threat to the Livelihood of Contemporary Civilization," Fisher Digital Publications, n.d.(2021).

⁵ D'Amico, "Conspiracy Theories and Social Media", 2.

⁶ D'Amico, "Conspiracy Theories and Social Media", 8.

⁷ Quassim Cassam, "Vice Epistemology," *The Monist* 99, no. 2 (March 21, 2016): 159–80.

⁸ Zhiying Ren et al., "Authoritarian Leaders Share Conspiracy Theories to Attack Opponents, Galvanize Followers, Shift Blame, and Undermine Democratic Institutions," *Current Opinion in Psychology* 46 (August 1, 2022): 101388.

⁹ Karen M. Douglas, "COVID-19 Conspiracy Theories," *Group Processes & Intergroup Relations* 24, no. 2 (February 1, 2021): 270–75.

The physical war between the countries had an added component of digital warfare, encompassing misinformation and informational repression. It needs to be clarified what effects these tactics had on the population of both countries: did the spread of conspiracy theories affect how citizens of both countries viewed their respective leaders? And if yes, was it a negative or positive effect? These are the questions which this research will try to answer. My study will fill the gap of empirical research of conspiracy spread specifically in post-war Armenia by focusing primarily on conspiracy theory spread in the Southern Caucasus area, to evaluate the recent effects of the events which unfolded during the war, and the perceptions which were generated post-war in the Armenian population.

Belief in Conspiracy Theories and Their Evolutionary Basis

Most research associates conspiracy theories with misinformation, mistrust in expertise, political institutions, and propaganda while at the same time distinguishing that epistemic deficiency and often also derogatory and disparaging information are key factors in the concept of a “conspiracy theory”¹⁰. Conspiracy theories have been prevalent throughout human history.

The adaptive conspiracism hypothesis proposes that people inherently possess a functionally integrated mental system to detect conspiracies that, in all likelihood, have been shaped in an ancestral human environment, in which hostile coalitions (conspiracies) that truly existed were a frequent cause of misery, death, and reproductive loss¹¹. A failure to detect potential conspiracies may cost more than an over-recognition, which is the basis of the error management theory. The theory predicts that although over- or underestimating potential conspiracies can be costly if a leader underestimates conspiracies, this will bear higher costs and reputational

¹⁰ Marianna Napolitano and Kevin Reuter, “What Is a Conspiracy Theory?,” *Erkenntnis* 88, no. 5 (September 24, 2021): 2035–62.

¹¹ Jan-Willem Van Prooijen and Mark Van Vugt, “Conspiracy Theories: Evolved Functions and Psychological Mechanisms,” *Perspectives on Psychological Science* 13, no. 6 (September 19, 2018): 770–88.

damage¹². These costs mainly depend on various social parameters, for instance if the majority of the group tends to believe in conspiracies, the several reputational costs, that can be present do not discourage the group from still believing in the conspiracy. In their research, Van Prooijen & Van Vugt proposed that conspiracy theories are directly or indirectly triggered by coalitional aggression and exploitation, and that leaders who are fast to catch on to these potential coalitions receive higher reputational gain in such environments. This reputational gain ties back to the adaptive mechanisms of the group. People tend to be overly cautious, therefore, the over-recognition done by leaders can benefit their reputational gains in times of crisis.

In the same line of reasoning, the current study proposes that leaders who are excellent at detecting potential conspiracies during intergroup conflict may be valued and rewarded with high reputation.

Perceived Effectiveness & Warmth

What is the reputation that leaders get by spreading conspiracy theories? Previous literature has suggested that people perceive others according to two dimensions: competence and warmth¹³. Competence refers to capability and assertiveness, and warmth refers to trustworthiness and friendliness¹⁴. The two-dimensional perceptions may also influence how people evaluate leaders who spread conspiracy theories, contributing to their reputations.

Leader's competence, or leadership effectiveness, is a key factor of organizational success or failure when examining the various factors that lead to organizational success¹⁵. The extend to which a leader is deemed as effective by their followers, seems to attribute to the success or failure of organizational goals. This same model can be translated into a more political realm, when looking at the effectiveness of a country's leader, and whether

¹² Van Prooijen & Van Vugt, "Conspiracy Theories: Evolved Functions and Psychological Mechanisms", 35.

