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Abstract

Ethical norms on the Internet are believed to be more permissive than in the 'real' world and this belief often serves as an explanation for the prevalence of the so-called digital "piracy". In this study we provide evidence from a vignette experiment that contradicts this claim. Analyzing the case of sports broadcast, we compare explicitly the ethical judgment of legal and illegal sharing in the offline and online context. We find that the norms concerning legality, availability of alternatives and deriving material benefits from sharing content do not differ substantially between the virtual and real worlds. We also test explicitly for the role of legal awareness and find that emphasizing what is prohibited (copyright infringement) is less effective than focusing on what is permitted (fair use) in reducing the disparity between legal and ethical norms.

Keywords:
Internet piracy, file sharing, fair use, legal awareness, copynorms, vignette experiment

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1 Introduction

Until late twentieth century it was relatively expensive to copy printed or recorded materials. The development of digital technology made real costs of copying, sharing and downloading files negligible and allowed making copyrighted content available to almost unlimited audiences. However, as Floridi (2002) observed "our ethical development has been much slower than technological growth". Indeed, although unauthorized distribution of copyrighted content is a case of law infringement, file sharing without explicit permission from the copyright owners via Internet has gradually become an everyday activity for a non-negligible segment of the population. Why are "copynorms"[1] so lax?

One possible answer is that the mere idea of copyright seems unnatural. For example, Good-enough and Decker (2009) used insights from neuroscience to explain why people may have little or no intrinsic motivation to obey the copyright law. First, the authors suggested that our ability to recognize and respect traditional property, i.e that of tangible objects, is connected to one or more "cognitive primitives"' in human brains. We are evolutionarily endowed with neurological structures and networks that "help recognize property-related choices and to link those choices to emotional, inhibitory processing". In the case of intellectual property, these property-related primitives and networks are not readily recruited and mobilized. Unlike its traditional counterpart, intellectual property is not subject to rivalrous use disputes. Listening to a downloaded music file or the use of an invention by one person does not prevent someone else from doing the same thing. Also, in the case of copyright content, the problem of overexploitation usually does not exist, i.e. the content does not deplete when many use it. As a result, when we consider illegal sharing or downloading, our "inhibitory process" gives us green light to put this plan into place.[2]

If we are indeed naturally predisposed to engage in copying and sharing (in particular online) how can the social acceptance of unauthorized sharing be reduced? Several studies find that greater awareness of the copyright does not reduce illegal sharing (Krawczyk et al., 2014) nor downloading (Cox and Collins, 2014). Among the usually analyzed reasons of low concern for copyright are weak legal implications (see e.g. Lysonski and Durvasula, 2008) and low risk of getting caught (see e.g. Hietanen, 2008). However, it is not clear whether strengthening of judicial enforcement of intellectual property rights could limit unauthorized sharing. As Larsson et al. (2012) observed, despite stronger copyright enforcement, social norms governing online behavior are increasingly permissive.

One possible reason for copyright failure might be related to ineffectiveness of its communication. (Gillespie, 2009) points out that anti-piracy campaigns are typically poorly balanced, focusing entirely on the bans and restrictions. This is evident in the treatment of the doctrine of fair use. In the Copyright Kids materials (Gillespie, 2009, p.296) the reader is advised "[u]nless you are absolutely sure, relying on the doctrine of 'Fair Use' to avoid seeking Permission to copy a work is risky." Such negative campaigns may in turn undermine willingness to comply with the law, increasing social acceptance of duplication of copyrighted materials. Mirghani (2011) likened the militarized language of the copyright discourse to that of the "war on terror", coming to the conclusion that anti-piracy media campaigns are as responsible for the propagation of "piracy" as those partaking in copyright infringement. Likewise, Yar (2008, p.457) calls for "legitimizing, rather than demonizing, cultural copying practices".

The observed divergence between copyright and copynorms could also simply be associated with the specificity of the Internet environment itself. In particular, some behaviors may be more ethically acceptable online than in the real life because it is easier to maintain anonymity over Internet. Larsson et al. (2012, p.262) state that online anonymity can be "liberating, allowing online users to become less inhibited by social conventions and restraints". Similarly, Hinduja (2008, p.392) maintains that "anonymity or pseudonymity on the Internet releases participants from traditional constraints on their behavior", causing the reduction of self-awareness and self-regulation.

The aim of our paper is to address these issues via a vignette experiment, i.e. a scenario survey, which asks subjects to provide ethical judgment on different forms of sharing copyrighted sport broadcast.[3] We decided to focus on sport broadcasts for several reasons. First, retransmitting live

[1] The term proposed to denote "informal social attitudes about the rightness or wrongness of duplicating material that is copyrighted" (Prof. Lawrence Solum, Legal Theory Blog).

[2] Goodenough and Decker (2009, p.15) explained that our "inhibitory process" does not consider the possible decrease of the opportunities for the development of creative works and investments caused by copyright infringement, because "assigning property rights to creative expression and invention is a relative latecomer to human experience."

