

Exploring Linkages Between Perceptions of Freedom and Internet Use Globally

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Abstract

This paper examines how perceptions about freedom both in one's life and in the media are related to access and use of the Internet.

Different methods exist for measuring Internet access and use around the world. A widely used source of estimates of Internet penetration is the ITU, the United Nations specialized agency for information and communication technologies. ITU gathers its data from a variety of sources, including commercial companies and government ministries. Sometimes it makes estimates based on other sources of information.

This paper compares data gathered by the Gallup World Poll against the ITU data to get a sense of the comparability of these two types of data sources. This comparison is based on data from questions newly added to the World Poll in 2015 that differentiate between access and actual use at the individual level.

The paper also explores the relationship between access to and use of the Internet in countries where it is available and the respondent's own perceptions of freedom to express political views, freedom to do what one wants in life, and media freedom as measured by Gallup. Finally, Internet access, use, and perceptions of freedom are examined under different conditions of Internet Freedom and Press Freedom, as measured by Freedom House. These are established indicators of government interference in Internet use (Freedom of the Net) and assessments of the political, legal, and economic environments of each country (Freedom of the Press). Knowledge of the link between freedom and use has theoretical implications as well as practical implications for those who use penetration figures rather than actual use figures in comparing countries around the world.

Introduction

Internet connectivity, and the access to information that accompanies it, is viewed by many as an important element of democracy. The United Nations Educational, Scientific and Cultural Organization (UNESCO) "recognizes that the Internet holds enormous potential for development. It provides an unprecedented volume of resources for information and knowledge and opens up new opportunities for expression and participation."ⁱ The State of Global Connectivity report 2014ⁱⁱ published by Internet.org in February, 2015 states, "The internet is a powerful tool for connecting people to information, ideas, resources, services, and other people. It's driving the global economic engine, creating new jobs, transforming industries, and in some cases, creating entire new industries. With the benefit of connected devices, people from all over

the world are changing the way business is done, how governments relate to their people, and people relate to their governments.” With so much promise it’s no wonder great efforts have been made to increase connectivity, as well as ensure Internet freedom for people around the world.

This paper compares data on Internet connectivity gathered by the Gallup World Poll against data from the International Telecommunications Union (ITU) - the United Nations specialized agency for information and communication technologies - to get a sense of the comparability of these two types of data sources. Two ITU indicators will be used in this analysis – one is a household access measure and the other is an individual use measure. The Gallup indicators measure access and use of the Internet at the individual level, raising questions about the comparability of these metrics; however, a strong relationship between these two items does exist. Additional analysis evaluates the relationships between Internet access, use and perceptions of Internet freedom. It stands to reason that people living in countries with a higher level of Internet freedom are more likely to have and utilize the Internet than people living in countries with less Internet freedom.

Finally, the paper examines the relationship between public opinion and elite assessments of media freedom overall. Media Freedom at the level of the nation-state historically has been indexed by professional or elite evaluators. Surveys of the general public about media freedom provide an alternative—or complementary—strategy for assessing the level of media freedom in a country. This paper examines the correspondence between the assessments of media freedom by the elite and by the public. It finds that the elite evaluators and public largely agree in their assessments of media freedom. It then examines discrepant cases to determine if outliers represent methodological errors, cases where the public either lagged behind the elite

assessments or anticipated them, or cases where there was a substantive difference between the elite and the public because they were measuring different things. The last of these explanations seems to be the likely one, given the data available.

Related Literature

Media freedom is recognized as a fundamental human right in Article 19 of the Universal Declaration of Human Rights. Two organizations, Freedom House and Reporters Without Borders, every year assess levels of press freedom among countries around the world relying on expert evaluators. They examine characteristics of the media systems, such political or economic pressures on media journalists and protection of press freedom by media organizations and judicial systems.

The information provided by these press freedom indexes is used by governments, non-governmental organizations, and media scholars. These ranking and ratings have often been criticized by those who are evaluated or by their governments (Font de Matas, 2010), as well as by academics (Holtz-Bacha, 2011). The criticism ranges from pro-U.S. or pro-Western bias to lack of conceptual precision or lack of methodological detail and clarity.