¹³ Susan T. Fiske, "Stereotype Content: Warmth and Competence Endure," *Current Directions in Psychological Science* 27, no. 2 (February 28, 2018): 67–73.

¹⁴ Fiske, "Stereotype Content: Warmth and Competence Endure", 69.

¹⁵ Mitra Madanchian et al., "Leadership Effectiveness Measurement and Its Effect on Organization Outcomes," *Procedia Engineering* 181 (January 1, 2017): 1043–48.

that has an effect on positive outcomes for the respective society and country in the eyes of the followers and the population in general. Leaders who have the ability to detect potential conspiracies may be perceived as more effective because they can manage intergroup conflict. A notable study by Avramov et al. looked at the spread of conspiracy theories as a foreign policy tool in the arsenal of modern hybrid warfare. They argued that the spread of conspiracy theories was an informational aspect in modern warfare, and coined it as “an offensive disinformation dissemination weapon for pressuring political decision-makers in selected countries at critical junctures”¹⁶. Their focus was on Russian foreign policy throughout the last few years, and how the isolation from the west gave Russian government agencies and media outlets a chance to “foster a steady supply of “alternative histories” and outright both ontologically false and effective conspiracy theories”¹⁷. He looked into the public’s perception and reaction to the spread of conspiracy theories and concluded that it did have a positive effect on current leadership’s ratings (effectiveness), especially in times of crises.

Warmth goes hand in hand with effectiveness and has been proven by multiple studies to be a vital factor when considering leadership quality. Leaders who spread conspiracy theories may be perceived as less warm because they communicate hostile attitudes towards members of other groups. Some studies have supported this idea. For example, spreading conspiracy theories conveys qualities such as suspiciousness, paranoia, and narcissism¹⁸. In a study conducted by Uscinski¹⁹ respondents were asked to rate the “QAnon movement” (an American political conspiracy theory) on a feeling thermometer scale ranging from cold to warm. Although the

¹⁶ Kiril Avramov, “By Another Way of Deception: The Use of Conspiracy Theories as a Foreign Policy Tool in the Arsenal of the Hybrid Warfare,” *Information & Security* 39, no. 2 (January 1, 2018): 151–61.

¹⁷ Avramov, “By Another Way of Deception: The Use of Conspiracy Theories as a Foreign Policy Tool in the Arsenal of the Hybrid Warfare,” 154.

¹⁸ Aleksandra Cichocka, Marta Marchlewska, and Mikey Biddlestone, “Why Do Narcissists Find Conspiracy Theories so Appealing?” *Current Opinion in Psychology* 47 (October 1, 2022): 101386. Jan-Willem Van Prooijen et al., “The Entertainment Value of Conspiracy Theories,” *British Journal of Psychology* 113, no. 1 (July 14, 2021): 25–48

¹⁹ Joseph E. Uscinski et al., “Have Beliefs in Conspiracy Theories Increased over Time?,” *PLOS ONE* 17, no. 7 (July 20, 2022).

movement was on the rise, the results showed a decrease in support of QAnon, and cold ratings given to statements made by prominent QAnon leaders. Thus, the current study proposed that conspiracy leaders may be perceived as less warmth than neutral persons.

The Moderating Effect of Gender

Another important factor to take note of is whether the gender of the leader would matter regarding conspiracy theory spread: would a female leader who spreads conspiracy theories be viewed and more effective than a male leader? This is one of the core factors of this research. To understand the mechanisms at play when spreading conspiracy theories during times of war, and how they affect the followers' perceptions of the leader, we need to also consider whether gender would make a difference in this model or not. Theoretical assumptions as to why or why not this might be the case will be discussed to establish a basis for involving gender as a moderator in this exchange between conspiracy theory spread and perceived leader effectiveness and warmth. Gender is an important factor to take note of when looking into spread of conspiracy theories, and this comes from an evolutionary perspective, called the Male-Warrior Hypothesis²⁰. According to the male warrior hypothesis, intergroup conflict gives men the means to access mates, territory, and greater status, and this may have put selective pressures on the psychological mechanisms that drive intergroup aggressiveness. For women, intergroup conflict substantially increases their risk of being sexually assaulted by outgroup men and may therefore create selection pressure for psychological mechanisms that bias women against outgroup men²¹. The gains and costs during intergroup conflict seems to vary for males and females. Due to the energetic costs, such as caring for the young, it is expected that females will tend to be involved in managing collective movement to locate food and safety to maintain their current and

²⁰ Melissa M. McDonald, Carlos Navarrete, and Mark Van Vugt, "Evolution and the Psychology of Intergroup Conflict: The Male Warrior Hypothesis," *Philosophical Transactions of the Royal Society B* 367, no. 1589 (March 5, 2012): 670–79.

