

Individualism and Digital State Surveillance

QUANTITATIVELY EXPLORING THE RELATIONSHIP
BETWEEN INDIVIDUALIST ORIENTATION AND
ATTITUDES TOWARDS DIGITAL STATE SURVEILLANCE

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Abstract

The main aim of this study was to explore the relationship between individualism and attitudes towards digital state surveillance, through the framework of an individualism-collectivism dichotomy. More specifically, the ways in which privacy concerns and trust in national government influence this relationship were laid out. The sample consisted of 80 Dutch voting-age citizens. The study was conducted using an online survey and analyses included correlation- and moderation analyses. Results showed a positive correlation between individualism and negative surveillance attitudes, a negative correlation between collectivism and negative surveillance attitudes, and no correlation between individualism and collectivism. Privacy concerns were found to be a strong factor in determining negative surveillance attitudes among participants with high individualism-scores. Trust in national government had no moderating effect on the relationship between individualism and negative surveillance attitudes, although this result may have been influenced by poor methodology. Individualism and collectivism may not be part of the same dichotomy, as collectivist and individualist attitudes can be held concurrently. Individualism poses a significant challenge for the surveillance state, on a personal level and perhaps on a societal level, although the latter is not expanded upon in this study. Addressing privacy concerns may help policy makers overcome this challenge. Further research is needed to explore the relationship between individualism and digital state surveillance, and limitations of the current study can be overcome in future research.

Introduction

There has been an increasing trend of digital surveillance expansion by governments of western liberal democracies. In 2023, the Dutch police database “Camera in Beeld” had registered over 314,000 cameras that were accessible by state police. (*DPG Media Privacy Gate*, n.d.). This number posits a significant increase from the number of camera’s that stood registered in 2019, which amounted to 228.530. The use of surveillance cameras by the police is not without reason, as it has shown to increase theft clearance rates and deter crime (Jung & Wheeler, 2023; Priks, 2015). Government CCTV surveillance is one of the more visible forms of a broader trend: the expansion of digital state surveillance apparatuses in western countries (Bonciani, 2020; Rosemain, 2020; Roth et al., 2020). Digital state surveillance refers to the systematic monitoring, collection, and analysis of digital information by governmental or state authorities. Other forms of digital state surveillance include internet monitoring and data collection programs. In the Netherlands, the Intelligence and Security Services Act that was put in place in 2017 granted Dutch intelligence and security agencies expanded powers to intercept and analyze online communication, access databases, and conduct hacking activities. It was cause for nationwide debate and concern about governmental invasion of privacy (De Vries, 2018).

In a liberal democracy, any government act must have sufficient mandate from the voting population. In the case of surveillance expansion, it is therefore relevant for policy makers to have knowledge of what constitutes and influences public concerns regarding government surveillance. The relevance of the collectivism-individualism framework for policy makers became clear during the Covid-19 pandemic, when the individualism-collectivism orientation scale proved a viable determinant in predicting attitudes towards government mandated safety measures. Individualism was found on multiple occasions to be correlated negatively with attitudes towards- and adherence to newly imposed government safety measures (Card, 2022; Lu et al, 2021; Maaravi et al., 2021; Mehta et al., 2023). If these results were to be extrapolated to a post Covid-19 context, the trend in increased digital state surveillance becomes hard to ignore. It raises questions as to whether attitudes towards digital state surveillance are impacted by similar cultural and individual determinants that played a role in the pandemic.

One individualistic value that seems to be particularly relevant in this context is a general mistrust of authority, since government surveillance is by definition an extension of government authority (Nickerson, 2023). In the Netherlands, around April 2020, trust in the Dutch government by voters was at an all-time recorded high of 70 percent. By September 2021, this number had plummeted to less than 30 percent. Trust in local government also

decreased, albeit less drastically than in the national government. The study does not make definitive conclusions on the exact causes of this decline in trust (Engbersen et al., 2021).

Königs (2022) also discusses the erosion of privacy associated with government surveillance as a cause of distrust and feelings of vulnerability among the populace. Following this reasoning, the massive expansion of the Dutch government surveillance apparatus during the pandemic period could be pointed to as a culprit for the decrease in trust. Interestingly enough, however, the study by Engbersen et al. found that that the decline in trust was not directly correlated to the government's Covid-19 policy, but was associated with the child benefits scandal and long government formation talks (Engbersen et al., 2021). The assumption throughout literature seems to be that a distrust of authority is an intrinsic part of individualism (Nickerson, 2023). Even if this is the case, the sudden nationwide decrease in political trust in The Netherlands suggests that it is impacted by multiple external factors (Engbersen et al., 2021). In the context of the current study, it might therefore be helpful to look at it as a separate variable. This separation is necessary to explore nuances in the relationship between individualism, trust in government and attitudes towards surveillance. In the context of surveillance attitudes, trust in authority might play a different role than the other attitudes that constitute an individualist orientation.

If it is indeed the case that political trust moderates the negative effect of individualism on surveillance attitudes, it would demonstrate that it is not the presence of surveillance itself that is problematic for individualistic oriented persons, but mainly a distrust of the authority that wields them. For policy makers, this would emphasize the importance of increasing government trust in order to maintain support for safety measures that are deemed necessary. By studying trust in government as a variable separate from individualism, nuance is added to the discussion about the seemingly opposing ideas of liberalism and state surveillance (Stahl, 2016).

The current paper has several aims. Firstly, it aims to further explore whether the collectivism-individualism framework has sufficient power to explain attitudes towards digital state surveillance. Its main theoretical focus will be on individualism, since individualist orientation appears to be more explicit pertaining its attitudes towards surveillance, as will be expanded upon in the theory section of this paper. Collectivism is, however, not omitted from the current study, as it is part of the same dichotomy as individualism and it will be interesting to see whether its effects on surveillance attitudes invert those associated with individualism. To understand the purported relationship between individualism and surveillance attitudes, the research will examine both political trust and privacy concerns, to find out more about their

role in this relationship. Although a significant part of this study, collectivism is omitted from the research question, since the construct of collectivism mainly serves to espouse the individualism-question in the current study.