The creation of the RWB index has been perceived as an alternative tool to the FH ranking. In 2006, for example, the German political opposition accused the ruling coalition of doing nothing to strengthen the "defaulted and endangered" media freedom in the country, when Reporters Without Borders downgraded Germany by five ranks (Spiegel Online, 2006). Then Prime Minister Silvio Berlusconi's spokesman Paolo Bonaiuti said in a plenary session of the European Parliament: "The left has made them (the press freedom indices, author's note) become famous like Pink Floyd. (...) Why do 27 left-wing European MPs accuse Italy over a lack of freedom of information when everybody knows it's not true?" (Adnkronos, 2010). His statement

followed a change in the status of the Italian media from "free" to "partly free" in 2009. The Malawi government in 2011 argued that the RWB report did not properly reflect the media situation, when the country plunged 67 places in the index (Media Institute of Southern Africa, 2012). Two Walter Cronkite School of Journalism and Mass Communication professors criticized the 2012 RWB ranking of the U.S. (Grobmeier, 2012) when the arrests of journalists who participated in the "Occupy" movement led to a drop of 27 places in the index. (The Freedom House measure for that year showed only a one point drop in the country's rating.)

Public support for institutions has been an important area of research in political science. Listhaug and Wiberg (1995) argued that confidence in institutions is an indicator of acceptance of or support for the legitimacy of the political system. According to Norris (1999), confidence in institutions is one of the dimensions of the broader concept of political support. Norris and Inglehart (2009) saw confidence in political institutions as an indicator of regime support. Listhaug and Wiberg (1995) made a distinction between confidence in private institutions and confidence in government institutions.

Becker and Vlad (2010) examined the relationship between press freedom measured by Freedom House and Reporters Without Borders and media freedom assessed in two international general public surveys. One was a 2007 BBC World Service Poll that included five questions dealing with the media in a survey conducted in 14 countries (BBC World Service Poll, 2007). One of the questions asked respondents to use a 5-point scale to indicate how free they thought the media in their country was to report the news accurately, truthfully and without bias. The survey was conducted in October and November of 2007. Samples were national in nine of the 14 countries and urban-only in the other ones. Sample sizes ranged from 500 to 1,500.

WorldPublicOpinion.Org (2008), based at the University of Maryland, conducted a survey in 28 countries and territories that included questions regarding the media. In a majority of countries, the respondents were asked how much freedom the media in their country have. Sample sizes varied from 597 to 2,699.

The relationship between the measure of public perceptions of media freedom and the Freedom House measure of press freedom for the 14 countries included in the 2007 BBC World Service Poll was slight at best. The Pearson Product Moment Correlation Coefficient was .31, while the Spearman rho was .23. The correlations between the BBC World Service Poll measures and the Reporters Without Borders were similar, with a .37 Pearson r and a .25 Spearman rho.

The relationship between the WorldPublicOpinion.Org measure of press freedom from the point of view of the general public and the Freedom House measure was considerably stronger, a .81 with Pearson r and a .76 with Spearman rho.

The Reporters Without Borders evaluations produced a similar .70 (Pearson) and .71 (Spearman). The researchers argued that the different findings were the result of different measurement of public assessments of press freedom. The BBC World Service Poll used an anchored scale and the WorldPublicOpinion.Org measure used verbal descriptions. The BBC question was also reverse coded; that is, respondents were asked to go from 5 to 1 rather than the reverse, which is more common.

In the most recent and robust of these analyses (Becker, English and Vlad, 2012), the researchers found correlation coefficients of .74 and .64 (Spearman's rho) between a measure of media freedom from the Gallup World Poll and the ratings of press freedom of Freedom House and Reporters Without Borders, respectively. These findings are based on an analysis of a

measure of press freedom used in surveys conducted in 134 countries around the world in 2011. The results replicate findings from 2010 from a smaller sample of 111 countries (Becker, English & Vlad, 2011). This paper focus specifically on the Freedom House media freedom and internet freedom measures.

Expectations

While a variety of sources are used to estimate the extent of Internet connectivity, Internet freedom, and press freedom in different countries, the Gallup World Poll provides an opportunity to explore the relationship between these external measures and related public opinion data. It is expected that a positive relationship will exist between the ITU and Gallup measures of Internet connectivity, as well as between Freedom House's Freedom of the Net measure and Gallup's measure of Internet access and use. Previous research has found a modest positive relationship between Freedom House and Gallup's media freedom measures and ITU and Gallup's Internet measures suggesting this will continue as newer data is accessed.

Methods

Different methods exist for measuring Internet access around the world. A widely used source of estimates of Internet penetration is the ITU, the United Nations specialized agency for information and communication technologies. ITU gathers its data from a variety of sources, including commercial companies and government ministries. Sometimes it makes estimates based on other sources of information (ITU, 2014).

Much of ITU's work in the area of indicator definitions and statistical methodologies is carried out through its two expert groups: the Expert Group on Telecommunication/ICT Indicators (EGTI) and the Expert Group on ICT Household Indicators (EGH). Created in 2009 and 2012, respectively, these two expert groups revise and review ITU's supply-side and

demand-side statistics, and discuss methodological issues and new indicators. Both groups, which are open to all ITU members and to experts in the field of ICT statistics and data collection, work through online discussion forums and annual face-to-face meetings. They periodically report back to the World Telecommunication/ICT Indicators Symposium (WTIS), ITU's main forum on ICT statistics. In 2011, EGTI opened a discussion item on the IDI on its online forum, and members were invited to provide suggestions on how to improve the IDI methodology. It has been a standing item on the EGTI forum since then.

In 2013, EGH revised the Partnership on Measuring ICT for Development core list of ICT indicators, and subsequently updated the ITU Manual for Measuring ICT Access and Use by Households and Individuals (ITU, 2014), which includes the revision of some of the indicators on ICT household access and individual use of ICT included in the IDI.⁴ Interested experts are invited to join the EGTI and/or the EGH discussion forum to share experiences, contribute to the discussions and participate in the decision-making process (ITU, 2014).

The best known and most widely used measure of the press freedom is that of Freedom House (Becker, Vlad & Nusser, 2007). Freedom House was founded in 1941 to promote democracy globally. Since 1978, Freedom House has published a global survey of freedom, known as *Freedom in the World*, now covering 195 countries and 14 territories (Freedom House, 2014). This indicator is widely used by policy makers, academics, and journalists. In 1980, as a separate undertaking, Freedom House began conducting its media freedom survey—*Freedom of the Press: A Global Survey of Media Independence*—which in 2013 covered 197 countries and territories (Freedom House, 2014).

To measure the press freedom concept, Freedom House attempts to assess the political, legal, and economic environments of each country and evaluate whether the countries promote

and do not restrict the free flow of information. In 2013, the research and ratings process involved several hundred analysts and senior-level advisers (Freedom House, 2014). These analysts and advisers gather information from professional contacts, staff and consultant travel, international visitors, the findings of human rights and press freedom organizations, specialists in geographic and geopolitical areas, the reports of governments and multilateral bodies, and a variety of domestic and international news media. The ratings are reviewed individually and on a comparative basis in a series of six regional meetings with the analysts, ratings advisers with expertise in each region, other invited participants and Freedom House staff. Freedom House then compares the ratings with the previous year's findings. Major proposed numerical shifts or category changes are subjected to more intensive scrutiny. These reviews are followed by cross-regional assessments in which efforts are made to ensure comparability and consistency in the findings. Freedom House asks the raters to use 23 questions divided into three broad categories covering the legal, political and economic environments. Each country is rated in these three categories and assigned a value, with the higher numbers indicating less press freedom.

Freedom House describes its *Freedom of the Net* variable as a measure of the “subtle and not-so-subtle ways that governments and non-state actors around the world restrict our intrinsic rights online.”ⁱⁱⁱ Each country is assigned a numerical score, based on methodology developed in consultation with international experts. This methodology includes three categories: ***obstacles to access*** (infrastructural and economic barriers to access, legal and ownership control over internet service providers , and independence of regulatory bodies), ***limits on content*** (legal regulations on content, technical filtering and blocking of websites, self-censorship, the vibrancy/diversity of online news media, and the use of digital tools for civic mobilization), and ***violations of user***

rights (surveillance, privacy, and repercussions for online speech and activities, such as imprisonment, extralegal harassment, or cyberattacks.)

The Gallup World Poll regularly surveys adult residents in more than 160 countries and areas, representing more than 98% of the world's adult population. In most cases, randomly-selected, nationally-representative samples of the entire civilian, non-institutionalized, age 15 and older population of each country are used. Exceptions include areas where the safety of interviewing staff is threatened, scarcely populated islands in some countries, and areas that interviewers can reach only by foot, animal, or small boat. Gallup typically surveys 1,000 individuals in each country, with at least 2,000 interviews being conducted in large countries like China, Russia and India. Margin of error for each country study is typically around +/-3 percent.

Telephone surveys are used in countries where telephone coverage represents at least 80% of the population or is the customary survey methodology. In Central and Eastern Europe, as well as in the developing world, including much of Latin America, the former Soviet Union countries, nearly all of Asia, much of the Middle East, and all of Africa, an area frame design is used for face-to-face interviewing.

Once collected, the data set goes through a rigorous quality assurance process before being publicly released. After review by the regional directors, Gallup scientists perform additional validity reviews. The data are centrally aggregated and cleaned, ensuring correct variable codes and labels are applied. The data are then reviewed in detail for logical consistency and trends over time. Once the data are cleaned, weighted, and vetted, the final step is to calculate approximate study design effect and margin of error. Specific details on each country's sample size, month/year of the data collection, mode of interviewing, languages employed, design effect, margin of error, and details about sample coverage are available upon request.

Gallup is entirely responsible for the management, design, and control of the Gallup World Poll and is not associated with any political orientation, party, or advocacy group and does not accept partisan entities as clients. Any individual, institution, or governmental agency may access the Gallup World Poll regardless of nationality.

In each country, a standard set of core questions is fielded in each of the major languages of the respective country. Beginning in 2010, the Gallup World Poll included a measure of public perceptions of media freedom. The question is: “Do the media in this country have a lot of freedom, or not?” Response categories are “Yes” and “No”, with Don’t Know and Refused coded if volunteered. The item cannot be asked in some of the countries in which the Gallup World Poll is fielded due to government censorship or, in some cases, the likelihood of interference with data collection. The data are aggregated by country, and the percentage of people in a country saying “Yes”, i.e., that the media in the country are free and their home has access to the Internet, are computed for each country for which the measures was used. In a few cases where multiple waves of data were collected in the same year, additional weighting was applied to properly determine an average for the year which takes into account samples sizes across waves. The media freedom item is a non-elite measure of media freedom (Becker, English & Vlad, 2012).

In 2015, questions on Internet access and use were added in select countries, with global inclusion executed in 2016. The access item asks, “Do you have access to the Internet in any way, whether on a mobile phone, a computer, or some other device?” Respondents who say “yes” are then asked, “Have you used the Internet in the past seven days, whether on a mobile phone, a computer, or some other device?” The Internet use item was rebased for this analysis to

reflect the percent of the total adult population who has used the Internet in the past seven days. Responses of yes, no, don't know, and refused were accepted.

Findings

The first step in this analysis was to collect available country-level data from ITU about the percent of households with an Internet connection and the percent of individuals who use the Internet. ITU data on individual Internet use from 136 countries and household Internet assessment from 95 countries were compared with Gallup World Poll data on the percent of adults in each country who have Internet access and the percent of adults who used the Internet in the last 7 days. (ITU data from countries where Gallup conducts the World Poll were used in this analysis.) The Gallup country-level data used for this analysis was collected in 2015 and 2016. Data from 2015 were used for most analyses, but when 2015 data was not available, data from 2016 were used, if available. Data from 2015 was favored since many of the external indicators used were based metrics for 2015. The Pearson's r correlations between the Gallup individual level access and ITU measures range from .89 to .94 demonstrating a very strong relationship between these measures.

Table 1: Gallup and ITU Internet Measures Highly Correlated

		World Poll: Percent Who Used the Internet in Past Seven Days 2015/2016	World Poll: Percent with Home Internet Access 2015/2016
ITU: Households with Internet Percent Downloaded 2016	Pearson Correlation	.89**	.91**
	Sig. (2-tailed)	0.000	0.000
	N	95	95
ITU: Percent Individuals Use Net 2015	Pearson Correlation	.92**	.94**
	Sig. (2-tailed)	0.000	0.000
	N	136	136

Given that the ITU measure of Internet access is limited to home access, whereas the Gallup measures asked about Internet access in any way, differences between these two measures are

expected. Specifically, it is expected that the Gallup measure would be the same or higher than the ITU measure in most cases. This hypothesis proved to be true in about 3 out of 4 cases.

Within these divergent cases, differences of twenty percentage points or more are noted in four countries – Azerbaijan, Japan, Morocco, and Saudi Arabia.

The Japan study only sampled from respondents in households with landline telephones, thus excluding any households with *only* mobile phone users. This exclusion could somewhat explain the lower percentage of Internet access reported. However, without more specific information about how ITU collects its information and how much of the country is included in estimates, it is uncertain which data source is more reliable in these measures.

Table 2 – World Poll and ITU Internet Access Measures

	ITU: Households with Internet Percent Downloaded 2016	World Poll: Home Has Access to Internet Yes 2015 (first) or 2016	Difference
Saudi Arabia	0.94	0.73	0.21
Morocco	0.67	0.46	0.21
Japan	0.96	0.69	0.27
Azerbaijan	0.77	0.45	0.32

As expected, there are many more cases where the Gallup estimates of Internet access exceed the ITU estimates of home Internet access. The largest differences are noted in Mongolia, Kyrgyzstan, Bolivia, and Tunisia. Again, without additional information on ITU measurement, it is uncertain what accounts for these differences.

Table 3 – World Poll and ITU Internet Access Measures

	ITU: Households with Internet Percent Downloaded 2016	World Poll: Percent with Home Has Access to Internet 2015/2016	Difference
Mongolia	0.25	0.66	-0.41
Kyrgyzstan	0.07	0.44	-0.37
Bolivia	0.14	0.47	-0.33

Tunisia	0.17	0.49	-0.32
Kuwait	0.62	0.90	-0.28
Guatemala	0.09	0.34	-0.26
El Salvador	0.14	0.40	-0.26
Dominican Republic	0.24	0.49	-0.26
Senegal	0.04	0.29	-0.25
Argentina	0.42	0.65	-0.24
Armenia	0.52	0.76	-0.23
Paraguay	0.25	0.47	-0.23
Nepal	0.03	0.25	-0.22
Lebanon	0.62	0.84	-0.22
Congo Brazzaville	0.01	0.22	-0.21
Zimbabwe	0.05	0.24	-0.20

While just under two-thirds of countries analyzed had differences of ten percentage points or less between the measures, there were notable outliers (see Table 2.) In four countries the Gallup measure was more than thirty percentage points lower than the ITU measure. Data from Japan – a country where Gallup conducts interviews on the telephone – is 32 percentage points lower in the Gallup data respectively. As noted above, the landline only sample in Japan may account for the lower percentage of households with Internet use reported.

Gallup data collection in Azerbaijan –excluded the Kelbadjaro-Lacha, Nakhichevan and Nagorno-Karabakh territories. These areas represent approximately 14% of the total population. It is unclear without more information on ITU data collection which measure is more accurate.

Table 4 – World Poll and ITU Internet Use Measures

	ITU Percent Individuals Use Net 2015	World Poll: Percent Who Used the Internet in Past Seven 2015/2016	Difference
Estonia	0.88	0.68	0.20
Dominican Republic	0.52	0.31	0.21
Bosnia Herzegovina	0.65	0.44	0.21
Bhutan	0.40	0.18	0.21
Slovakia	0.85	0.62	0.23
Venezuela	0.62	0.38	0.24
Albania	0.63	0.36	0.28

Uzbekistan	0.43	0.13	0.30
Japan	0.93	0.61	0.32
Morocco	0.57	0.25	0.32
Azerbaijan	0.77	0.38	0.39

There are far few outliers where the ITU estimates are twenty percentage points or more below Gallup's (see Table 5.) The largest differences are noted in Iraq, Turkmenistan and Mongolia. There were not exclusions in the Gallup data collection in these countries and it is uncertain why these differences between the Gallup measure and ITU have occurred.

Table 5: World Poll and ITU Internet Use Measures

	ITU: Percent Individuals Use Net 2015	World Poll: Percent Who Used the Internet in Past Seven Days 2015/2016	Difference
Iraq	0.17	0.50	-0.33
Turkmenistan	0.15	0.43	-0.28
Mongolia	0.21	0.49	-0.27

The relationship between Gallup's Internet measures and Freedom House's Freedom of the Net measure also was explored. One hypothesis under investigation was whether countries with greater Internet freedom would be more likely to have higher levels of Internet penetration and vice e versa. Data for the Freedom House measure only were available in 57 countries for the most recent data available – collected from June 2014-May 2015 - while Gallup's data were collected between Feb. 2015 and July. 2016. The Freedom House measure was reverse coded such that higher numbers demonstrated a greater amount of Internet freedom. The Pearson's r correlation between the Freedom House's Freedom of the Net measure and Gallup's Internet access and use measures was modest at -.38 and -.34, respectively.

Not surprisingly, a stronger correlation - -.64 for access and -.61 for use - exists between the Gallup measures and Freedom House's Obstacles to Access measure. Correlations between the Gallup measures and Freedom House's Limits on Content or Violations User Rights measures, suggest that once barriers to access are reduced, use of the Internet in many countries may not be hindered by limits on content or concerns about violations. It is uncertain the extent to which citizens are aware of these limits or violations. The next section covered perceptions of media freedom and will address this topic more fully.

Table 6: World Poll and Freedom House Freedom of the Net Measures

		World Poll: Used the Internet in Past Seven Days Yes 2015 (first) or 2016 (All- unfiltered)(rebased 11 11 16)	World Poll: Home Has Access to Internet Yes 2015 (first) or 2016
Freedom House Freedom on the Net June 1 2014 to May 31 2015	Pearson Correlation	.34**	.38**
	Sig. (2-tailed)	0.009	0.004
	N	57	57
Freedom House Freedom on the Net Obstacles to Access June 1 2014 to May 31 2015	Pearson Correlation	.61**	.64**
	Sig. (2-tailed)	0.000	0.000
	N	57	57

There are several countries with low levels of Internet freedom as reported by Freedom House that have high levels of Internet access and use (see Table 7.) In Bahrain, the United Arab Emirates, Saudi Arabia, Russia, and Belarus, for example, more than two-thirds of the population has access to Internet and nearly as many has used the Internet in the past seven days. There are notable differences in China and Iran as well.

Table 7: World Poll and Freedom House's Freedom of the Net Measures

	Freedom House Freedom on the Net June 1 2014 to May 31 2015	World Poll: Home Has Access to Internet Yes 2015 (first) or 2016	Difference (Gallup Access)	World Poll: Used the Internet in Past Seven Days Yes 2015 (first) or 2016 (All-unfiltered)(rebased 11 11 16)	Difference (Gallup Use)
Belarus	0.36	0.69	-0.33	0.63	-0.27
Russia	0.38	0.75	-0.37	0.68	-0.30
Iran	0.13	0.52	-0.39	0.50	-0.37
China	0.12	0.56	-0.44	0.43	-0.31
Saudi Arabia	0.27	0.73	-0.46	0.75	-0.48
United Arab Emirates	0.32	0.90	-0.58	0.89	-0.57
Bahrain	0.28	0.92	-0.64	0.93	-0.65

Conversely, in several countries with relatively higher rates of Internet freedom, Internet access was relatively low (see Table 8). For example, fewer than thirty percent of residents in Uganda, Malawi, Rwanda, Bangladesh, and India report Internet access in any way.