²¹ McDonald, "Evolution and the psychology of intergroup conflict", 676.

future reproduction²². On the other hand, males tend to compete for potential fertile partners, which is a less divisible resource than food²³. Following from this, intergroup conflict possesses an opportunity for males to gain potential fertile mates, and this evolutionary basis of competition puts higher pressure on male leaders during times of crisis, bearing in mind the potential benefits and losses which male leaders can inherit following success or defeat.

With this theory in mind, it can be said that compared to a female leader, a male leader who fails to detect potential conspiracies may be viewed as less competent/effective in the eyes of the followers and can lead to lower ratings of leader effectiveness for male leaders.

The Current Study and Hypotheses

The goal of this research is to establish a model of the effect of conspiracy spread during times of crisis, and to establish whether the gender of the leader makes a difference in perceptions of leader effectiveness or not. Taking Armenia as the population, the research will also investigate whether the 44-day war in 2020 created a lasting perception in the Armenian public when judging a leader based on conspiracy spread. When taking into account the amount of information that is spread virtually to modern society, and the major points of vulnerability within people to fall victims to misinformation, the current state of the world creates a dangerous climate where the use of such techniques and the spread of conspiracy theories can act as a tool in boosting leader ratings and people's perceptions of the world, more specifically during war, and of their enemies. This study's main goal is to determine whether the spread of conspiracy theories during war does, in fact, affect people's perceptions of leader effectiveness and warmth or not. Hence, the research question is as follows: Does the spread of conspiracy theories by leaders during times of war affect the followers' perceptions of leader effectiveness and warmth? And is this relationship stronger for male leaders or female leaders?

²² Jennifer E. Smith et al., "Sex Bias in Intergroup Conflict and Collective Movements among Social Mammals: Male Warriors and Female Guides," *Philosophical Transactions of the Royal Society B* 377, no. 1851 (April 4, 2022).

²³ Smith et al., "Sex Bias in Intergroup Conflict and Collective Movements among Social Mammals: Male Warriors and Female Guides," 5.

Our first hypothesis (H1) states that the spread of conspiracy theories during times of war has a positive effect on perceived leader effectiveness. Our second hypothesis (H2) states that the spread of conspiracy theories during times of war has a negative effect on perceived leader warmth. And finally, our third hypothesis (H3) states that there is an interaction between gender and spreading conspiracy theories: male leaders spreading conspiracy theories during times of war are perceived as more effective and less warm than female leaders.

Methods

The study was a 2 (male vs. female) * 2 (conspiracy vs. neutral) between-subjects design in which participants were exposed to a spread of a conspiracy theory through either a male or female leader, and one in which they were not exposed to a spread of a conspiracy theory through either a male or female leader. A between-subjects design was chosen to compare the subjects in both conditions, and to determine whether the spread of conspiracy theories would affect participants' perception of leader effectiveness and warmth or not. The spread of conspiracy theories was the independent variable, the gender of the leader was the moderating variable, and leader effectiveness and warmth were the dependent variables.

Participants and Ethics

The sample consisted of people living in Armenia who experienced war firsthand two years ago and are still in a tense situation. The requirement to complete the survey was that the respondents were at least eighteen years old. a priori power analysis was conducted which revealed that to achieve 80% power (a small-to-medium-sized effect, effect size $f = .15$, $\alpha = .05$), a minimum of 199 participants were necessary for the study, by the end of data collection, our sample size exceeded this number, bringing in 202 participants. Participants were recruited via social media and institutions in Armenia such as the Yerevan State University.

The initial data set consisted of 328 responses. After removing participants' responses which did not fit with the goal of this research, the usable data consisted of 202 responses. Participant responses were removed

for various reasons, for instance if a participant did not complete the survey fully, their responses were removed. Responses were also removed if the participant failed the manipulation check of the scenario within the questionnaire. We removed 206 participants because they did not complete the survey until the end, or because they did not answer the items which measured one of our dependent variables (effectiveness and warmth). Lastly, 4 responses removed for failing the manipulation check at the end of the survey.