[3] This method has often been used when eliciting moral judgment, especially with reference to controversial choices,

television broadcast has recently been made cheap and easy with widely available software and TV tuner cards (Hutchins and Rowe, 2012). Second, live streaming of sporting events has become substantial threat to the sports industry (NetResult, 2011). Third, sport broadcasts have received little scrutiny in past literature. Finally, focusing on sport broadcast was a good opportunity to attract also non-student subjects, so that we could investigate if findings from standard college samples are likely to be generalizable to other populations.

The situations included in our set of stories differed on several dimensions that could potentially influence the judgment. Most importantly, we had otherwise comparable cases of online vs. offline sharing. Using a fractional design in the vignette experiment, we could estimate and compare the impact of each dimension and identify their interactions. Furthermore, we manipulated the message that preceded the survey: some responders were subject to negative, prohibitive framing similar to the one typically used in anti-piracy campaigns; others received positive framing indicating which forms of file sharing are acceptable within fair use; the control group received no message. Therefore we could evaluate if indeed a typical campaign may be counter-productive.

Our results are interesting from a number of angles. First, we find no confirmation of the popular claim that copynorms over the Internet are more lax than ethical norms in the offline context. Second, the results demonstrate that the main difference between the online and offline context refers to the availability of alternatives. Indeed, in the offline context providing an additional broadcast when they are already widely accessible reduces the ethical acceptance of sharing. On the contrary, in the online context it seems that the more sources are available, the more ethically acceptable is sharing. This interesting feature of the copynorms may reflect the experience with online broadcast interruptions and it is likely to be a temporary phenomenon. Third, we find that showing what is legal may be a more desirable strategy for awareness campaigns than emphasizing what is forbidden. While they are both likely to have only a bounded effect on actions, positive enforcement seems to shift the ethical judgment towards better alignment with the legal standards.

2 Dimensions and hypotheses

To investigate moderators of the key effects to be studied, as well as to put their size into perspective, we have manipulated three additional dimensions in our stories (on top of the online-offline distinction). First we juxtaposed sharing with friends only (which is permissible in Poland under individual fair use) vs. illegal public sharing. Second, we distinguished sharing for free vs. charging the audience and finally providing unique access vs. sharing content available otherwise. These dimensions, their links to our main variables of interest and hypotheses concerning expected impact on ethical judgment of sharing are explored below.

Our first hypothesis pertains to the ethical comparison of sharing on- and offline. Clearly, unauthorized file sharing on the Internet is ubiquitous, especially among the younger generation. For example, a study by Karaganis and Renkema (2012) showed that 70 per cent of the 18-29 year olds admit being involved in it. A representative survey of the Polish society conducted by Filiciak et al. (2012) found prevalence of 33 per cent (or 61 per cent of Internet users).

Moreover, virtual environments seem to loosen norms in general, as manifested by the wide range of very common yet ethically dubious phenomena such as trolling, cyberstalking, pornography and identity theft. Impressive prevalence of the Internet misdemeanors may be closely associated with physical detachment, apparent anonymity and weak social and legal sanctions. Overall, there are good reasons to expect norms governing online behavior to be less strict. Thus we formulate:

> **Hypothesis 1.** Sharing copyrighted material online will be perceived as more permissible than offline.

An act of file-sharing may be classified into one of two broad categories-the activity of professionals who seek profit through copyright infringement or selfless behavior of activists willing to make culture available to the community. The former will tend to evoke negative affect and ethical judgments while the latter will typically be evaluated positively and induce feelings of gratitude. The key distinction between these two types is whether the individuals involved in piracy derive any direct material benefit from it. Comparing these two acts in terms of justice, it seems natural

e.g. Steinert and Lepping (2009).

to refer to Nozick's Entitlement Theory of distributive justice (Nozick, 1974).[4] This theory deals with the rules of justice in acquisition, i.e. how unowned things can come to be owned justly and that of justice in transfer, i.e. how (justly owned) things can be transferred justly. According to Nozick, no one is entitled to hold a good which is acquired or transferred unjustly. In our case, sharing unauthorized content is unjust (i.e. one is transferring unjustly owned content). Thus, when we pay for unjustly owned content we both have no right to that content and we are deprived of money. In the case of sharing for free, we do not have the right to the content we download but we can still keep the money. Therefore we propose:

> **Hypothesis 2.** Commercial sharing will be evaluated more harshly than sharing with no material benefits.

Internet users are often frustrated with delayed, inefficient or overly costly distribution of contents by copyright holders. Consequently, lack of a legal alternative is very often reported as the reason or justification for unauthorized downloading, see e.g. points 3, 6, 7, 8 as compiled by (Hart, 2012). Therefore we expect that sharing content that could not be accessed otherwise will be judged more positively:

> **Hypothesis 3.** Evaluation of unauthorized sharing will be more positive in the case of content that is not available via legal channels.