Research Question: Is there a relationship between individualism and attitudes towards digital state surveillance, and what is the role privacy concerns and political trust in this relationship?

Theory

The framework of individualism and collectivism is a foundational theory within social psychology that distinguishes a dichotomy in (cultural) attributes that shape individuals' values, beliefs, attitudes and behaviors (Hofstede, 2001; Singelis et al., 1995; Triandis, 2001; Schwartz, 1994). While it is useful for cultural-scale analyses, the framework also serves as a lens through which to understand human behavior and personality. The dichotomy between collectivism and individualism can be applied to various aspects of human behavior. Collectivistic oriented individuals tend to conform to societal expectations, maintain harmony within their social circles, and prioritize the well-being of the group over their own interests. They tend to rely on indirect communication, seek advice from close others, and exhibit a strong sense of duty and hierarchy within their ingroup structures. Individualistic oriented individuals prioritize personal freedom, self-sufficiency, and the pursuit of individual success. They are more likely to engage in competitive behaviors and prioritize autonomy and independence over group cohesion. With this perspective in mind, it makes sense that most critique of increasing government surveillance stems from an individualistic (and liberal) worldview (Stahl, 2016). It should be noted that the term 'liberal', especially in the context of politics, has multiple meanings. When Stahl talks about liberal critiques of surveillance, he seems to refer to classical liberalism, a political philosophy that prioritizes individual freedom of citizens (Buchanan, 2000).

Apart from this precedent, there are various other reasons why individualistically oriented persons might hold a negative view of government surveillance. Research shows that people who score high on individualism, as opposed to collectivism, are inclined to view themselves as independent and autonomous (Marceta, 2023; Nickerson, 2023). The presence of surveillance cameras in particular can be perceived as a tool for controlling or modifying behavior, leading to a sense of being constantly monitored and judged. This perception runs counter to the individualist values of, e.g. independence and autonomy. More research shows privacy to be an important value for individualistic oriented people, meaning perceived invasions of privacy might be met with animosity (Kwan et al., 2023). The main focus of the

current paper is to shed more light on the relationship between individualism and surveillance attitudes. Both the precedent in pandemic attitudes and the theoretically antagonistic nature of individualism and government surveillance form the theoretical basis of the first hypothesis of the current study.

Hypothesis 1: Personal levels of individualism correlate with negative attitudes towards digital state surveillance.

Although not the main focus of the current study, collectivism will also be researched as an explanatory variable for attitudes towards digital state surveillance. Very little research on the relationship between collectivism and surveillance attitudes has been done. Shulruf et al. (2023) assume collectivism to be on the same scale as individualism but on the opposite end, as is seen in their collectivism-individualism scale. The notion of a dichotomy between individualism and collectivism has been criticized in literature (Schwartz, 1990). Although there is little precedent in literature to hypothesize on the relationship between collectivism and digital state surveillance attitudes, it would be interesting to find out whether there actually is a relationship. If this is the case, it would in some sense legitimize the framework of a collectivism-individualism dichotomy, and would give incentive to further explore mediating factors that would impact such a relationship. If there is no relationship, it would question whether it is justified to consider individualism and collectivism as being part of the same spectrum, which according to Schwartz, is not the case per se. A second hypothesis was constructed.

Hypothesis 2: Personal levels of collectivism correlate with positive attitudes towards digital state surveillance.

When exploring the relationship between individualism and surveillance attitudes, privacy concerns cannot be left out of the equation. Literature shows privacy concerns to play a significant role in determining surveillance attitudes (Dinev et al., 2008). Königs (2022) distinguished two potential sources of public concern in the debate about government surveillance: (1) the concern that governments diminish citizens' privacy by collecting and accessing their data, and (2) the concern that the collected data may be used for objectionable purposes. Stahl (2016) observed that in general, critique of government surveillance tends to stem from privacy concerns, rooted in a liberal, individualist orientation in which the right to privacy, or 'the right to exclude others' is central to the ability of the individual to live an autonomous life. Both autonomy and privacy are values that, according to sociological

literature, are part of an individualistic orientation (Hofstede, 2001). Thompson et al. (2020) found that societal collectivism significantly affected the strength of the relationship between privacy concerns and acceptance of surveillance. A study by Dinev et al. (2006) compared attitudes towards e-commerce among US and Italy citizens. In this study, it was found that Italians were less concerned about privacy violations in e-commerce than US citizens, and the authors concluded that individualism in the US and collectivism in Italy were the cause of this difference. The difference between the approach of Thompson et al. (2020) and Dinev et al. (2006) is that Thompson et al. treat individualism-collectivism as a moderator variable between privacy concerns and surveillance attitudes, whereas Dinev et al. argue that privacy concerns are actually downstream from individualist or collectivist orientation. The latter seems to be more in accord with Kwan et al. (2023), who described placing an importance on privacy as an intrinsic part of individualism. Following this idea, privacy concerns is expected to be a major determinant in the relationship between individualism and negative surveillance attitudes. A third hypothesis was constructed to research this idea.

Hypothesis 3: Surveillance attitudes pertaining privacy concerns will have a stronger relationship with individualism than the other negative surveillance attitudes.