After cleaning the data, a descriptive analysis was run for the demographic variables of our respondents (Gender, Age, Education Level, Country of Origin). The respondents comprised 70 males (34.7%) and 132 females (65.3%). The ages of respondents ranged from 18 to 76 ($M = 27.90$, $SD = 12.24$). Out of 202 respondents, 81 had completed Secondary Education, 58 had completed a Bachelor's degree, 43 had completed a Master's degree, and 20 had completed a PhD. All 202 were from Armenia.

A statement of informed consent was given to participants at the end of the survey, describing the goal of the research and what was being measured.

Materials

Participants were given a scenario, in which an important outpost has been taken by the enemy on the North side of the border, and the leader of the country publishes a statement. The statement in the conspiracy spreading condition involved talk about potential traitors and spies in the country which resulted in the loss of some territory, both for the male or female leader condition. For example, "As you all know, this morning important military bases in the North borders of our country have been taken by the enemy. The oppositional politicians of this country have tried their best to sabotage our war efforts, and through betrayal and spread of classified military information to the enemy, we were at a disadvantage. We will find those responsible and will deal with them accordingly".

The statement in the condition where the leader does not spread a conspiracy theory, involved an honest and rational response, stating that the loss of the position was due to lack of military personnel on the North side of the country and being outpowered by the enemy on the South. For

example, “As you all know, this morning important military bases in the North borders of our country have been taken by the enemy. Due to heavy military concentration, we had in the South of our country to prevent a breakthrough from the enemy, the North side front saw some trouble in withholding the enemy. we will apply army reordination to benefit our situation accordingly”. In the female conditions, the president’s name was “Lilit” while in the male condition, the president’s name was “David”.

Measurement

To make the questionnaire, Qualtrics was used, where the survey was generated. The dependent variable (leader effectiveness) was measured by the adapted version from Hains, Hogg and Duck and van Knippenberg and van Knippenberg that consisted of 4 items ($\alpha = .838$). ‘The President is very effective as a leader’; ‘The President is a good leader’; ‘The President influences my level of commitment effectively’; ‘Overall I feel a good level of agreement with The President’. A composite perceived leadership effectiveness score was computed by averaging the responses to each item.

Warmth was another variable that was measured to try and understand the levels of leader effectiveness. The scale consisted of 7 items ($\alpha = .759$): “The President is helpful and unselfish with others”, “The President has a forgiving nature”, “The President can be cold and aloof”, “The President is considerate and kind to almost everyone”, “The President likes to cooperate with others”, “The President is generous”, “The President is warm”. Both the Leader Effectiveness scale, and the Warmth scale were measured on a 5-point Likert scale, ranging from “Strongly Disagree” to “Strongly Agree”.

Procedure

The recruitment of participants was done through the spread of a survey generated through Qualtrics within the universities in Armenia, along with the use of social media, which helped us to reach different demographical respondents within Armenia. Participants received a survey via Qualtrics in which they were randomly assigned to one of the following four conditions: A male-spreader condition in which a male leader spreader a conspiracy; A female-spreader condition in which a female leader spreads a conspiracy

theory; A male-neutral condition in which a male leader makes a neutral statement; And a female-neutral condition in which a female leader makes a neutral statement. First, participants were presented with a scenario, then all participants were given the same scales that measured how effective they perceived the leader.

Plan of Analysis

After the data was generated through the survey, firstly, descriptives of the sample were assessed through SPSS, including age, gender, and education level of the respondents. A two-way ANOVA was then conducted to test the interaction between our variables.

Results

Descriptive data

The means, SDs, and correlations are shown in Table 1.