Now we turn to the question of how ethical attitudes towards unauthorized sharing can be altered, particularly by legal awareness campaigns. On the one hand, according to the Attitudinal Theory of Expressive law (McAdams, 2000a), legal regulations strengthen norms, because they inform citizens about what is right and wrong, in particular in the case of novel phenomena. For example, lacking relevant statistical data, consumers can conclude that using seat belts or child safety seats is good because it has been made obligatory. In other situations, the law can serve as a focal point helping citizens to coordinate (McAdams, 2000b). It may also increase perceived compliance among others, feeding into one's own willingness to comply due to conformism or reciprocity.

On the other hand, introduction of legal sanctions may crowd out intrinsic motivation (Gneezy and Rustichini, 2000; Fehr and Gächter, 2002). Additionally, Kahan (2001) argued that sanctions will be perceived as a signal that perpetration is widespread, thereby undermining willingness to comply with the law, see Galbiati et al. (2013) for experimental evidence. Consistent with these effects, Cox and Collins (2014) found a positive correlation between awareness of the copyright law and quantities of unauthorized material downloaded. Finally, according to Lawrence Kohlberg's stages of moral development (Kohlberg, 1973), if young population is on their penultimate stage of moral development (stage five), i.e. their view of what is right and what is wrong depends on the opinion of the majority in a particular social group, legal awareness itself may have little effect on their ethical judgment.

Given these opposing effects, it may not be surprising that in an experimental survey closely related to ours Feldman and Nadler (2006) found that perceived social and ethical norms concerning unauthorized file-sharing were unaffected by announcements of legal (as well as informal) sanctions.[5] Overall, we formulate:

> **Hypothesis 4.** Legal awareness will have little effect on ethical judgment of file sharing.

Finally, as spelled out in the introduction, the dominant discourse of (industry-led) copyright awareness campaigns is clearly negative, emphasizing exclusively what is forbidden. The cited authors propose that this feature contributes to the prevalent critical view of the copyright as a whole, being perceived as an impractical burden on the users, tailored solely to the interests of creative industries. Such an effect impedes understanding and legitimacy of the law. We thus hypothesize that logically equivalent statements drawing a distinction between cases of fair use and copyright violations will have differentiated impact on legal and ethical perception of sharing. We shall refer to emphasizing what acts represent copyright infringement as "Negative Treatment (NT)" whereas emphasizing what belongs to the domain of fair use will be dubbed "Positive Treatment (PT)". Given observed inefficacy of NT campaigns, we expect that

[4] Although Nozick's theory is controversial in terms of social justice, we found it interesting in considering justice in the context of illegal file-sharing.

[5] However, self-declared intention to pursue such activities was reduced, in line with deterrence theory.

Hypothesis 5a PT will lead to a better understanding of the legal difference between cases of infringement and the fair use than NT.

Hypothesis 5b Ethical distinction between infringement and fair use will be more accentuated under PT than NT.

3 Methodology

We constructed eight stories describing the actions of a fictitious individual we call Piotrek (Peter), who streams or displays sports events having no consent of the original broadcasting entities (see Appendix A for the translation of the stories). All stories followed the same structure, but differed on several dimensions that potentially influence the ethical judgment of the conducted actions. The dimensions and the construction of the stories are discussed in Subsection 3.1. Additionally, to determine the effect of legal awareness, we manipulated the opening message concerning legality of specific actions, which we describe in Subsection 3.2. Subsection 3.3 describes dependent variables: ethical judgment in the main study and assessment of legal status in the manipulation check. Finally, the two samples of responders are described in Subsection 3.4.

3.1 Design

All of the described actions pertained to a form of sharing of sports broadcasts. The stories were developed around four dimensions that have been previously identified as important for the norms concerning unauthorized sharing. For each of the dimensions we have included one of the two possible levels in the stories description. The dimensions and their levels are provided in Table 1. The exact wordings are available in Appendix A.

Table 1: The four dimensions and their levels.

Dimension	Description	Interpretation
Online	NO: Peter organized a meeting. YES: Peter streamed the event on the Internet.	A physical world act. An online act.
Friends	NO: Peter shared the event with everyone. YES: Peter shared the event only with his friends.	Copyright infringement Fair use
Fee	NO: Peter allowed watching for free. YES: Peter required a payment for watching.	A selfless act A selfish act
Alternative	NO: The event was only available through expensive TV packages. YES: The event was available for free on public TV.	No cheap/easy-to-acquire alternative. Free, legal alternative.

All of the stories were constructed from a set of 'story components'. We have focused on conveying the particular dimensions without adding any other plot details so as to avoid distorting the judgments. Therefore, for each dimension we have constructed two sentences that were associated with one side of the particular dimension. We then constructed eight stories that varied across the four dimensions - i.e. we constructed them from the previously developed sentences. The only further editing of the stories was done to improve their flow. We have specifically avoided any mentions of other characteristics that could change the nature of Peter's deeds. For example, we have only described the streaming as happening during "organized meetings" or via the Internet website-we did not include any information on the exact nature of the meetings or the website's reputation.

Although in total we could have generated $2^4 = 16$ stories, we have eventually decided to simplify the design by using eight different scenarios. We have chosen the underlying dimension combinations following the fractional factorial design methodology (Box et al., 2005)[6]. This made our survey less tiresome for the responders, while still enabling us to estimate the impact of the dimensions (and their one-way and two-way interactions) on subjects' ratings.

Table 2 shows the values of all dimensions for the eight stories. The stories are grouped in pairs that appeared together on one screen. While throughout the paper we label the screens from A

[6]Having four two-level factors (dimensions) and setting the number of generators at '1' we arrived at eight ($2^{4-1} = 8$) stories required for our purposes.

to D, their specific order had been randomized, as well as the order of the two stories within any screen.

Table 2: Dimensions in the eight stories

Screen and story	Dimensions				Avg. ethic. judgm.		Considered legal (%)
	Online	Friends	Fee	Alternative	ES study	EF study	LS study
A1	NO	NO	NO	YES	1.07	1.43	62%
A2	NO	YES	YES	YES	-1.25	-0.63	45%
B1	YES	NO	YES	YES	-1.07	-0.83	10%
B2	YES	YES	NO	YES	1.31	1.27	77%
C1	NO	NO	YES	NO	-0.41	-0.87	17%
C2	NO	YES	NO	NO	2.11	1.94	92%
D1	YES	NO	NO	NO	-0.22	0.14	21%
D2	YES	YES	YES	NO	-0.47	-0.73	22%

Note: Average of ethical judgments on a scale from very negative (-3) to very positive (3). The Considered legal column describes the proportion of responders that considered the described action as lawful.

3.2 Treatments

Some previous studies have analyzed the effect of law deterrence and legal awareness on the potential customer's behavior and attitude towards 'piracy' (see e.g. Hietanen, 2008; Lysonski and Durvasula, 2008; Cox and Collins, 2014). It is unclear, however, how big of a role legal awareness actually plays, when some of the actions commonly referred to as 'piracy' actually constitute 'fair-use'. This is especially relevant in Poland and some other countries where downloading - as well as sharing among friends and relatives - is permitted within fair use[7]. In such countries legal awareness could in fact both discourage from sharing and encourage downloading and sharing with close relatives, with all actions commonly called 'piracy'.

To establish the awareness of law and its effect on the ethical judgment we have introduced two treatments possibly affecting the responders' awareness of what is legal. In the Positive Treatment (PT) we explained that sharing with friends is a case of fair use, while in the Negative Treatment (NT) we provided information explaining that sharing with strangers is against the law. Formally, these two messages were equivalent, yet ample evidence exists that direct inference ('sharing with friends is legal' ; 'sharing with strangers is illegal') is easier than indirect inference. These conditions were compared to the Control Treatment (CT) in which no hint concerning legality of the actions in question was provided. The allocation to the treatments was randomized, with equal number of subjects commencing each variant.

3.3 Dependent variable: main study and manipulation check

Two variants of the study were run. The only difference between the two variants was the dimension, on which the subjects were expected to assess the presented stories. In the main study, the Ethicality variant, they were asked to provide their ethical judgment of Peter's actions on the scale ranging from very negative (-3) to very positive (3). In the Legality variant we asked the responders to indicate whether they considered the deed lawful or against the law (variable "deemed legal").[8] The legality variant served as a manipulation check of our treatment strategy. It allowed us to directly observe whether PT and NT actually increased validity of legal assessment of the stories and, if so, in which cases they had a stronger effect.

3.4 Responders

We conducted our studies on two samples of responders. First, we used the student subject pool of the University of Warsaw-based Laboratory of Experimental Economics. Invitations were sent

[7] Examples of countries with some degree of legal downloading include Canada, Russia, Spain, Switzerland and, until recently, Netherlands.

[8] We reasoned that while ethical judgment comes in several shades of gray, legal status can be considered a binary variable. Furthermore, the former but not the latter has a natural neutral midpoint. Thus we decided it would be misguided to use the same scale in both cases.

to 400 subjects to take part in the Ethicality variant (henceforth Ethicality-Students or ES) and to 500 subjects for the Legality version (LS). We collected the responses for a period of one week for both Studies, achieving a response rate of 47% for ES and 49% for LS.

Additionally, to attract another population of subjects, we made use of the fact that the study took part during the World Championship in volleyball held in Poland. The invitations were distributed via sports news portals and on Twitter, using popular hashtags of #GoPoland and #TeamPoland. In total, 132 complete responses were collected in this way. Only the ethicality version was distributed in this sample; we will refer to it as Ethicality-Fans (EF). While Krawczyk et al. (2014) showed that student's opinion is a good approximation of the general public opinion, obtaining participants among the Internet sports fans in the midst of an exciting event provided an additional check if the findings are robust to individual experience and 'spur of the moment'.

Twenty-five vouchers worth 100PLN each (~25 EUR), issued by a popular chain store specialized in books, magazines and media were randomly distributed among participants (both students and fans) to increase the response rate.

We include the basic sample characteristics for each group of participants in Table 3. There is a stark difference between the web sample and the students sample. The fans were much older and are predominantly male, while in the students sample, slightly more than half of the participants were female. There was also a much larger dropout rate within the EF sample, probably because students registered in the subject pool are already accustomed to participation in online surveys. Importantly, as expected, there are no discernible differences between ES and LS subjects.

Table 3: Sample characteristics

	Ethicality-Students	Ethicality-Fans	Legality-Students
Invitations	500	Not controlled	400
Responders no.	234 (206)	220 (132)	194 (167)
Avg. age	24	33	24
Female (%)	63%	11%	63%
Median duration	288 sec.	217 sec.	287 sec.
Treatments	Avg. ethic. judgm.		Considered legal (%)
PT	0.25	0.64	42%
NT	0.02	0.16	40%
CT	0.08	-0.04	49%

Note: The responders' number in parentheses indicates the number of participants who actually finished the survey. Median durations of filling the survey disregard immediate dropouts. Average of ethical judgments on a scale from very negative (-3) to very positive (3). The Considered legal column describes the proportion of responders that considered the described action as lawful.

4 Results

We first report the effect of the dimensions used in the vignette experiment on the ethical judgment by the subjects. We place particular emphasis on identifying the effect of online/offline on the way responders evaluate the presented stories. In the second step we move to analyzing the treatment effects. i.e. the role legal awareness plays in shaping the ethical valuation.

4.1 Determinants of ethical judgment

Recall that according to Hypothesis 1, social norms in the context of the Internet (the so-called copynorms) will be more permissive than in the context of traditional activities, such as social events. As shown in Table 4, we find quite the opposite. Average rating of stories referring to online sharing was slightly negative, well bellow the rating for offline. The 'online' dummy is statistically significant and negative both in the total sample and when we separate students pool from the fans pool (effect sizes are very similar). Two explanations of this strong effect seem plausible. On the one hand, the linguistic norm of "piracy" could be suggestive that online sharing is indeed something inappropriate (even if legal, i.e. within the realm of fair use). On the other hand, however, social events - as opposed to the Internet - could be valued more socially acceptable due to all the other attributes they invoke. For example, socializing itself can be considered ethically desirable, which

would translate to a higher ethical judgment for actions which encourage socializing. While we are unable to unequivocally discriminate between these two explanations, we strongly reject Hypothesis 1.

Table 4: Determinants of ethical judgement

	(1)	(2)	(3)	(4)	(5)
Sample	ES and EF	ES	EF	ES and EF	
Stories	All	All	All	Online	Offline
Online	-0.482***	-0.493***	-0.470***		
	(0.050)	(0.067)	(0.073)		
Fee	-1.759***	-1.769***	-1.756***	-1.278***	-2.363***
	(0.078)	(0.098)	(0.127)	(0.088)	(0.108)
Alternative	-0.117**	-0.284***	0.109	0.439***	-0.685***
	(0.054)	(0.074)	(0.072)	(0.078)	(0.089)
Friends	0.527***	0.570***	0.471***	0.829***	0.283***
	(0.069)	(0.083)	(0.118)	(0.092)	(0.084)
Avg. rating	0.17	0.13	0.22	-0.08	0.42
# of observations	2,868	1,678	1,190	1,440	1,428
# of responders	375	213	162	369	364

Note: Ordered logit regressions. Standard errors clustered at individuals shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1 .

By contrast, we find strong support for Hypothesis 2, i.e. charging for access implies harsher ethical judgment. This effect is not only strongly statistically significant, but also very large.[9] This effect is actually larger in the offline context, which suggests that organizing commercial social events is beyond the limits of social acceptability, despite widespread popularity of ticketed events. We seek explanation of this fact in the design of the study: subjects were judging Peter, not a specialized enterprise.

The estimates for the total sample suggest that when an alternative is available, sharing is judged as less ethically acceptable, which confirms Hypothesis 3. However, significance and the sign comes mostly from the students pool and from offline stories. Namely, sharing is less ethically acceptable if an alternative is available in the offline context (and among students). Possibly, if broadcast is widely accessible, our subjects - especially students - see no benefits that would outweigh the violation of the legal norms. On the other hand, in the online context it seems that the wider the availability, the higher the ethical acceptance. This result may owe to the fact that many individuals accustomed to following sports events online have experienced broadcast interruptions and more sources are typically associated with better chances of actually observing the whole event. In the offline context, by contrast, broadcast interruptions are less frequent. Consideration of lower marginal harm involved in broadcasting otherwise available context may also play a role.

In the experimental design, the dimension 'friends' is associated with legal/illegal distinction. Namely, sharing with friends falls under the brackets of fair use, whereas sharing with the unknown individuals poses a violation of the legal status quo. We find strong confirmation for the fair use copynorm, i.e. sharing is viewed as more socially acceptable when it happens within the closest circle. This effect does not seem to depend on age or wealth, because we find no significant difference between the student pool and the fans pool. However, the prevalence of this social norm seems much stronger in the context of the Internet.

4.2 Legal awareness and ethical judgement - the treatment effects

Recall that the experiment featured two treatments. In the positive treatment (PT), participants were told what kind of behaviors in the context of sharing are legal. In the negative treatment (NT), we emphasized which type of actions are illegal. Both messages were truthful and none of them contained threat or other form of incentives. Were these treatments effective in increasing the legal awareness of the subjects?

[9] Due to the factorial design of this study, the coefficients can be compared directly, i.e. a larger coefficient implies stronger effect on ethical judgment.

The treatment was likely to have any bearing on ethical judgment directly or indirectly, when mediated by the perception of legality. For the latter, Table A.1 in the Appendix demonstrates that indeed treatment did have an impact on the perception of legality. In fact, the effects are statistically significant and of expected signs both in the correctness of the answers and in the judgment on legality.[10]

Does the perception of legality affect the ethical judgment (the indirect treatment effect)? While subjects consider sharing with friends as more ethically acceptable, it is not necessarily a case for the role of legal awareness, and thus should not be interpreted as evidence against Hypothesis 4. In the student sample we can directly relate the understanding of a legal norm to the ethical judgment, see Table 5. Based on the LS, as described in section 3.3, we construct a dummy considered legal taking the value of 1 if most students within a treatment-age group judged the story as legal and 0 otherwise.[11] We find that the coefficient for legal awareness is generally low and insignificant. We thus find no grounds to reject Hypothesis 4 that legal awareness has little effect on copynorms.

Table 5: Legal awareness as determinant of ethical judgment (ES)

	(1)	(2)	(3)	(4)	(5)
Stories	All	With all	With friends	Online	Offline
Considered legal	0.989***	0.228	0.210	0.312	0.171
	(0.157)	(0.227)	(0.206)	(0.238)	(0.190)
Online	-0.230***	-0.853***	-0.094		
	(0.084)	(0.142)	(0.101)		
Fee	-1.193***	-1.008***	-2.514***	-1.123***	-2.352***
	(0.139)	(0.150)	(0.238)	(0.159)	(0.198)
Alternative	-0.511***	0.216*	-0.952***	0.320**	-1.056***
	(0.082)	(0.127)	(0.106)	(0.140)	(0.118)
Friends	0.260***			0.910***	0.155
	(0.094)			(0.159)	(0.120)
Avg. rating	0.13	-0.16	0.42	-0.11	0.38
# of observations	1,678	839	839	844	834
# of responders	213	213	213	213	210

Note: Ordered logit regressions on ES. The dummy variable considered legal takes the value of 1 if more students (within a treatment-age group) judged the story as legal and zero otherwise. Standard errors clustered at individuals shown in parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Direct effects of treatment on the ethical judgment are displayed in Table 6. In full sample, the PT significantly improved the ethical perception of the actions. Not surprisingly, and in line with observations for the manipulation check, this effect was due to more positive rating of sharing with friends only (interactions of PT with Friends were higher than for the control group). This impact seemed to be higher in our Fan than Student sample - students perceived sharing with fiends more positively in the control treatment already. Likewise, PT manipulation appears to have made more of an impact for judgments of online sharing. Rating of stories involving sharing with all was not affected by treatment manipulation.

Summarizing, the treatment effects, which were at the core of Hypotheses 5a and 5b, are visible for the positive treatment, but not for the negative treatment. Recall that both treatments contribute to more restrictive perception of what is legal (see Table A.1). This incongruity suggests that while awareness campaigns are likely to increase the understanding of the legal norms, emphasizing

[10] Overall, the treatment effect on the perceived and factual legality of the studies is statistically significant and quantitatively seizable. In the case of sharing with all, responders were more likely to correctly judge that the action is against the law under PT and NT, as compared to control group. However, for sharing with friends, entries for PT and NT are not significantly different from those for the control group. These effects brought about a general positive impact of PT on correctness of the answers and overall negative impact of the NT on legal acceptability of the deed, while PT only had weakly significant impact here. Note also that subjects had some correct baseline intuition regarding legality also absent treatment manipulation - in the control group, stories involving sharing with friends only received higher rating than those on sharing with all.

[11] We define groups with the same treatment and within the same age category: a) below 21, b) 21 to 25 or c) above 25 years.

Table 6: Determinants of ethical judgment - treatment effects

	(1)	(2)	(3)	(4)	(5)	(6)
	Whole sample		Students	Fans	Online	Offline
PT	0.295***					
	(0.108)					
NT	0.041					
	(0.110)					
NT#All		-0.063	-0.150	0.057	-0.029	-0.092
		(0.135)	(0.160)	(0.230)	(0.176)	(0.138)
NT#Friends		0.445***	0.437***	0.457**	0.789***	0.162
		(0.136)	(0.170)	(0.224)	(0.171)	(0.144)
PT#All		0.168	0.074	0.308	0.246	0.088
		(0.136)	(0.159)	(0.242)	(0.173)	(0.144)
PT#Friends		0.735***	0.602***	0.931***	1.101***	0.441***
		(0.135)	(0.166)	(0.229)	(0.169)	(0.144)
CT#Friends		0.294***	0.378***	0.193	0.633***	0.020
		(0.107)	(0.120)	(0.191)	(0.142)	(0.125)
Avg. rating	0.17	0.17	0.13	0.22	-0.08	0.42
# of observations	2,868	2,868	1,678	1,190	1,440	1,428
# of responders	375	375	213	162	369	364

Note: Ordered logit regressions for: (1) both Ethicality samples and all stories; (2) Students sample only and all stories; (3) Fans sample only and all stories; (4) both Ethicality samples but online stories only; (5) both Ethicality samples but offline stories only. Standard errors clustered at individuals in parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

the 'forbidden' is not likely to affect the ethical judgment - in the context of this study: the copy-norms. By contrast, we demonstrate the 'allowed' can positively affect the overall ethical judgment of sharing. But would this affect the copynorms in the desirable direction, i.e. would it make us selectively permissive in accordance with the legal rules? It seems that in the student sample sharing with friends is always judged better - with or without treatments. Yet, among the fans, control treatment is insignificant in the interaction with the 'friends' dimension, which suggests that with reference to this subject pool the treatments could have affected the copynorms in the desirable direction. Strictly with reference to Hypotheses 5a and 5b, 'friends' dimension is characterized with bigger coefficient under PT than under NT, which we interpret as supportive evidence that positive treatment results in more diversified ethical judgment between legal and illegal deeds.

5 Conclusions

The prevalence of digital "piracy" suggests a clear disparity between the legal norms and the social norms. While downloading and sharing content in an unauthorized way is by far not the only example of such disparity, it may actually be that the intrinsic motivations prevent the legal norms from becoming universal. One of the ways to verify this contention, is to inquire the determinants of the ethical norms behind deeds such as sharing content. Our objective in this study was to provide experimental evidence on the role of digital context in evaluating the content sharing behavior.

Our work contributes to the literature in several ways. First, we compared ethical judgment of online versus offline content sharing. In doing so we address the debate if social norms are indeed more permissive on the Internet. We did not find evidence in support of this claim: online and offline ethical norms do not seem to differ for content sharing.

Second, the design of the vignette experiment allowed to clearly identify the role of legality, availability of alternatives and deriving material benefits from content sharing. We found that deriving material benefits had a negative bearing on the ethical judgment, ceteris paribus. In addition, we found that legal deeds (fair use) were considered more ethically acceptable than illegal deeds (copyright infringement) even in the context of online sharing. The latter finding provides further reinforcement to the earlier conclusion that roots of the ethical judgment in the online and offline contexts do not differ substantially. The focus on the specific practice of sharing, rather

than a blurred concept of “piracy” makes this finding particularly relevant for the policy context, because we addressed the actions of those who make “piracy” possible at all (by posting content online). Also, the focus on sharing is of particular importance for the countries where only sharing is prohibited by law. Given the richness of these conclusions, we believe that vignette experiment is a viable technique of obtaining insight into ethical perception of digital “piracy”.

Third, we designed treatment that allowed investigating whether a ‘positive’ framing of what is allowed by the law carries an effect on responders’ ethical judgment. We compared it to a ‘negative framing’, focused on copyright infringement, which is typical for anti-piracy campaigns. This adds to the previous literature on the link between legal awareness and ethical stance on unauthorized content sharing. We found that positive treatment led to a clearer distinction between legal actions (fair use) and illegal actions (copyright infringement) in their ethical judgment.

Finally, we provided insight into a field that received relatively little scrutiny so far, i.e. sports events that are now increasingly becoming an object of unauthorized transmissions. Moreover, participants included sports fans, in addition to standard student subjects. Thus, we have acquired responses from individuals directly interested in the content in question. The methodological lesson is that, perhaps surprisingly, student samples probably do not cause a strong bias when compared to other populations.

References

Box, G. E. P., Hunter, J. S., Hunter, W. G., 2005. Statistics for experimenters: design, innovation, and discovery, 2nd Edition. Wiley-Interscience, Hoboken, N.J.

Cox, J., Collins, A., 2014. Sailing in the same ship? differences in factors motivating piracy of music and movie content. Journal of Behavioral and Experimental Economics, 70-76.

Fehr, E., Gächter, S., 2002. Do incentive contracts undermine voluntary cooperation?

Feldman, Y., Nadler, J., 2006. Expressive law and file sharing norms. San Diego Law Review 43, 577-618.

Filiciak, M., Justyna, H., Alek, T., 2012. The circulations of culture: On social distribution of content.
URL http://obiegikultury.centrumcyfrowe.pl

Floridi, L., 2002. Information ethics. Philosophy in the Contemporary World 9 (1), 39-45.

Galbiati, R., Schlag, K. H., van der Weele, J. J., 2013. Sanctions that signal: an experiment. Journal of Economic Behavior & Organization 94, 34-51.

Gillespie, T., 2009. Characterizing copyright in the classroom: The cultural work of antipiracy campaigns. Communication, Culture & Critique 2 (3), 274-318.

Gneezy, U., Rustichini, A., 2000. Fine is a price, a. J. Legal Stud. 29, 1.

Goodenough, O. R., Decker, G. J., 2009. Why do good people steal intellectual property? Law, Mind and Brain, Ashgate, 2008-2.

Hart, R., 2012. Top 10 reasons people use to justify pirating digital content (and why theyre wrong). litreactor.com.

Hietanen, H., 2008. Criminal friends of entertainment: Analysing results from recent peer-to-peer surveys. SCRIPT-ed 5 (1), 31-49.

Hinduja, S., 2008. Deindividuation and internet software piracy. Cyberpsychology and Behavior 11 (4), 715-32.

Hutchins, B., Rowe, D., 2012. Sport beyond television: The Internet, digital media and the rise of networked media sport. Vol. 40. Routledge.

Kahan, D. M., 2001. Trust, collective action, and law. Boston University Law Review 81, 333.

Karaganis, J., Renkema, L., 2012. Copy culture in the us and germany.
URL http://piracy.americanassembly.org

Kohlberg, L., 1973. The claim to moral adequacy of a highest stage of moral judgment. The journal of philosophy, 630-646.

Krawczyk, M., Tyrowicz, J., Kukla-Gryz, A., Wojciech, H., 2014. piracy is not theft! is it just students who think so? Journal of Behavioral and Experimental Economics 54, 3239.

Larsson, S., Svensson, M., Kaminski, M., Rnkk, K., Olsson, Johanna, A., 2012. Law, norms, piracy and online anonymity. Journal of Research in Interactive Marketing 6 (4), 260-280.

Lysonski, S., Durvasula, S., 2008. Digital piracy of MP3s: consumer and ethical predispositions. Journal of Consumer Marketing 25 (3), 167-178.

McAdams, R. H., 2000a. Attitudinal theory of expressive law, an. Oregon Law Review 79, 339.

McAdams, R. H., 2000b. A focal point theory of expressive law. Virginia Law Review, 1649-1729.

Mirghani, S., 2011. The war on piracy: Analyzing the discursive battles of corporate and government-sponsored anti-piracy media campaigns. Critical Studies in Media Communication 28 (2), 113-134.

NetResult, 2011. Update on digital piracy of sporting events 2011.
URL http://www.wipo.int/export/sites/www/ip-sport/en/.../piracy_report_2011.pdf

Nozick, R., 1974. Anarchy, state, and utopia. Vol. 5038. Basic books.

Steinert, T., Lepping, P., 2009. Legal provisions and practice in the management of violent patients. a case vignette study in 16 european countries. European Psychiatry 24 (2), 135-141.

Yar, M., 2008. The rhetorics and myths of anti-piracy campaigns: criminalization, moral pedagogy and capitalist property relations in the classroom. New media & society 10 (4), 605-623.

Appendix A. Stories

The stories were organized in pairs that shared the first sentence - always describing the online and alternative dimensions. Each screen contained one such pair. The shared dimensions were always displayed once, on top of the screen with the remaining part of the stories described with the questions. Below is a list of all the stories in their full versions.

Screen A. Peter organizes meetings, at which he shows sports events transmissions that are available for free on TV.

1. Anyone can take part in these meetings with no entry fee, including people Peter never met.
2. Only Peter's close friends are invited to these meetings and they are required to pay a small entry fee.

Screen B. Peter shares online transmissions of sports events that are available for free on TV.

1. Anyone who pays a small fee can watch these transmissions.
2. The transmissions are free but available only for Peter's friends.

Screen C. Peter bought many expensive TV packages and thus gained access to various sports events that he shows at meetings organized specifically for that purpose.

1. Anyone can take part in these meetings, including people Peter never met. Peter charges a small entry fee for participation.
2. Only Peter's close friends can take part in these meetings with no entry fee.

Screen D. Peter bought many expensive TV packages and thus gained access to various sports events that he shares online.

1. The transmissions are free and available to all the Internet users.
2. Only Peter's friends who pay a small fee can access the transmissions.

Appendix B. Manipulation check

Table A.1: Manipulation check (LS)

	(1) Correct answer	(2) Correct answer	(3) Deemed legal	(4) Deemed legal
PT	0.052**		-0.067*	
	(0.026)		(0.036)	
NT	0.023		-0.099**	
	(0.026)		(0.039)	
NT#All		0.122***		-0.135***
		(0.041)		(0.047)
NT#Friends		-0.095*		0.194***
		(0.051)		(0.052)
PT#All		0.121***		-0.133***
		(0.043)		(0.049)
PT#Friends		-0.035		0.254***
		(0.044)		(0.044)
CT#Friends		-0.021		0.269***
		(0.056)		(0.037)
# of observations	1,330	1,330	1,330	1,330
# of responders	172	172	172	172

Note: Models (1) and (2) use the binary indicator for the factually correct answer. That is, the dependent variable is equal to one if a story of Peter's behavior involving sharing with all is deemed as unlawful or if a story describing sharing with friends only is deemed legitimate (and zero otherwise). The dependent variable in models (3) and (4) is the dummy indicating that the action was thought of as lawful. The base category contains all the stories presented in the control treatment in specifications (1) and (3) and stories involving sharing with all under CT in specifications (2) and (4). Standard errors clustered at individual in parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

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