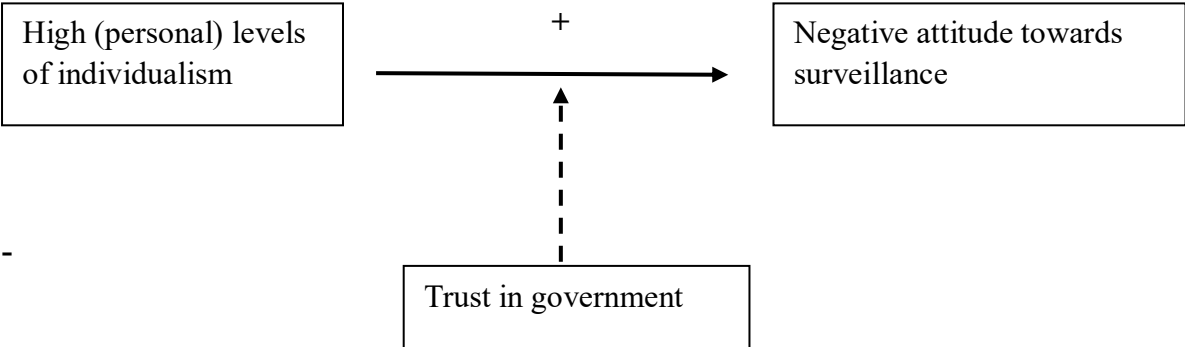
One factor that might moderate the relationship between individualism and surveillance attitudes is trust in national government. A study by Trüdinger & Steckermeier (2017) showed that trust in government increased acceptance of government surveillance measures. However, since low political trust is oftentimes accompanied by other individualistic attitudes, this result does not add to the discussion other than reinforcing the idea that individualism and surveillance attitudes are negatively correlated. The current study, however, will also try to elucidate whether a lack of trust in the government actually influences the overall expected individualist attitude towards surveillance. The idea is that if individuals trust the authorities implementing surveillance, their concerns rooted in individualism might be lessened, leading to more favorable attitudes towards surveillance. It should be noted that the literature on the relation between individualism and political trust is all but conclusive. Individualism tends to correlate with a decrease in community participation and community trust (Thake, 2009; Walls, 2008). It is not unthinkable that lower community trust actually causes citizens to increasingly rely on state institutions. From this perspective of individualism lowering trust in community, one could argue that individualism would even lead to increased surveillance acceptance. Clearly, there are multiple mechanisms by which political trust and individualism may influence each other. Using only existing literature, this relationship can thus be argued

to go in either direction, through multiple pathways. Novel empirical research is needed in order to address nuances in this relationship, and therefore a fourth hypothesis was constructed.

Hypothesis 4: Trust in government will have a moderating effect on the relationship between individualism and surveillance attitudes.

A similar study was done by Furnham & Swami (2019), albeit from a more overt political perspective. In the study, it was indicated that pro-surveillance attitudes correlated, among others, to right-wing authoritarianism. Anti-surveillance attitudes correlated with political cynicism and belief in conspiracy theories. At the same time, critique on digital state surveillance has been outed from a minority rights perspective as well, a talking point commonly associated with political leftism (Pecher, 2021). Then again, in the Netherlands, the most critique on surveillance during the pandemic came from right-wing (populist) political parties in The Netherlands. It is clear that terms like “right-wing” and “left-wing” have become increasingly blurred in the past few years (Orban, 2019). The current paper therefore omits similar semantics, and explores the nature of the relationship between government trust, individualism and surveillance attitudes. Based on hypotheses 1 and 3, a conceptual model is proposed for elucidating this relationship, as shown in figure 1. This model suggests a positive correlation between levels of individualist orientation and a negative attitude towards surveillance, with trust in government as a moderating variable.

Figure 1. *Conceptual model of combined hypothesis 1 and 3.*



Method

First, a literature review was conducted on the research gap in attitudes towards surveillance, following the recent trend of increase in surveillance cameras in the Netherlands. Considering its overlap with Covid-19 safety measures, further review was conducted about attitudes towards Covid-19 measures and restrictions. The literature review was done through Google Scholar using the following keywords: CCTV, surveillance trends, camera surveillance, surveillance attitudes, Covid-19 attitudes, Covid-19 restrictions. After the literature was found to indicate a relationship between individualism/collectivism and attitudes towards Covid-19 safety restrictions, the individualism-collectivism dichotomy was further studied using the keywords: collectivism-individualism, individualism personality, individualism measurement, individualism surveillance, collectivism surveillance. From this research, distrust of authority was identified as being part of individualist orientation, and privacy concerns were identified as noteworthy component of individualism in the context of digital state surveillance. Trust in authority was studied in the context of the Netherlands, and a trend of distrust was identified based on previous research. Considering the existing body of research, a conceptual model was constructed, identifying individualist orientation to be studied as predictor variable, attitudes towards government surveillance as outcome variable, and trust in government as moderator variable.

Participants.

The sample consisted of 80 Dutch citizens, 45 male and 35 female. The age range was 19 to 82 years ($M = 34.06$, $SD = 16.3$). Initially, 100 participants were approached. When 100 surveys were filled in, it turned out that 25 participants had quit the survey halfway through, rendering their data unusable. After that, more participants were approached, leading to a total of 80 fully filled in surveys. Participants were contacted through widespread distribution of the survey in the researcher's network. The minimum age for partaking in the survey was 18 years, which is also the voting age in The Netherlands. The voting age was chosen as a cutoff because of its purported relevance for policy makers - the survey contained items regarding political trust and other political themes. People below voting age were expected to be less engaged with these topics, and adding them in might decrease relevance for policy makers. All variables were measured digitally through an online survey, without a researcher present during administration (filling in) of the survey.

Variables

Measurement of this study's predictor variables, level of individualism and level of collectivism, have multiple precedents in literature, a recent one being the Auckland Individualism and Collectivism Scale (AICS; Shulruf et al., 2023). The AICS was chosen for this study as it avoids the need for measuring horizontal and vertical dimensions of collectivism and individualism – as was the case with previously constructed scales (Hofstede, 2001; Triandis et al., 1998). The 26-item survey published in 2023 served as an improvement of the 20-item version of the same scale, published 16 years prior (Shulruf et al., 2007; 2023). The AICS uses a 6-point (frequency) Likert-type scale: 1 = Never or almost never; 2 = Rarely; 3 = Occasionally; 4 = Often; 5 = Very often; 6 = Always. Although presented as a dichotomy, it is not a scale in the sense that it has one score. Measurement with the AICS delivers two scores, one for individualism, and one for collectivism. As such, the current study had not one, but two predictor variables. Because the survey in the current study combines multiple scales, a shortened version of the AICS was used, with 7 items for individualism and 8 items for collectivism.

The outcome variable in this study, attitudes towards government surveillance, has been covered less extensively in prior research. In 2019, Furnham & Swami conducted a study on the relationship between surveillance attitudes and political attitudes, belief in conspiracy theories and paranoia, among others. For that study, a 25-item Surveillance Attitudes Questionnaire (SAQ) was constructed, using clear attitudinal and belief statements. These statements were, according to the author, “piloted for clarity, overlap and comprehensiveness (p. 2).” Each item has a 7 point response scale where 1 = Strongly Disagree and 7 = Strongly Agree. One disadvantage of using the SAQ for the current study was that the SAQ items measure general surveillance attitudes, whereas for the current study, a measurement was needed of attitudes towards specifically digital state surveillance. For this reason, the items of the SAQ were adjusted to be about digital state surveillance. Although not ideal, this adjustment was minimal, as the adjustments were semantic in nature: if before ‘surveillance’ was used, the items now specified ‘digital state surveillance’. Before starting this part of the survey, a short disclaimer was given, explaining the meaning of ‘digital state surveillance’; a few examples were also given.

To answer the third hypothesis, it was imperative to find out whether the items related to privacy concerns had a stronger relationship with individualism than the other negative attitudes. To do this, a Pearson's correlation will be calculated for each individual negative item on the SAQ. Among the negative items on the SAQ, there were two items that alluded to privacy

concerns. These items were item 8 (“I am concerned that my emails and web traffic are being monitored”) and item 10 (“Digital surveillance systems constitute a violation of my right to privacy”). The correlation of these two items with the variable Individualism was then compared with the rest of the negative items from the SAQ.

In the study by Engbersen et al. (2021) about trust in national government, participants were asked to rate their trust in the national government on an interval scale of 0 to 100. This is a simple method, and has been used in similar datasets measuring trust in national government (OECD, 2024). Based on this precedent, the same, single-question method was used in the current study.

A principal component analysis was conducted on AICS and SAQ items. A measure of linear correlation was taken using Pearsons correlation coefficient (PCC), with AICS scores as predictor variable and SAQ scores as outcome variable. Using the moderator variable, trust in government, a multiple regression analysis was done to assess its moderating effect of trust in government on the relationship between AICS scores and SAQ scores among participants.

Results

Table 1

Demographic characteristics of respondents.

<i>Variable</i>	<i>Categories</i>	<i>Frequency</i>	<i>Percent</i>
<i>Sex</i>	Male	45	56,3
	Female	35	43,8
<i>Age</i>	18-30	55	68,75
	31-65	19	23,75
	65+	6	7,50

The final dataset consisted of 80 participants, with a mean age of 34 years (SD = 16.3). Gender distribution was relatively balanced, with 56.3% males and 43.8% females.

The scales measuring individualism (IND), collectivism (COL), positive surveillance attitudes (PSA) and negative surveillance attitudes (NSA) were subjected to a reliability analysis and factor analysis. The internal consistency of the scales was assessed using Cronbach's alpha. The results of this analysis are presented below. The collectivism scale consisted of 8 items. The analysis revealed a Cronbach's alpha of .764, indicating decent reliability. However, it was found that after removing item 2 ("Even when I strongly disagree with my group members, I avoid an argument."), the reliability increased to .818. One reason for this might be that conflict avoidance might be related to i.e. high anxiety, which is not necessarily a collectivist attitude. Thus, item 2 was removed from the scale and from the dataset. The individualism scale consisted of 8 items. The analysis revealed a Cronbach's alpha of .620, indicating subpar reliability. However, it was found that after removing item 5 ("I enjoy being unique and different from others."), the reliability increased to .687, which is close to being decent reliability. A reason for this may be that enjoying uniqueness reflects more of a personal preference for novelty or non-conformity, and is in that way distinct from items that capture more ideologically-driven attitudes. Thus, item 5 was removed from the scale and from the dataset. The Negative Surveillance Attitudes scale consisted of 10 items. The analysis revealed a Cronbach's alpha of .917, indicating good reliability. The Positive Surveillance Attitudes scale consisted of 11 items. The analysis revealed a Cronbach's alpha of .875, indicating good reliability.

To measure criterion validity, a subtype of construct validity, a principal component analysis was conducted on the combined items of IND, COL, PSA and NSA. The goal was to understand the underlying structure of the scales and determine how well they measure the intended constructs. Since there was an expected correlation between the items of the different scales, Oblimin rotation was chosen. By accounting for correlation between items,

Oblimin rotation provides an interpretable reflection of the data structure. Item 2 of the collectivism scale and item 5 of the individualism scale were left omitted after reliability analysis. As can be seen in table 1, both item 23 and 31 have a factor loading of less than .5. These items, however were part of the scales individualism and collectivism respectively. As these scales consist of very few items already, for the sake of reliability item 23 and 31 were kept in.

Table 2

Factor loadings of IND, COL, PSA and NSA items

	Component			
	1	2	3	4
1. Digital surveillance systems serve to dehumanize people.				,676
2. The use of digital surveillance implies that the government has an "us versus them" attitude towards the population of a country.				,711
3. Digital surveillance systems have severely restricted our social and political freedoms in this country.				,711
4. We now live in a surveillance society, with extremely limited or non-existent political and personal freedoms.				,640
5. Digital surveillance systems are used by governments to weaken any political opposition to their rule.				,806
6. Digital surveillance alienates people from each other because it makes them more inclined to judge one another.				,636
7. Governments often use digital surveillance techniques for purposes different from their stated goal (e.g., to control people instead of traffic).				,655
8. I worry that my emails and web traffic are being monitored.				,584
9. Digital surveillance systems are illegal because they track and monitor individuals everywhere.				,543
10. Digital surveillance systems constitute a violation of my right to privacy.				,576
11. Knowing that digital surveillance systems exist gives me a sense of security.	,592			
12. Digital surveillance systems help secure society against criminals and terrorists.	,661			

13. The use of digital surveillance systems increases public safety because the government can take action before a crime is committed.	,634
14. There is nothing wrong with digital surveillance because someone who does nothing wrong has nothing to fear.	,509
15. Digital surveillance systems are necessary because they help identify and apprehend criminals.	,591
16. Digital surveillance systems are useful because people are less likely to commit crimes if they know they are being watched.	,693
17. Digital surveillance can motivate me to be or become a better citizen.	,640
18. I feel comfortable with the amount of digital surveillance in the Netherlands.	,586
19. The government of the Netherlands is likely to handle information obtained through digital surveillance in a reliable manner.	,653
20. The government of the Netherlands has a clear policy regarding digital surveillance.	,561
21. I would probably not notice if I was being monitored through digital surveillance.	,570
22. I define myself as a competitive person.	,806
23. I enjoy being unique and different from others.	,449
24. I believe that competition is a law of nature.	,698
25. I prefer competitive recreational activities over non-competitive ones.	,582
26. I consider myself a unique person distinct from others.	
27. Without competition, I believe it is not possible to have a good society.	,644
28. Before making an important decision, I seek advice from people close to me.	,785
29. I consult my supervisors about work-related matters.	,615
30. Before making a major trip, I discuss it with my friends.	,659
31. I sacrifice my self-interest for the benefit of my group.	,472
32. I consider the opinions of my friends before taking important actions.	,747
33. It is important to consult close friends and get their ideas before making a decision.	,777

34. I seek advice from my friends before making career-related decisions.

,657

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

As shown in table 3, multiple Pearson correlations were conducted to examine the relationships between the different variables. Since the direction of these relationships were predicted in the hypotheses, a one-tailed test of significance was chosen.

Hypothesis 1 : Personal levels of individualism correlate positively with negative attitudes towards digital state surveillance.

Results indicated a significant positive correlation between IND and NSA, $r(78) = .200$, $p = .038$. This suggests that as individualism increases, negative surveillance attitudes also tends to increase. This confirms Hypothesis 1.

Hypothesis 2: Personal levels of collectivism correlate positively with positive attitudes towards digital state surveillance.

Between COL and PSA, a positive correlation was found, but it was not significant, $r(78) = .156$, $p = .083$. This suggests that Collectivism does not significantly influence Positive Surveillance Attitudes. This refutes Hypothesis 2. However, a significant negative correlation was found between COL and NSA, $r(78) = -.266$, $p = .009$. This suggests that as Collectivism increases, Negative Surveillance Attitudes tend to decrease. Although not directly confirming hypothesis 2, there are some implications of this result that will be expanded upon in the discussion.

Further results include a negative, non-significant correlation between IND and PSA, $r(78) = -.146$, $p = .098$. A significant negative correlation was found between PSA and NSA, $r(78) = -.678$, $p = <.001$. This suggests that positive surveillance attitudes and negative surveillance attitudes are inversely correlated, but not diametrically opposed. Interestingly, no significant correlation was found between individualism and collectivism, $r(78) = -.063$, $p = .289$. The implications of these results will also be expanded upon in the discussion.

Table 3

Correlational hypotheses.

		IND	COL	NSA	PSA
IND	Pearson Correlation	1	.063	.200	-.146
	Sig. (1-tailed)		.289	.038	.098
	N	80	80	80	80
COL	Pearson Correlation	.063	1	-.266	.156
	Sig. (1-tailed)	.289		.009	.083
	N	80	80	80	80
NSA	Pearson Correlation	.200	-.266	1	-.678
	Sig. (1-tailed)	.038	.009		
	N	80	80	80	80
PSA	Pearson Correlation	-.146	.156	-.678	1
	Sig. (1-tailed)	.098	.083	<.001	
	N	80	80	80	80

Hypothesis 3: Surveillance attitudes pertaining privacy concerns will have a stronger relationship with individualism than the other negative surveillance attitudes.

To find out whether the items related to privacy concerns had a stronger relationship with individualism than the other negative surveillance attitudes, the Pearson correlation coefficient was calculated for each individual negative item on the SAQ. The results are shown in table 4. The positive items of the SAQ were not included in this analysis, since the hypothesis did not pertain to positive attitudes and there was no significant correlation between IND and PSA anyway. Among the negative items on the SAQ, there were two items that alluded to privacy concerns. These items were item 8 (“I am concerned that my emails and web traffic are being monitored”) and item 10 (“Digital surveillance systems constitute a violation of my right to privacy”). Item 8 was found to have a correlation coefficient of 0.274, indicating a positive relationship with individualism, which is significant at $p = .007$. Item 10 was found to have a correlation coefficient of .282, also indicating a positive relationship with individualism, which is significant at $p = .006$. The remaining items exhibited correlation coefficients ranging from .056 to .270, all of them insignificant except for item 4 (“We now live in a society of mass surveillance, with extremely limited or non-existent political and personal freedoms.”), which had a correlation of .270 at a significance level of .008. The difference in significance might indicate weaker or even nonexistent relationships with individualism relative to Item 8 and Item 10. However, the lower reliability could also be a result of the small sample size. As such, the difference in reliability between the Privacy items and the other items does not mean that the

relationship between privacy concerns and individualism is stronger per se, but it does imply that privacy concerns have perhaps a higher explanatory value in understanding the relationship with individualism. This confirms hypothesis 3, as the surveillance attitudes pertaining privacy concerns have a stronger relationship with individualism than the other negative surveillance attitudes.

Table 4

Individual correlations between negative SAQ items and individualism scores

		IND
IND	Pearson Correlation	1
	N	80
1. Digital surveillance systems serve to dehumanize people.	Pearson Correlation	,000
	Sig. (1-tailed)	,500
	N	80
2. The use of digital surveillance implies that the government has an "us versus them" attitude towards the population of a country.	Pearson Correlation	,072
	Sig. (1-tailed)	,264
	N	80
3. Digital surveillance systems have severely restricted our social and political freedoms in this country.	Pearson Correlation	,177
	Sig. (1-tailed)	,058
	N	80
4. We now live in a society of mass surveillance, with extremely limited or non-existent political and personal freedoms.	Pearson Correlation	,270
	Sig. (1-tailed)	,008
	N	80
5. Digital surveillance systems are used by governments to weaken any political opposition to their rule.	Pearson Correlation	,098
	Sig. (1-tailed)	,194
	N	80
	Pearson Correlation	,140

6. Digital surveillance alienates people from each other because it makes them more inclined to judge one another.	Sig. (1-tailed)	,108
	N	80
7. Governments often use digital surveillance techniques for purposes that differ from their stated goals (e.g., to control people rather than traffic).	Pearson Correlation	,095
	Sig. (1-tailed)	,202
	N	80
8. I'm concerned that my emails and web traffic are being monitored.	Pearson Correlation	,274
	Sig. (1-tailed)	,007
	N	80
9. Digital surveillance systems are unlawful because they track and monitor individuals everywhere.	Pearson Correlation	,056
	Sig. (1-tailed)	,310
	N	80
10. Digital surveillance systems constitute a violation of my right to privacy.	Pearson Correlation	,282
	Sig. (1-tailed)	,006
	N	80

Hypothesis 4: Trust in government will have a moderating effect on the relationship between individualism and surveillance attitudes.

To examine the moderating effect of trust in national government on the relationship between IND and NSA, a moderation analysis was conducted using Hayes' Process macro (Model 1). The interaction effect of IND and Trust in government on NSA was not statistically significant ($\Delta R^2 = .258$, $p = .933$). This indicates that the relationship between Individualism and Negative survey attitudes is not moderated by trust in national government. It is important to note that the regression-model also showed no significant relationship between IND and NSA, with a linear regression analysis showing $B = .372$, $p = .076$. This indicates that although there is a significant correlation between the two, it is not strong enough to reliably predict NSA on the basis of IND. With regards to moderator variable Trust, the lack of a significant regression makes it more difficult to draw conclusions about a possible moderation.

Discussion

The main focus of the current study was to explore the relationship between individualism attitudes towards digital state surveillance, using the framework of a individualism-collectivism dichotomy. More specifically, the role that privacy concerns might play in this relationship was investigated, as well as the function of trust in national government. It was hypothesized that participants Individualism-scores would be positively correlated to negative surveillance attitudes, collectivism attitudes would be positively correlated to positive surveillance attitudes, privacy items on the SAQ would have a higher correlation with negative surveillance attitudes than the other negative items, and that trust in national government would have a moderating effect on the relationship between negative surveillance attitudes and individualism.

The first result that is important to highlight, is the lack of significant correlation between the individualism scores and collectivism scores. The correlation that was found was negative, but had a negligible significance-level. Although not part of any hypothesis, this result is important because of its implications for the theoretical framework. In literature, individualism and collectivism are often treated as two parts of the same spectrum; a dichotomy (Hofstede, 2001; Singelis et al., 1995; Triandis, 2001; Schwartz, 1994). As such, high individualism would imply low collectivism and vice versa. There have been critiques of this idea, that the current result appears to align with (Schwartz, 1990). The importance of this result lies in the fact that one of the central ideas behind this thesis assumed individualism and collectivism to have opposite effects on attitudes towards digital state surveillance. If individualism and collectivism are not inverted orientations, using this framework makes little sense. Hypothetically, a person could both be individualistic and collectivistic at the same time. This does not nullify any of the correlational results per se, but it does place them in a different light. Moreover, the method of the study was designed in such a way that collectivism, individualism, positive surveillance attitudes and negative surveillance attitudes could be measured separately. And so, although the theoretical framework assumed a dichotomy, the methodology does not, making every result still valid and interpretable.

The results showed a significant positive correlation between scores on the individualism scale and scores measuring negative attitudes towards digital state surveillance, confirming the first hypothesis. In literature, an individualist orientation on both a cultural and a personal level is often defined through values like autonomy, freedom, small government and privacy importance (Kwan et al., 2023). Since critique on digital state surveillance is linked to

expansion of state authority, privacy invasion and behavior control, the expectation was that an individualist attitude would be significantly positively correlated to negative surveillance attitudes. Although this expectation was confirmed, it is too early to make definitive conclusions on the mechanisms behind this correlation. That is to say, this result does not give answers as to why exactly these two are correlated, only *that* they are. It should also be noted that the current study found no significant regression, meaning that individualism had no predictive value with regard to surveillance attitudes. However, the regression-value that was found, was positive, meaning that in a future study with higher reliability, perhaps a predictive effect of individualism could still be found. Another observation is that there was only a very small and insignificant correlation between individualism and positive surveillance attitudes, meaning that individualistic people agree more strongly with negative statements about digital state surveillance than they disagree with positive statements. Perhaps digital state surveillance has uses, that, when amplified, could vindicate some of its negative connotations. This notion is backed up by the fact that although an inverted relationship was found between negative survey items and positive survey items, they were not diametrically opposed, implying that it is possible for people to hold both positive and negative attitudes towards digital state surveillance.

Even though it is difficult to make conclusive statements about the relationship between individualism and negative surveillance attitudes, one of the other results does give more insight. In accordance with hypothesis 3, it was found that privacy concerns were indeed more strongly and significantly correlated to individualism than the other negative surveillance attitudes. This confirms earlier research that found a significant role of privacy concerns in determining surveillance attitudes (Dinev et al., 2008). And so, as far as explanations for the relationship between individualism and surveillance attitudes go, the highest explanatory value seems to reside in the concerns participants had about the perceived threat to privacy that digital state surveillance poses. In accordance with previous research, the perceived threat was smaller among collectivist participants (Dinev et al., 2006; Thompson et al., 2020).

Between collectivism and positive surveillance attitudes, a small positive correlation was found, but it was not significant. It is possible that such a correlation does exist, and the current result is related to the small sample size of the current study. Another explanation could be that the collectivism scale mainly used questions about personal characteristics, considerations and preferences. The scale made little to no reference to politics, the state and the way people thought it should function, raising the question as to whether collectivist orientation influences behavior without directly influencing political views. Or perhaps it does

influence political views, but the participants were simply not politically engaged or interested. One trait commonly associated with collectivism is conformism (Bond & Smith, 1996). Since collectivistic participants tend to conform more to the attitudes of their group, perhaps they find less value in actively researching political topics. Individualistic participants, because of their desire to be unique, might have a higher need to form their own opinions causing them to be politically informed and engaged. This might explain why individualism was significantly correlated with the expected surveillance attitude, but collectivism was not. Collectivism was, however, significantly negatively correlated with negative attitudes towards digital state surveillance. So, although ‘collectivistic’ participants did not agree strongly with positive attitudes, they did significantly disagree with the negative statements, showing that they were not indifferent to the topic per se.

The last important outcome that was found shows that trust in national government does not moderate the relationship between individualism and surveillance attitudes. This result is unlikely to be caused by sample size or other factors, since the significance-level was extremely poor. There are multiple possible explanations for this outcome. Firstly, it is possible that the measuring instrument – a single-question scale from 1 to 100 – was inadequate. However, there is precedent in previous research for using this instrument (Engbersen et al., 2021). Another explanation could be that participants associated digital state surveillance with their local municipality and local law enforcement, since i.e. CCTV cameras in the Netherlands are owned and used by the municipalities, and not by the national government per se (*DPG Media Privacy Gate*, n.d.). Lastly, it could be – and has been – argued that distrust in government is an intrinsic part of individualism (Kwan et al., 2023). Because of this, it is likely that the AICS already took a measure of (dis)trust of government into account, making it more difficult to find an interaction effect using an additional, different measure of government trust. In a way, the moderator variable in this study had to interact with itself, which may have been the reason no significant effect was found.

With regard to the methodology of this paper, some reflection is in order. First of all, the sample was relatively small, contributing to lower reliability of some of the scales and results. The average age was heavily skewed towards the range of 18-30, making it difficult to generalize the outcomes of this study to the broader population of the Netherlands. As for the scales that were used, the removal of several of the collectivism and individualism items from the original scale was probably consequential. Ideally, the full original scale would have been used, or a broader study would have been conducted to expand on the consequences of removing these items. A broader limitation of this study lies in the use of the AICS to measure

collectivism and individualism. From looking at the items, it is clear that the scale mainly focusses on personality traits, lifestyle choices and personal preferences. The question is whether this does justice to the constructs of individualism and collectivism as discussed in literature. Where the AICS can be used to interpret personal orientations and preferences, literature oftentimes links collectivism and especially individualism to specific political ideologies (Buchanan, 2000; Thake, 2009). In other words, the AICS may not fully capture the broader sociopolitical dimensions of collectivism and individualism, and may potentially overlook important contextual factors that influence these constructs. At the same time, the personality traits measured by the AICS do impact attitudes towards digital state surveillance, as shown by some of the results of this study, meaning the usefulness of the AICS should not be diminished either.

Future research could resolve most of the aforementioned limitations without too much effort. A larger sample should be used, with evenly distributed age groups. Preferably, the complete AICS would be used, without removing any of the items. If a shorter survey is desirable, a shorter yet still valid version of the AICS should be constructed. It would also be interesting to see whether different measures of collectivism and individualism would yield different outcomes in a similar future study. Additionally, more research could be done on proper methodology for testing trust in government, locally as well as nationally. For policy makers, the current study holds some value, but further research must be conducted. Since privacy concerns may play a significant part in forming negative attitudes towards digital state surveillance, policy makers would do well to address these concerns among citizens, especially in societies with high levels of individualism like the Netherlands. If citizens can be assured their privacy concerns are taken seriously and their rights will be respected, chances are this will have a positive impact on their attitudes towards these measures. Apart from creating transparency for citizens, there needs to be a broader reflection on the expansion of state surveillance, considering specifically the role of individualist orientation in this context. Policy makers should keep a strict eye on societal sentiments regarding digital state surveillance, i.e. through polling data. Seeing the results of the current study, it should be considered that individualism poses a considerable challenge to the surveillance state, as it emphasizes personal autonomy, resistance to authority, but most of all privacy, which can lead to stronger opposition and scrutiny of digital state surveillance practices.

References

- Boncianni, M. (2020, December 18). Firenze, telecamere anti-assembramenti, transenne e sensi unici pedonali nelle vie dello shopping. *Corriere Fiorentino*.
https://corrierefiorentino.corriere.it/firenze/notizie/cronaca/20_dicembre_17/nardella-annuncia-misure-anti-assembramenti-firenze-il-weekend-shopping-natale-ee6b1996-405a-11eb-904c-7f092a557a67.shtml
- Bond, R., & Smith, P. B. (1996). Culture and conformity: A meta-analysis of studies using Asch's (1952b, 1956) line judgment task. *Psychological bulletin*, *119*(1), 111.
- Buchanan, J. M. (2000). The soul of classical liberalism. *The independent review*, *5*(1), 111-119.
- Card, K. G. (2022). Collectivism, individualism and COVID-19 prevention: A cross sectional study of personality, culture and behavior among Canadians. *Health Psychology and Behavioral Medicine*, *10*(1), 415-438.
- de Vries, M. S. (2018). De sleepwet. Gaat veiligheid voor privacy?.
- Dinev, T., Bellotto, M., Hart, P., Russo, V., Serra, I., & Colautti, C. (2006). Privacy calculus model in e-commerce—a study of Italy and the United States. *European Journal of Information Systems*, *15*(4), 389-402.
- Dinev, T., Hart, P., & Mullen, M. R. (2008). Internet privacy concerns and beliefs about government surveillance—An empirical investigation. *The Journal of Strategic Information Systems*, *17*(3), 214-233.
- DPG Media Privacy Gate. (n.d.). <https://www.nu.nl/tech-wetenschap/6255431/videodeurbel-pakt-inbreker-politie-kan-beelden-van-314000-cameras-opvragen.html>
- Engbersen, G., van Bochove, M., de Boom, J., el Farisi, B., Krouwel, A., van Lindert, J., ... & van Wensveen, P. (2021). De laag-vertrouwensamenleving: de maatschappelijke impact van COVID-19 in Amsterdam, Den Haag, Rotterdam & Nederland.
- Furnham, A., & Swami, V. (2019). Attitudes toward surveillance: Personality, belief and value correlates. *Psychology*, *10*(5), 609-623.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Sage publications.

- Jung, Y., & Wheeler, A. P. (2023). The effect of public surveillance cameras on crime clearance rates. *Journal of experimental criminology*, 19(1), 143-164.
- Königs, P. (2022). Government surveillance, privacy, and legitimacy. *Philosophy & Technology*, 35(1), 8.
- Kwan, M. P., Huang, J., & Kan, Z. (2023). People's political views, perceived social norms, and individualism shape their privacy concerns for and acceptance of pandemic control measures that use individual-level georeferenced data. *International Journal of Health Geographics*, 22(1), 35.
- Lu, J. G., Jin, P., & English, A. S. (2021). Collectivism predicts mask use during COVID-19. *Proceedings of the National Academy of Sciences*, 118(23), e2021793118.
- Maaravi, Y., Levy, A., Gur, T., Confino, D., & Segal, S. (2021). "The tragedy of the commons": How individualism and collectivism affected the spread of the COVID-19 pandemic. *Frontiers in public health*, 9, 627559.
- Marceta, J. (2023). An individualist theory of meaning. *The Journal of Value Inquiry*, 57(1), 41-58.
- Mehta, J. M., Chakrabarti, C., De Leon, J., Homan, P., Skipton, T., & Sparkman, R. (2023). Assessing the role of collectivism and individualism on COVID-19 beliefs and behaviors in the Southeastern United States. *PLoS One*, 18(1), e0278929.
- Nickerson, C. (2023). Individualistic Cultures and Example Behavior. *Simply Psychol.*
- OECD (2024), "How's Life? Well-Being", *OECD Social and Welfare Statistics* (database), <https://doi.org/10.1787/b8a8569d-en> (accessed on 15 March 2024).
- Orban, F. (2019). European populism and the blurring frontier between left and right. *Discussing Borders, Escaping Traps: Transdisciplinary and Transspatial Approaches*, 67.
- Peacher, H. B. (2021). Regulating Facial Recognition Technology in an Effort to Avoid A Minority Report Like Surveillance State. *Marq. Intell. Prop. & Innovation L. Rev.*, 25, 21.

- Priks, M. (2015). The effects of surveillance cameras on crime: Evidence from the Stockholm subway. *The Economic Journal*, 125(588), F289-F305.
- Rosemain, M. (2020). French watchdog warns against COVID-19 smart surveillance. Reuters. <https://www.reuters.com/article/us-health-coronavirus-france-privacy/french-watchdog-warns-against-covid-19-smart-surveillance-idUSKBN23O2T7/>
- Roth, A., Kirchgaessner, S., Boffey, D., Holmes, O., & Davidson, H. (2020, July 1). Growth in surveillance may be hard to scale back after pandemic, experts say. *The Guardian*. <https://www.theguardian.com/world/2020/apr/14/growth-in-surveillance-may-be-hard-to-scale-back-after-coronavirus-pandemic-experts-say>
- Schwartz, S. H. (1990). Individualism-collectivism: Critique and proposed refinements. *Journal of cross-cultural psychology*, 21(2), 139-157.
- Schwartz, S. H. (1994). Beyond individualism/collectivism: New cultural dimensions of values.
- Shulruf, B. (2023). Auckland Individualism and Collectivism Scale (AICS). In *International Handbook of Behavioral Health Assessment* (pp. 1-14). Cham: Springer International Publishing.
- Shulruf, B., Hattie, J., & Dixon, R. (2007). Development of a new measurement tool for individualism and collectivism. *Journal of Psychoeducational Assessment*, 25(4), 385-401.
- Singelis, T. M., Triandis, H. C., Bhawuk, D. P., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-cultural research*, 29(3), 240-275.
- Stahl, T. (2016). Indiscriminate mass surveillance and the public sphere. *Ethics and Information Technology*, 18(1), 33-39.
- Thake, S. (2009). Individualism and community: investing in civil society. In *Contemporary social evils* (pp. 169-180). Policy Press.
- Thompson, N., McGill, T., Bunn, A., & Alexander, R. (2020). Cultural factors and the role of privacy concerns in acceptance of government surveillance. *Journal of the Association for Information Science and Technology*, 71(9), 1129-1142.

- Triandis, H. C. (2001). Individualism-collectivism and personality. *Journal of personality, 69*(6), 907-924.
- Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of personality and social psychology, 74*(1), 118.
- Trüdinger, E. M., & Steckermeier, L. C. (2017). Trusting and controlling? Political trust, information and acceptance of surveillance policies: The case of Germany. *Government Information Quarterly, 34*(3), 421-433.
- Walls, S. M. (2008). *The Impact of Individualism on Political and Community Participation* (Doctoral dissertation, University of Cincinnati).