Table 1

Descriptive data: means, SDs, and correlations

	Mean	SD	1	2	3	4	5	6
1. Gender	1.6	.47	1					
2. Age	27.9	12.2	-.08	1				
3. Conspiracy	1.55	.49	-.04	.04	1	.08	-.06	-.25**
4. President Gender	1.59	.49	-.11	.07	.08	1	-.10	-.03
5. Effectiveness	2.57	.95	-.06	-.09	-.06	-.10	1	.55**
6. Warmth	2.65	.70	-.07	-.11	-.25**	-.03	.55**	1

Note. * $p < .05$; ** $p < .01$

Results from ANOVA

A two-way ANOVA was conducted twice, with conspiracy spread being our independent variable, gender of the president being a moderating variable, and effectiveness and warmth being our two dependent variables. Before conducting the two-way ANOVA, certain assumptions had to be met. To ensure the orthogonality of our factors, a Chi-Square test was conducted. The Chi-Square showed non-significant results, $\chi^2(1, N = 202) = 1.248, p = 0.264$, which means that our assumption of orthogonality was met. The second assumption of homogeneity of variances was tested using Levene's

test, the results were insignificant $F(3, 198) = 2.567, p = 0.056$, when testing for the dependent variable “Effectiveness” and therefore the assumption of equal variances was met in this case, however when testing for the dependent variable of “Warmth” the results were significant $F(3, 198) = 3.840, p = 0.011$, therefore violating the assumption of equal variances. Lastly, the Kolmogorov-Smirnov test was used to check for the assumption of normality. The results were significant $D(202) = 0.107, p = 0.001, D(202) = 0.079, p = 0.004$ indicating that the assumption of normality was violated. Although the assumption of normality was violated, this did not hinder us from proceeding with our planned analysis. The reason for continuing the ANOVA analysis even after the assumption of normality was violated, is because due to ANOVA’s robustness towards this violation, especially considering how large our sample size was, and the fact that all the other assumptions were met, it was decided to ignore this violation and to keep going with our planned analysis. Regarding the violation of the assumption of homogeneity of variances, since the violation was only for the dependent variable of warmth, and once again due to ANOVA’s robustness to minor violations of this assumption, this also did not hinder us from continuing with our analyses. However, it is important to note that the level of significance when testing for the dependent variable of warmth could be slightly overestimated, and this will be considered.

After testing all the assumptions, the two-way ANOVA was run. The goal of our analysis was to investigate whether conspiracy spread had a significant main effect on our dependent variables (effectiveness and warmth) and additionally if the gender of the president and conspiracy spread will have a significant interaction effect or not.

Table 2
Tests of Between-Subjects Effects (DV = Warmth)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	6.514 ^a	3	2.171	4.538	.004	.064

Intercept	1376.781	1	1376.781	2877.602	<.001	.936
Conspiracy	6.233	1	6.233	13.028	<.001	.062
President_Gender	.004	1	.004	.009	.925	.000
Conspiracy * President_Gender	.000	1	.000	.001	.976	.000
Error	94.733	198	.478			
Total	1525.020	202				
Corrected Total	101.246	201				

a. R Squared = .064 (Adjusted R Squared = .050)

Table 3

Tests of Between-Subjects Effects (DV = Effectiveness)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3.793 ^a	3	1.264	1.409	.241	.021
Intercept	1288.291	1	1288.291	1435.737	<.001	.879
Conspiracy	.855	1	.855	.953	.330	.005
President_Gender	1.916	1	1.916	2.135	.146	.011
Conspiracy * President_Gender	1.464	1	1.464	1.631	.203	.008
Error	177.666	198	.897			
Total	1517.500	202				
Corrected Total	181.459	201				

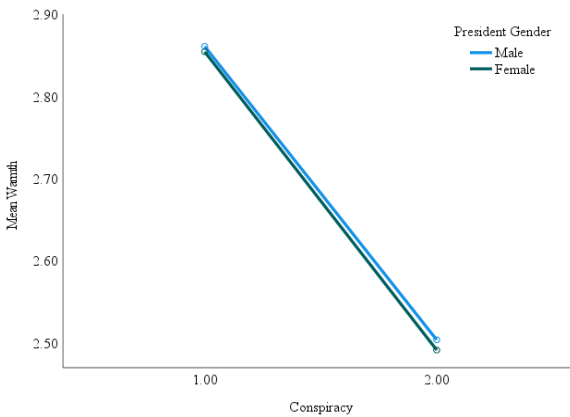
a. R Squared = .021 (Adjusted R Squared = .006)

The results showed no significant main effect of conspiracy spread when running the two-way ANOVA with our variable of effectiveness, $F(1, 202) = 0.953, p = .330, \eta^2 = 0.005$ along with no significant interaction effect

between conspiracy spread and gender of the president ($F(1, 202) = 1.631, p = .203$). For perceived warmth, a significant main effect of the narrative was found: conspiracy spreaders ($M = 2.5, SD = 0.78$) were perceived as less warm than people making neutral statements ($M = 2.85, SD = 0.55$) in all contexts, $F(1, 202) = 13.028, p < .001, \eta^2 = 0.062$. There was once again no significant interaction effect between conspiracy spread and gender $F(1, 202) = 0.001, p = .976, \eta^2 = 0.00$.