Table 8: World Poll and Freedom House’s Freedom of the Net Measures

	Freedom House Freedom on the Net June 1 2014 to May 31 2015	World Poll: Home Has Access to Internet Yes 2015 (first) or 2016	Difference (Gallup Access)	World Poll: Used the Internet in Past Seven Days Yes 2015 (first) or 2016 (All-unfiltered)(rebased 11 11 16)	Difference (Gallup Use)
Malawi	0.60	0.14	0.46	0.10	0.50
Rwanda	0.50	0.07	0.43	0.11	0.39
Uganda	0.64	0.24	0.40	0.17	0.47
India	0.60	0.21	0.39	0.13	0.47
Bangladesh	0.49	0.13	0.36	0.11	0.38
Kenya	0.71	0.38	0.33	0.31	0.40
Nigeria	0.67	0.34	0.33	0.38	0.29
Zambia	0.60	0.30	0.30	0.25	0.35

Press freedom measures from both Gallup and Freedom House were available in 132 countries in 2015. The Freedom house measure was reverse coded such that higher numbers demonstrated a greater amount of press freedom. The Pearson's r correlation between the two measures is .679. Historical comparisons for previous years from Gallup and Freedom House also show similar positive relationships.

Table 9: World Poll and Freedom House Press Freedom Measures

		World Poll: Media Free Yes 2015 (first) or 2016
Freedom House Press Freedom 2016 (Status 2015)	Pearson Correlation	.679**
	Sig. (2-tailed)	0.000
	N	132

The biggest differences between the Gallup and Freedom House measures exist in countries where the residents perceive greater press freedom than elite evaluators (see Table 10.) In Rwanda, for example, where experts say the press is “not free” 87% of adults say the media in their country have a lot of freedom. All the countries in the table below have press that are “not free” according to Freedom House and a majority of citizens say the press are free.

Table 10: World Poll and Freedom House Press Freedom Measures

	Freedom House Press Freedom 2016 (Status 2015)	World Poll: Media Free Yes 2015 (first) or 2016	Difference
Rwanda	0.21	0.87	-0.66
Egypt	0.23	0.78	-0.55
Cambodia	0.31	0.84	-0.53
Azerbaijan	0.11	0.63	-0.52
Pakistan	0.36	0.81	-0.45
Tajikistan	0.17	0.62	-0.45

Kazakhstan	0.16	0.54	-0.38
Somalia	0.21	0.56	-0.35
Thailand	0.23	0.58	-0.35
Myanmar	0.27	0.62	-0.35
Russia	0.17	0.51	-0.34
Kyrgyzstan	0.33	0.66	-0.33
Sri Lanka	0.36	0.67	-0.31

There are a few cases of note where citizens are somewhat more critical of their press freedom than elite evaluations would suggest they should be (see Table 11.) Fewer than 60% of adult residents in Lithuania and Latvia, for example say their press has a lot of freedom, but both countries are described as “free” by Freedom House.

Table 11: World Poll and Freedom House Press Freedom Measures

	Freedom House Press Freedom 2016 (Status 2015)	World Poll: Media Free Yes 2015 (first) or 2016	Difference
Lithuania	0.77	0.53	0.24
Latvia	0.72	0.50	0.22
South Korea	0.67	0.47	0.20

Conclusions

Gallup’s measures of Internet penetration generally show a strong relationship with the ITU Internet connectivity measures with few exceptions at the country level. Freedom House’s Internet freedom measure was shown to have a modest positive correlation with Gallup’s Internet access data, although several notable differences were found suggesting that high Internet freedom does not always lead to higher levels of Internet access and use in a country, at least not during the time period studied. It could be that some residents in these countries opted out of Internet access due to the constrained media environment, although there is no evidence of that in this study. Gallup’s media freedom measure has a good correlation to Freedom House’s

measures, although some outliers exist where citizens are either more critical or less critical of press freedom than elite evaluators.

Future Research

Additional research is needed to explore whether the level of freedom of the media and online are known to most citizens. While many are able to answer the question about media freedom in their own country when Gallup asked, it is unclear how these opinions are being formed. For example, in several countries where media freedom is rated low by elite experts, citizens are more likely to say their media have a lot of freedom. While these cases are infrequent, it does demonstrate how both elite evaluations and citizen perceptions have a role to play in understanding these complex subjects. It is also unclear whether online freedom specifically, has any effect on a person's likelihood to have access to and use the Internet.

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ⁱ <http://www.unesco.org/new/en/communication-and-information/freedom-of-expression/freedom-of-expression-on-the-internet/>

ⁱⁱ https://fbnewsroomus.files.wordpress.com/2015/02/state-of-connectivity_3.pdf Accessed on November 16th, 2015.

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