Figure 1

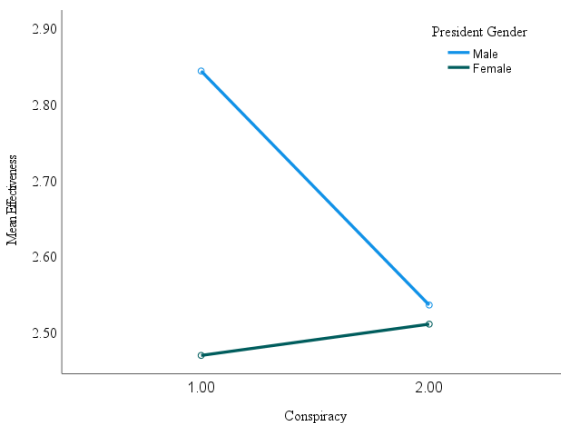
Estimated Marginal Means. Dependent Variable: Warmth



Note: Conspiracy (1 = Neutral, 2 = Conspiracy)

Figure 2

Estimated Marginal Means. Dependent Variable: Effectiveness



Note: Conspiracy (1 = Neutral, 2 = Conspiracy)

Discussion

The primary goal of this study was to investigate whether the spread of conspiracy theories during times of war would affect followers' perceptions of leader effectiveness and warmth, and whether the gender of the president would make a difference. Our findings revealed that a main effect of conspiracy spread was found when evaluating respondents' scores on the perceptions of leader's warmth, however not effectiveness. This finding supports H2 but not H1. Additionally, H3 was also not supported by our findings, there was no significant interaction effect between conspiracy spread and president's gender when evaluating the leader on both warmth and effectiveness, implying that in this sample gathered from the Armenian population, the gender of the president did not affect how followers perceive the leader's effectiveness and warmth.

Regarding the main effect of conspiracy spread on perceived warmth, our findings fall in line within the common theoretical framework. As mentioned in the introduction of our paper, studies consistently show that the spread of conspiracy theories has negative effects on perceived warmth of the leader when rated by followers ²⁴, our study supports this trend.

However, contrary to the hypotheses, conspiracy leaders were not perceived as more effective than neutral leaders. This finding seemed to not be aligned with our expectations. But, according to the unpublished work of Cao et al., the perceived competence or effectiveness of conspiracy spreaders appeared to be influenced by the presence of intergroup conflict rather than the act of spreading conspiracy itself. Thus, it is unclear whether conspiracy leaders were perceived as more effective than neutral leaders.

The lack of interaction between the gender of the leader can be potentially credited to total distrust within the Armenian population towards governmental figures and rhetorical statements. Since the country experienced loss in the 2020 Armenian-Azerbaijani war and has been infested with corruption since the early 90's post-Soviet era, most political leaders could be associated with distrust and malevolent intent. Many studies have distinguished that distrust in leadership can deeply harm organizations

²⁴ Uscinski et al., "Have Beliefs in Conspiracy Theories Increased over Time?"

and societies, and root themselves within the core of an organizational or societal culture ²⁵, and to combat this, leaders must act as moral agents, working to reconcile with the public and rebuild trust.

Our findings have several theoretical implications. Since leaders in the Armenian political sphere have failed to reconcile with the public and rebuild trust, the population could still feel a strong sense of distrust, hence according to our results, no matter whether it is a female or male leader, and no matter their reasoning for a loss or a disadvantage in a crisis situation (war), respondents from Armenia within this study view the leader as ineffective, since both in the conspiracy spreading and neutral conditions within our scenario, there was a loss of a strategic position, the only difference was that the justification of the loss was blamed externally in the conspiracy spreading condition (sabotage and betrayed from opposition party leaders) , and on the other hand within the neutral condition, it was blamed internally (lack of troops on the North of the border). However, our results showed that regardless of the justification, the president was not deemed as more effective whether they were a male or a female leader, and whether they spread a conspiracy or did not. On the other hand, a conspiracy spreading leader was deemed as less warm, complimenting the notion of perceived leader ineffectiveness and most research on the construct of warmth, since in a crisis, leaders who spread conspiracy theories may be perceived as less warm, due to the communication of hostile attitudes towards members of other groups, and this in-turn can increase followers' feelings of paranoia and suspicion²⁶²⁷. It is important to note, however, that our findings are not sufficient to generalize on the Armenian population as a whole, and the conclusions that we arrived to, are based solely on the specific sample gathered for our research, and certain limitations that were present in our research, could have potentially affected our results.

Our study had multiple limitations which future research should consider when trying to replicate a similar study. Firstly, our sample was

²⁵ Benjamin Kutsyuruba and Keith Walker, “The Destructive Effects of Distrust: Leaders as Brokers of Trust in Organizations,” in *Advances in Educational Administration* (Emerald Publishing Limited, 2016), 133–54.

²⁶ Cichocka, “Why do narcissists find conspiracy theories so appealing?”, 3.

²⁷ Van Prooijen, “The entertainment value of conspiracy theories”, 32.

almost exclusively gathered within Yerevan, the capital of Armenia, and due to this the outskirts of Armenia and other cities were not included in the sample. If a more representative sample was gathered within all of Armenia, the results could potentially differ and give a clearer answer to our research question, due to a greater pool of diverse opinions attributed to demographical differences in each city/region of Armenia. Secondly, although the scenario which was created was vague and did not specify or imply any affiliation to a certain country, there is a possibility that the respondents had existing and prior Armenian leaders in mind due to the war being so recent, and this could have affected the results they gave when evaluating the leader also. For future research, it would possibly be more practical to create a scenario which could specify a country outside of Armenia, and use a scenario which would represent a crisis, but not specifically a war, to prevent associations to recent events which happened in Armenia in this case. Lastly, since the assumption of homogeneity of variances was violated when testing for warmth, the significant result which was received could have been overestimated, however this issue can be prevented next time if the sample size is more representative to the population.

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Appendix A

Scenario

Imagine you are a citizen of a country that is currently participating in a war. News has come out of important military bases being lost on the North side of the country. The leader of the country has come up with the following statement.

Male-Conspiracy

President David's Statement:

“As you all know, this morning important military bases in the North borders of our country have been taken by the enemy. The oppositional politicians of this country have tried their best to sabotage our war efforts, and through betrayal and spread of classified military information to the enemy, we were at a disadvantage. We will find those responsible and will deal with them accordingly”.

Male-Neutral

President David's Statement:

“As you all know, this morning important military bases in the North borders of our country have been taken by the enemy. Due to heavy military concentration, we had in the South of our country to prevent a breakthrough from the enemy, the North side front saw some trouble in withholding the enemy. we will apply army reordination to benefit our situation accordingly”.

Female-Conspiracy

President Lilit's Statement:

“As you all know, this morning important military bases in the North borders of our country have been taken by the enemy. The oppositional politicians of this country have tried their best to sabotage our war efforts, and through betrayal and spread of classified military information to the enemy, we were at a disadvantage. We will find those responsible and will deal with them accordingly”.

Female-Neutral

President Lilit's Statement:

“As you all know, this morning important military bases in the North borders of our country have been taken by the enemy. Due to heavy military

concentration, we had in the South of our country to prevent a breakthrough from the enemy, the North side front saw some trouble in withholding the enemy. we will apply army reordination to benefit our situation accordingly”.

Manipulation Check

“What was the President’s name?”

“What was the reason the President gave, due to which the country has lost some military bases to the enemy?”

**ՊԱՏԵՐԱԶՄԻ ԺԱՄԱՆԱԿ ԱՌԱՋՆՈՐԴՆԵՐԻ ԿՈՂՄԻՑ
ՏԱՐԱԾՎՈՂ ԴԱՎԱԴՐՈՒԹՅԱՆ ՏԵՍՈՒԹՅՈՒՆՆԵՐԻ
ԱԶԳԵՑՈՒԹՅՈՒՆՆԵՐԸ ՀԵՏԵՎՈՐԴՆԵՐԻ ՎՐԱ. ԱՌԱՋՆՈՐԴԻ
ՍԵՌԻ ԱԶԳԵՑՈՒԹՅՈՒՆԸ ՆՐԱ ՎՐԱ, ԹԵ ԻՆՉՊԵՍ ԵՆ
ՀԵՏԵՎՈՐԴՆԵՐԸ ԸՆԿԱԼՈՒՄ ԱՌԱՋՆՈՐԴԻ
ԱՐԴՅՈՒՆԱՎԵՏՈՒԹՅՈՒՆԸ ԵՎ ՋԵՐՄՈՒԹՅՈՒՆԸ**

Հովհաննես Զիջյան

Ամստերդամի ազատ համալսարան

Հասկանալու համար, թե ինչով է պայմանավորված պատերազմական իրավիճակներում առաջնորդների կողմից դավադրապաշտական տեսությունների լայն տարածումը, անհրաժեշտ է ի հայտ բերել և ուսումնասիրել այն գործոնները, որոնց վրա կարող է ազդել այդ տեսությունների կիրառումը՝ այդպիսով հիմքեր ստեղծելով տվյալ երևույթի հարատևման համար: Ադապտիվ դավադրականության (adaptive-conspiracism) հիպոթեզի համաձայն՝ դավադրապաշտական մտածողությունը հարմարվողական մեխանիզմ է, որը գործադրվում է միջխմբային բախումների և կոնֆլիկտների ժամանակ՝ օգնելու խմբի անդամներին գոյատևել: Արդյունքում հնարավոր դավադրությունները բացահայտելու կարողություն ունեցող առաջնորդները ընկալվում են որպես առավել կարող և ընդունակ գործիչներ: Այս ազդեցությունը հատկապես վերագրելի է տղամարդ առաջնորդներին, քանի որ, համաձայն «ռազմիկ տղամարդկանց մասին» հիպոթեզի, միջխմբային բախումների համար պատասխանատվություն կրողները տղամարդիկ են: Ներկայացվող հոդվածում ուսումնասիրվում է, թե արդյոք առաջնորդների կողմից դավադրության տեսությունների տարածումը ազդում է վերջիններիս արդյունավետության և ջերմության վերաբերյալ

հետևորդների ընկալումների վրա: Ի թիվս այլ գործոնների՝ հաշվի է առնվում նաև առաջնորդների սեռի դերը այս փոխազդեցության վրա: Հետազոտությունը իրականացվել է 2x2-ի փորձարարական միջսուրյեկտային մոդելի հիման վրա, որտեղ արդյունավետությունը և ջերմությունը կախյալ փոփոխականներ են, դավադրության տեսությունների տարածումը՝ անկախ փոփոխական, իսկ առաջնորդի սեռը՝ մոդերատոր: Հետազոտության հարցաշարը լրացրել է 220 մասնակից, որոնք գնահատել են առաջնորդների արդյունավետությունը և ջերմությունը մի շարք պատահական ընտրված սցենարներում: Սցենարները ներառում էին՝ տղամարդ-դավադրություն համադրությունը, տղամարդ-չեզոք համադրությունը, կին-դավադրություն համադրությունը, կին-չեզոք համադրությունը: Հավաքված տվյալների վերլուծությունը ցույց տվեց, որ առաջնորդի սեռը որևէ էական ազդեցություն չունի նրա վրա, թե ինչպես են հետևորդները ընկալում առաջնորդների արդյունավետությունը և ջերմությունը: Ավելին՝ դավադրությունների տարածումը նույնպես որևէ էական ազդեցություն չունի արդյունավետության ընկալման վրա, սակայն դավադրություններ տարածող առաջնորդները ընկալվում են նվազ ջերմ, քան չեզոք առաջնորդները: Հայաստանի բնակչության շրջանում իրականացված այս հետազոտությունը թույլ է տալիս եզրակացնել, որ առաջնորդի սեռը որևէ ազդեցություն չունի արդյունավետության ընկալման վրա, երբ առաջնորդը վատ նորություններ է հայտնում ճգնաժամային իրավիճակներում: Սակայն դավադրության տեսությունների տարածման ազդեցությունը ջերմության ընկալման վրա վերահաստատում է տեսության մեջ արդեն իսկ սահմանված այն պնդումը, որ դավադրության տեսությունների տարածումը պատերազմական իրավիճակներում բացասաբար է անդրադառնում հետևորդների կողմից առաջնորդի ջերմության ընկալման վրա: