

Safe Sexting ?

Perceived legitimacy, perceived risk and perceived sharing risk in online publication of pictures of a personal nature.

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ABSTRACT

This study focused on the way the public perceives sexting pictures. Perceived legitimacy, risk and sharing risk of participants(N=85) on sexting pictures were compared to other personal pictures through an online experiment. Two variables, fidelity(high and low) and scenario(consent versus nonconsensual publication), were manipulated in sexting and personal pictures. In an online experiment perceived risk, perceived sharing risk and perceived legitimacy were measured. To find out more about how the public perceives sexting. Significant results were found on all three scales when comparing sexting to non-sexting pictures. Because of their explicit nature they are perceived as more of a risk, sharing risk and less legitimate to publish. Perceived legitimacy was influenced by fidelity and scenario suggesting that legitimacy is extracted from picture quality and scenario through situation awareness. Perceived risk and perceived sharing risk seemed to have no connection to fidelity or scenario. The perceived risk and perceived sharing risk seemed to be derived directly from the picture itself, its quality, independent from the text-based context described attached to it. Risk seemed to be determined by situation awareness in a different way; as long as it is clear to see what is portrayed in the picture itself it was enough to determine the risk involved.

Keywords: Sexting, Online experiment, Perceived legitimacy, Perceived (Sharing) Risk, Fidelity, Scenario, SEAM, Information Privacy, Situation Awareness.

INTRODUCTION

Anthony Weiner, Paris Hilton Kim Kardashian, Rihanna, Vanessa Hudgens; just a few names

of celebrities whom have become famous or infamous because of sexting scandals. But you don't have to be/become famous to be sexting. When someone brings up the name of Jessica Logan people draw a blank. Tragically, Jessica Logan has been reported as the first known fatality over the consequences of sexting. She committed suicide following ongoing bullying and harassment after her ex-boyfriend circulated a nude photo she had sent him around her school(Hastings 2010). This example illustrates that there are real people behind sexting, it is not just a celebrity-trend, it can have dire consequences.

'Sexting' is a combination of the words 'sex' and 'texting' and designates the practice of using a camera cell phone to take and send nude (including semi-nude) photographs to other cell phones or Internet sites (Chalfen 2009). At this date that definition might need revision. The boundaries of the phenomenon named sexting are hard to pin down. Does a sexting picture need to be taken with a mobile phone? Doesn't sending a picture not taken with camera via email have the same outcome? What is the moral behind sexting? Is sexting a reason for politicians to lose their jobs? Is sexting an "ill effect" for the masses? Or just a wholesome practice between consenting adults? And Is it necessary to focus on the "sexters"(practitioners of sexting) themselves or on the public that judges them?

This study will, instead of focusing on the relatively small group of "sexters", focus on the way the public perceives sexting pictures. In particular the perceived legitimacy, risk and sharing risk of sexting pictures compared to other personal pictures. Two variables, fidelity(high and low) and scenario(consent versus nonconsensual publication), will be manipulated in sexting and personal pictures. In an online experiment perceived risk, perceived sharing risk and perceived

legitimacy will be measured. To find out more about how the public perceives sexting.

Pornography

One cannot bring up the phenomenon sexting without breaching the subject of pornography; its early ancestor. Through the last decades research concerning pornography has vastly focused on the possible antisocial behavioral outcomes of sexually explicit material. The main concern of sexually explicit material was, and is, its influence on sexual crimes (rape, incest, and child molestation), further aggressive behavior and anti-female attitudes. In their meta-analysis on effects of sexually explicit material Mundorf, D'Alessio, Allen & Emmers-Sommer (2007, p. 192) found positive correlations between exposure to sexually explicit material in experimental settings and subsequent anti-female attitudes and increased aggressive behavior. They also found support for the social learning and the excitation transfer theory (Mundorf et al, p. 191). However there are also many contradicting findings, among them the finding that for aggressive behavior; exposure to nudity actually decreased the subsequent aggressive behavior. As Mundorf et al (2007, p. 193) indicate "a correlation between exposure and outcome of the kind of this meta-analysis, although consistent with an explanation of causality, does not rule out alternative explanations that post no causal roles for media exposure". Gunter (2002) pointed out that "ill effects" of pornography seem to be confined to a minority of its users, so restricting its availability would curb the freedom of the majority of users. And of course there is also the no-effects position amongst others taken by Kutchinsky (1991). Pornography is (d)evolving into a medium that is no longer just made by professionals. Any everyday person with a camera can voluntarily or involuntarily become the flavor of the week

on the internet. The user has become creator and distributor.

The Internet and sexual explicit "Amateur" material (SEAM)

Porn, contrary to popular belief, is not what the internet was made for. However at this time it does inhabit a large place in cyberspace. Throughout history one of the first responses to new technology has been to use it to create better sexual imagery (Giles 2003, p. 88). With the internet came the rapid growth of the phenomena sexual explicit "amateur" material (SEAM), the name implies mainly that it has not been made by "professional" porn stars, but these days anyone with a webcam or camera can create (and get paid for creating) SEAM. Which is why a definition for SEAM is hard to pin down; it implies a certain homemade authenticity, but certain divisions of the regular sex-industry try to portray that as well, so it would be difficult to differentiate.

Social psychologists might argue that voyeurism has always been around but simply found a larger platform, that people are just getting their kicks and/or making some money. Media psychologists might argue that SEAM is a form of social learning. Communication researchers could argue that SEAM came straight from the hypodermic needle. Or possibly SEAM is simply filling the divide between the unrealistic media sex (Harris 1999; sex scenes in mainstream media) and over the top sex antics portrayed in pornography. Whatever the cause of the growth of SEAM, through mostly celebrity scandals or child pornography charges against minors (Choi 2009, Siegel 2009) it's becoming obvious that the current rise in technology is getting the best of its users. Using technology for SEAM, be it either naively, mistakenly or against your will, can have serious

consequences for your privacy and life in general.

Sexting

Sexting is a popular form of SEAM with the exemption that is usually not meant for a main audience. Although the same can be said about SEAM it seems that sexting has a more social nature considering the motivations by Chalfen (2009, Figure A). Although not necessarily sexting usually applies the “sexter” (knowing the person the sexting picture is sent to.). It seems sexting is as used as a tool to find a viable mate, celebrate love and gain self-confidence or social status. However these same sexting pictures can be used to by the recipient to undo all the positives through blackmail, bullying and harassment. Therefore sexting can be used for social but also antisocial goals.

A broader definition for sexting is; sending or forwarding nude, sexually suggestive, or explicit pictures on a cell phone or online (Siegle 2010). However it is also possible to “sext” via text-message, picture and video. Although apparently only a small part of the population is known to sext (Figure A.), sexting was 2009’s number one buzzword on Time magazine’s list (Stephey, 2009). So even though not everyone admits to actually being a sexter people are talking about it.

Sexting is mainly perceived as problematic for teenagers, as whatever sexually explicit material of themselves they bring into the world is by law child pornography (in the USA making the creator a sex offender, even if that person him/herself is a minor and the pictures portray themselves). Besides the dangers of coming into contact with actual pedophiles, there’s also the risk of (cyber) bullying and once posted a sexting-picture/text/video can keep influencing a life for a very long time (referred to by some as a cyber tattoo).

However, the harm following the practice of sexting doesn’t start at the moment the picture is taken, rather at the moment it, voluntary or involuntary, finds its way into the hands of a third party. The reaction from global and in particular the local community in many ways determines the outcome for the “sexter”. Whether the sexter be an adult or an impressionable teenager; everyone seems to underestimate the possibly side-effects of sexting.

Behind the relative small group of people that are known to participate in sexting. There is a much larger group viewing them, whether it is on the World Wide Web (WWW) or on their phones. Besides the obvious motives, sexual arousal or curiosity, much more might be at play here. Peter & Valkenburg (2008) found that exposure to sexually explicit Internet material (SEIM) stimulates sexual preoccupation, while that influence was fully mediated by the subjective sexual arousal. Peter & Valkenburg (2008) call for a broader look at the types of effects that adolescents’ use of SEIM may elicit.

The appraisal of sexting pictures will probably differ greatly per individual. However the main appeal of sexting might be the invasion of privacy it portrays. As a society through the last decade we’ve gotten introduced and shortly after that bombarded by “reality” television. And at this moment there certainly still seems to be an appetite for “reality concepts”. When looking at the increase in reality programs, it doesn’t look like the appetite for them will be decreasing any time soon. The key ingredient for the reality concept is experiencing something real, which is by definition achieved by invading someone’s privacy. Sexting pictures are exactly that, something private.

Figure A. *Facts on Sexting: Statistics, projections, motives and scenario's.*

Chalfen 2009	20% of all teens in the USA	have either sent or posted pictures or videos of themselves where they are nude or only partially clothed.
	Four main motivations	<ol style="list-style-type: none"> I. Picture(s) sent after a partner asked for them (James 2009). II. Picture(s) sent as a form of flirting (Jones 2008) III. Picture(s) sent as a form of feedback on their looks(Alapo 2009) IV. Picture(s) sent as a form of "safe" sex (Alapo 2009)
Ghadialy 2009	36%(age 20-26) of females 31% (age 20-26) of males	say they have sent or posted sexting images.
Family Research Council 2009	20%(N= 653 age 13 - 19)of teens 33.33%(N=627 age 20-26) of young adults (USA national representative sample)	reported to have sent or posted semi-nude or nude images of themselves in cyberspace.
Pew internet 2009	4% (12-17) of cell-owning teens ages 15% (age 12-17) of cell-owning teen Older teens(age 17) are much more likely to send and receive these images;	<p>say they have sent sexually suggestive nude or nearly nude images of themselves to someone else via text messaging.</p> <p>say they have received sexually suggestive nude or nearly nude images of someone they know via text messaging on their cell phone.</p> <p>30% have received a nude or nearly nude image on their phone.</p> <p>8% with cell phones have sent a sexually provocative image by text</p>
	Three main scenarios for sexting:	<ol style="list-style-type: none"> I. exchange of images solely between two romantic partners II. exchanges between partners that are shared with others outside the relationship III. Exchanges between people who are not yet in a relationship, but where at least one person hopes to be.

Privacy

With the rapid growth of advancements in technology used in day to day life, privacy has become a far more intricate concept than it used to be. In the pre-computer age you only had to keep track of tangible private information. In the age of the computer however you can blog, twitter, instant message, Short Message Service these things which makes it that much harder to keep them under lock and key. The core issues are the same, however largely amplified, social networks have become larger and interweaved with the ability to contain private information you share on them.

As information has gone digital it has become more accessible and easier to distribute. However, as anyone has seen in the media or experienced for themselves at some point, being unable to hold on to personal information can have abundant and long-lasting consequences. Therefore several industries have become highly engaged in the concept of information privacy and safety. Terms of service (TOS) have therefore become an essential part of the use of nearly every site where you enter personal information. The TOS describe what is done with the information gathered and what the rights of the user are considering the matter. Keeping a person's information safe has become a liability issue. However gathering and using personal information has also become lucrative, consumer-information is one of the most valuable assets in the current-day economy.

Lee and LaRose (1994) analyzed the correspondence between competing sets of privacy dimensions (Burgoon, 1982; Burgoon et al., 1989; Westin, 1967) and distinguished the dimensions found in figure B.

Figure B .

Privacy Dimensions by Lee and LaRose (1994)

Physical privacy (Solitude)	The state of privacy in which persons are free from unwanted intrusion or observation.
Informational privacy (Anonymity)	The desire to have control over the conditions under which personal data are released.
Psychological privacy (Reserve)	The control over release or retention of personal information to guard one's cognitions and affects.
Interactional privacy (Intimacy)	Relevant to relationships in social units as it preserves meaningful communication between individuals and among group members.

Perceived risk, Perceived sharing risk and Perceived legitimacy

The practice of sexting can potentially impact all of the dimensions of privacy found in Figure B and therefore brings with it the risk of invasion of privacy. Whilst these dimensions of privacy are still being explored. There is also the consideration that because of the fact that personal information is shared more freely every day, the user's perception and thereby the definition of privacy, and thereby invasion of it, might have shifted. Which begs the question are personal pictures still seen as something private and is the danger of sharing these pictures deemed dangerous? And as an extension of that how are they perceived compared to sexting pictures?

H1: Sexting pictures will score higher on perceived risk, perceived sharing risk and perceived legitimacy compared to non-sexting pictures.

Scenario

There are several scenarios in which sexting pictures could find their way on the www, as presented previously (Figure A.). The scenario wherein the sexting picture gets presented, will arguably influence the perspective of the viewer(s). Recently nonconsensual posted sexting pictures of a porn star going by the name of Tori Black surfaced on the WWW (Renegade99 2010). In “normal” celebrity sexting scandals the excitement is usually about seeing a superstar nude for the first time. However the fact that this was newsworthy surely wasn’t because of the sexual content, which was after all far less explicit than the many porn-movies and magazines she had performed and been portrayed in before. However the sexting pictures did portray an authentic “realness”,

which as noted before might have to do with the implicated invasion of privacy. However surely there have been earlier attempts to portray this realness in a professional setting, so could it be that the underlying factor was that the posting of the pictures had been nonconsensual ?

H2: Perceived legitimacy, perceived risk and perceived sharing risk will be higher on sexting pictures portrayed as published in a non consensual scenario than on sexting pictures portrayed as published in a consensual scenario.

Fidelity

The trend of sexting went hand in hand with the upgrades in technology, therefore sexting pictures resolution has improved substantially. The media equation (Reeves and Nash 1997) suggests that visual fidelity of visual images has no effect on: attention, memory and evaluation of the experience.

Because people have enormous experience with images that are poorly defined, fidelity seems to have very little effect on the experience of pictures. However since the distinction between pornography and SEAM, which sexting is a form of, is that one is made by professionals and the other by amateurs. A sexting picture with a high resolution might seem unauthentic and appear too much like professional porn pictures. The main appeal of SEAM is authenticity “the home-made” feel, watching something “real” and a low fidelity of a picture might enhance that effect.

H3: Sexting pictures with a low fidelity will score higher on perceived risk, perceived sharing risk and perceived legitimacy than sexting pictures with a high fidelity.

METHODS

Participants

The total of participants that took part in this study were 124 of that total 85 (68,5%) filled out a complete version of the questionnaire. Of the viable participant responses, 41 were male and 44 were female, age ranged from 18 to 79 (M=36.8, SD=16.7). Current education level was also measured (Figure C). Participants were gathered through several internet fora and email request towards acquaintances whom were requested to forward the invitation.

Materials

The questionnaire that was created was available through www.thesistools.nl/18plusonderzoek, it pertained 9 pages in total. The online questionnaires were most likely filled out in private behind a personal computer, notebook, netbook or Smartphone. Screen size was measured as a variable, sizes ranged

Figure C

Distribution, count, pearson chi square and percentages of participants.

Condition	Pearson Chi square				Fidelity		Pearson Chi square		Scenario		Pearson Chi square
	I	II	III	IV	Low	High	X ₂	X ₂	Consent	No consent	X ₂
Gender	Male	9 (22.0%)	10 (24.4%)	13 (31.7%)	9 (22.0%)	3.86 (53.7%)	22 (46.3%)	1.39 (53.7%)	22 (46.3%)	19 (46.3%)	0.02
	Female	16 (36.4%)	10 (22.7%)	7 (15.9%)	11 (25.0%)	18 (40.9%)	26 (59.1%)		23 (47.7%)	21 (52.3%)	
Student	Nee	17 (32.1%)	15 (28.3%)	12 (22.6%)	9 (17.0%)	20.22* (39.6%)	21 (60.4%)	5.34 (54.7%)	29 (45.3%)	24 (45.3%)	9.13*
	MBO	0	0	0	3 (100%)	0	3 (100%)		0	3 (100%)	
	HBO	3 (23.1%)	3 (23.1%)	1 (7.7%)	6 (12.5%)	7 (53.8%)	6 (46.2%)		4 (30.8%)	9 (69.2%)	
	WO	5	2	7	2	9 (56.3%)	7 (45.8%)		12 (75.0%)	4 (25.0%)	
Total		25 (29.4%)	20 (23.5%)	20 (23.5%)	20 (23.5%)	40 (47.1%)	45 (52.9%)		40 (47.1%)	45 (52.9%)	

*p=0.05 N=85

Conditions portrayed in figure C

Condition 1: High fidelity, Scenario consent for publication online(HFC).

Condition 2: High fidelity, Scenario no consent for publication online(HFNC).

Condition 3: Low fidelity, Scenario consent for publication online(LFC).

Condition 4: Low fidelity, Scenario no consent for publication online(LFNC).

from 3-5 inch (most Smartphone's) to larger than 41 inch, the most used screen size was 17-19 inch (large notebooks/small pc screens).

Stimuli used (Figure D.) where four pictures of one and the same woman to account for possible variations. The pictures described where augmented for the low fidelity condition using the program GIMP 2.0. The photograph's resolution was downgraded from 100 (high fidelity) to 5 (extremely low fidelity), resulting in a picture of the same measurements but about one tenth its size; 450 kilobyte became 45 kilobyte.

Measurements

Perceived legitimacy (Malhotra, Kim & Agarwal, 2004)

Was translated to Dutch and adjusted to fit the subject of exposure to personal pictures. It contained five questions informing on invasion of privacy and the participants emotional state (uncomfortable/ at ease/ I take it personal) concerning the online publication and use of the particular picture. Items can be found in figure E.

Perceived Risk (Jarvenpaa and Tractinsky 1999)

Was translated to Dutch and adjusted to fit the subject of exposure to personal pictures. After the adjustments it was broken up into two separate scales; perceived risk and perceived sharing risk.

Perceived Risk

Perceived risk contained two questions pertaining towards the direct risk of the publication of the particular picture online and the risk of it spreading across the World Wide Web. Items can be found in figure F.

Figure D.

Stimuli 4 pictures (actual pictures can be requested via thesismailut@gmail.com)

Stimulus A	A personal picture of a young woman from the waste up.
Stimulus B	A personal picture of a young woman.
Stimulus C	A nude/sexting picture of a young woman.
Stimulus D	A nude/sexting picture of a young woman in a sexual explicit pose. It contained a male counterpart, however only his genitals, arm and hand touching the young woman's genitalia were visible.

Perceived Sharing Risk

Perceived sharing risk contained three questions pertaining towards the trust in others concerning; sharing a personal picture similar to the particular picture shown with others and the overall honesty of others in their treatment of a general personal pictures provided by the participant. Items can be found in figure G.

Procedure

This study was created as a 2x2 design and therefore had four conditions wherein fidelity and scenario varied.

Each participant was randomly put into a condition (Figure G.) and was then exposed to four pictures varying in personal nature. The pictures were not shown randomly, rather they were presented in order of exposedness. Females are more likely to have sent naked photos of themselves, and males are more likely to have received them (Siegle 2010). Therefore pictures of a female were used as stimuli.

Figure E

Means standard deviation, Item-total correlations and Cronbach Alpha of Perceived legitimacy.

	Stimulus A			Stimulus B			Stimulus C			Stimulus D											
	M	SD	Item-Total R	M	SD	Item-Total r	M	SD	Item-Total r	M	SD	Item-Total r									
Perceived legitimacy items 1-5 on a likert scale 1-7 (helemaal eens- helemaal oneens)																					
Item 1	Ik vind het online plaatsen van deze foto een inbreuk op deze persoon haar privacy.	3.51	2.18	.64	.61	3.53	2.13	.64	.63	5.58	2.07	.61	.66	5.74	1.91	.60	.63				
Item 2	Ik voel me ongemakkelijk bij hoe deze foto wordt gebruikt.	2.52	1.59	.69	.78	2.73	1.61	.78	.81	5.11	2.11	.75	.76	5.13	2.02	.71	.73				
Item 3	De manier waarop deze foto wordt beheerd vind ik niet prettig.	3.08	1.85	.66	.79	3.08	1.75	.80	.83	5.24	1.95	.79	.81	5.32	1.86	.80	.85				
Item 4	De manier waarop er met deze foto wordt omgesprongen trek ik me persoonlijk aan.	1.93	1.21	.45	.54	2.22	1.34	.58	.62	3.56	1.95	.60	.61	3.56	1.97	.56	.58				
Item 5	Ik heb weinig reden mij zorgen te maken over de privacy van deze persoon, op basis van het online plaatsen van deze foto. (Reversed)	3.51	2.13	.05	3.47	1.84	.32	5.01	2.10	.30	5.02	2.09	.24								
Scale with item 5													14.54	6.15	15.04	6.32	24.49	7.69	24.78	7.26	
Scale without item 5													11.04	5.67	11.56	5.81	19.48	6.79	19.75	6.47	
Cronbach's Alpha α =													Cronbach's Alpha α =			Cronbach's Alpha α =			Cronbach's Alpha α =		
Internal Consistency Scale with item 5													.70		.81		.81		.79		
Internal Consistency Scale without item 5													.83		.86		.86		.85		
Total Scale													.78			.85					
Overall Internal Consistency Scale with item 5													.85								
Overall Internal Consistency Scale without item 5													.85								

Figure F + G

Means standard deviation, Item-total correlations and Cronbach Alpha of Perceived risk and perceived sharing risk.

Perceived risk items 1 and 2 on a likert scale 1-7 (helemaal oneens - helemaal eens)	Stimulus A			Stimulus B			Stimulus C			Stimulus D		
	M	SD	Item-Total r	M	SD	Item-Total r	M	SD	Item-Total r	M	SD	Item-Total r
Item 1 Het is een risico voor deze persoon dat deze foto online gezet is.	3.47	1.82	.38	3.85	1.97	.58	6.04	1.46	.86	6.46	1.08	.81
Item 2 Er is een grote kans dat deze foto op het internet verspreid zal worden.	3.68	1.79	.38	4.04	1.67	.58	6.08	1.47	.86	6.54	1.03	.81
	7.15	3.00		7.88	3.24		12.12	2.83		13.00	2.01	
Internal Consistency Scale	Cronbach's Alpha α			Cronbach's Alpha α			Cronbach's Alpha α			Cronbach's Alpha α		
	.55			.73			.93			.89		
Overall Internal Consistency	Total Scale											
	.78											
Perceived sharing risk items 1-5 on a likert scale 1-7 (helemaal oneens- helemaal eens)	Stimulus A			Stimulus B			Stimulus C			Stimulus D		
	M	SD	Item-Total r	M	SD	Item-Total r	M	SD	Item-Total r	M	SD	Item-Total r
Item 1 Ik heb er vertrouwen in dat mensen waarmee ik een soortgelijke foto van mijzelf zou delen, mijn belangen zouden behartigen in de omgang met die foto.	4.51	1.75	.77	4.55	1.60	.86	3.29	2.12	.83	3.45	2.107	.877
Item 2 Ik vertrouw erop dat mensen waarmee ik soortgelijke foto van mijzelf zou delen, voorspelbaar zouden zijn in de omgang met die foto.	4.49	1.76	.83	4.49	1.75	.87	3.64	2.12	.78	3.49	2.119	.835
Item 3 Anderen zijn altijd eerlijk in de omgang met verkregen foto's die ik ze zou geven.	4.00	1.85	.66	4.15	1.80	.70	3.41	1.82	.69	3.27	1.892	.768
	13.00	4.77		13.20	4.71		10.34	5.43		10.21	5.65	
Internal Consistency Scale	Cronbach's Alpha α			Cronbach's Alpha α			Cronbach's Alpha α			Cronbach's Alpha α		
	.87			.90			.88			.91		
Overall Internal Consistency	Total Scale											
	.89											

After every stimulus participants were asked to fill out two matrixes with 5 questions the first containing the measurement of Perceived Legitimacy and the second containing perceived risk a perceived sharing risk.

RESULTS

Reliability analysis

Because the Corrected Item-Total Correlation of item 5(the reversed version of item 1) was slightly above or below .3 on all of the four stimuli for item 5 of perceived legitimacy (figure E.) it was removed. This increased reliability from Cronbach's $\alpha = .78$ on the five items (measured four times) to Cronbach's $\alpha = .85$ on the remaining four items(measured four times). Perceived risk(Figure F) and perceived sharing risk (Figure G) both were also measured on reliability. Perceived risk had a Cronbach's $\alpha = .78$ on its two items (measured four times) and perceived sharing risk had a Cronbach's $\alpha = .89$ on its three items (measured four times) .

Non-nude personal pictures vs. nude sexting pictures

Perceived Legitimacy

On average participants experienced significantly greater perceived legitimacy to nude sexting-pictures($M= 4.90$, $SE=.18$) than to non-nude pictures($M=2.83$, $SE=.15$), $t(84) = -12.53$, $p < .05$, $r = .81$.

Perceived Risk

On average participants experienced significantly greater perceived risk to nude sexting-pictures($M= 6.28$, $SE=.12$) than to non-nude pictures($M=3.76$, $SE=.16$), $t(84)=-15.27$, $p < .05$, $r = .86$.

Perceived Sharing Risk

On average participants experienced significantly greater perceived Trust to non-nude pictures($M=4.37$, $SE=.17$) than to nude sexting-pictures($M= 3.43$, $SE=.20$), $t(84)=-6.37$, $p < .05$, $r = .57$.

Scenario

Perceived Legitimacy

There was a trend of scenario on perceived legitimacy on the nude sexting pictures, $F(1, 83)= 2.80$, $p < .1$, indicating that consent increased perceived legitimacy on the nude sexting pictures compared to no consent.

There was a significant effect of scenario on perceived legitimacy on stimulus C, $F(1, 83)= 3.77$, $p < .05$, indicating that no consent increased perceived legitimacy on stimulus C compared to consent. However there was no significant effect for scenario on perceived legitimacy on stimulus D.

There was also significant effect of scenario on perceived legitimacy on the non-nude pictures , $F(1, 83)= 42.30$, $p < .05$, indicating that no consent increased perceived legitimacy on the non nude pictures compared to consent.

There were also significant effects of scenario on perceived legitimacy on stimuli A ($F(1, 83)= 31.57$, $p < .05$), B($F(1, 83)= 43.16$, $p < .05$) and on the mean overall score ($F(1, 83)= 17.80$, $p < .05$), all indicating that no consent increased perceived legitimacy compared to consent.

Perceived Risk

There were no significant effects of Scenario on Perceived Risk for stimuli C, D and on the nude sexting pictures. However there were significant effects of Scenario on perceived risk for stimuli A ($F(1, 83)= 10.17$, $p < .05$), B($F(1, 83)= 11.02$, $p < .05$) and the Non nude personal pictures ($F(1, 83)= 12.57$, $p < .05$), all

indicating that no consent increased perceived risk compared to consent. There was also a significant effect for scenario on the overall mean score on all stimuli, $F(1, 83) = 5.95, p < .05$, indicating that no consent increased perceived risk compared to consent.

Fidelity

Perceived Legitimacy

There was a significant effect of fidelity on perceived legitimacy on the nude sexting pictures, $F(1, 83) = 5.17, p < .05$, indicating that high fidelity increased perceived legitimacy on the nude sexting pictures compared to low fidelity.

There was a significant effect of fidelity on perceived legitimacy on individual stimulus C, $F(1, 83) = 4.55, p < .05$, indicating that high fidelity increased perceived legitimacy on stimulus C compared to low fidelity.

There was a significant effect of fidelity on perceived legitimacy on individual stimulus D, $F(1, 83) = 5.52, p < .05$ indicating that high fidelity increased perceived legitimacy on stimulus D compared to low fidelity.

Condition

Perceived Legitimacy

There were significant effects of condition on perceived legitimacy on the mean overall score on all stimuli, $F(3, 81) = 7.38, p < .05$, where condition three(LFC) was significantly lower on perceived legitimacy than condition two(HFNC) and four(LFNC).

There were significant effects of condition on perceived legitimacy on stimuli A ($F(3, 81) = 10.66, p < .05$), B($F(3, 81) = 14.41, p < .05$) and the Non nude personal pictures ($F(3, 81) = 14.20, p < .05$), where condition one(HFC) and three(LFC) were both significantly lower on

perceived legitimacy than condition two(HFNC) and four(LFNC).

There were significant effects of condition on perceived legitimacy on stimuli C ($F(3, 81) = 3.70, p < .05$), D ($F(3, 81) = 3.14, p < .05$) and the nude sexting pictures ($F(3, 81) = 3.51, p < .05$), where condition three(LFC) was significantly lower on perceived legitimacy than condition two(HFNC).

Perceived Risk

There were significant effects of condition on perceived risk on stimuli A ($F(3, 81) = 4.68, p < .05$) and the Non nude personal pictures ($F(3, 81) = 4.86, p < .05$), where condition three(LFC) was significantly lower on perceived legitimacy than condition two(HFNC) and four(LFNC).

There was a significant effect of condition on perceived risk on stimuli B, $F(3, 81) = 3.81, p < .05$, where condition three(LFC) was significantly lower on perceived risk than condition four(LFNC).

DISCUSSION

H1: Hypothesis one is fully supported, nude sexting pictures are perceived as having a higher perceived legitimacy, risk and sharing risk compared to non nude personal pictures.

Perceived legitimacy

The confirmation of this hypothesis implies that it is perceived to be less legitimate to publish sexting pictures than general personal pictures.

Perceived risk

It also implies that the sexting pictures are perceived as a greater risk when published online than general personal pictures.

Perceived sharing risk

Furthermore it implies that it is perceived as a greater risk to share one's own sexting pictures with others than general personal pictures.

For all of the above mentioned results can be concluded that sexting pictures through there explicitness are deemed more taboo more and as a consequence of that perceived as more personal. Although everyone is at one time naked and (hopefully) having sex, one does not wish ones family to see it. Therefore sexting pictures are perceived as way more private than normal personal pictures. Sexting can be seen as a high risk behavior. Ferguson (2010) measured its relation to other high-risk sexual behavior and mixed results in a young Hispanic women. Whatever the risk involved this study does not focus on the gratifications of sexting, and considering the knowledge that people do recognize the risks; there must be.

H2: Perceived legitimacy, perceived risk and perceived sharing risk will be higher on sexting pictures portrayed as published in a non consensual scenario than on sexting pictures portrayed as published in a consensual scenario.

Only one(C) of the two sexting pictures (C and D) produced a significant higher perceived legitimacy on scenario. Picture D did not produce a significant result on scenario but considering the explicit nature of the picture it is not strange that it was perceived as equally illegitimate to publish in either scenario.

Consent influences the perceived legitimacy of the posting of sexting pictures; if a person publishes a picture at their own free will, it is deemed more legitimate. Information privacy is deemed important.

No effects for perceived risk and perceived sharing risk were found. Scenario does affect perceived legitimacy; the knowledge that a picture is published without a person's knowledge decreases the legitimacy.

The risk of publication and the sharing risk of one's own pictures however do not seem to be influenced by whether publication of the photo is consensual or not. The perceived risk seems to be derived directly from the picture itself independent from the text-based context described attached to it. This might be linked to the to the situation awareness of the participant.

H3: Sexting pictures with a low fidelity will score higher on perceived risk, perceived sharing risk and perceived legitimacy than sexting pictures with a high fidelity.

Both picture C and picture D were perceived as more illegitimate in high fidelity compared to low fidelity.

It seems that high fidelity is experienced as more explicit and thereby less legitimate. More of a person is exposed; you can literally experience the person's characteristics in more detail. In the high fidelity stimulus C you could clearly recognize the anatomy of the vagina and in high fidelity version of stimulus D it is possible to distinguish bodily fluids whereas in low fidelity version stimulus D it is not .The media equation (Reeves and Nash 1997) suggests that visual fidelity of visual images has no effect on: attention, memory and evaluation of the experience. The perceived legitimacy does seem to be influenced by fidelity, so either the media equation is not applicable to sexting pictures or in this experiment proved wrong.

However the fidelity in the low fidelity version of stimuli was really low. It is possible that in picture C low fidelity was interpreted as a

blurring/censoring effect of the genitals; or at least made the vagina less explicit.

The risk of publication and the sharing risk of one's own pictures however does not seem to be influenced by whether the fidelity of a picture is low or high.

The perceived risk seems to be derived directly from the portrayal in the picture and not the resolution in of that picture. As long as it is clear to see what is going on in the picture enough is perceived to base the risk and sharing risk on. Therefore situation awareness might be a factor in perceived risk and sharing risk of sexting pictures.

This also begs the question of how censorship influences perceived risk and sharing risk. A common trend in SEAM is also to cover, not show, bar or blur ones face in the picture/movie. It would be interesting to see what the effects would be of these conditions. Would it influence the viewer's awareness of the situation?

Overall significant results were found on all three scales when comparing sexting to non-sexting pictures. Because of their explicit nature they are perceived as more of a risk, sharing risk and less legitimate to publish. Perceived legitimacy was influenced by fidelity and scenario suggesting that legitimacy is extracted from picture quality and scenario through situation awareness. Perceived risk and perceived sharing risk seemed to have no connection to fidelity or scenario. The perceived risk and perceived sharing risk seemed to be derived directly from the picture itself, its quality, independent from the text-based context described attached to it. Risk seemed to be determined by situation awareness in a different way; as long as it is clear to see what is portrayed in the picture itself it was enough to determine the risk involved.

RECOMMENDATIONS/FURTHER RESEARCH

The stimuli were presented in a static order; A, B, C, and D this most likely created an order-effect. Therefore further research could include the exact same experiment but with only one random stimulus per person with the same two conditions in the online experiment. In that setup situation awareness could be integrated as a factor in picture perception.

Once again, a common trend in SEAM is also to cover, not show, bar or blur ones face in the picture/movie. It would be interesting to see what the effects would be of these conditions. Would faceless sexting be perceived as less of risk and sharing risk?

There is also still a lot to work out to explore on the concept of sexting for instance; what are the effects of text vs. picture vs. movie?

The overall Appraisal of sexting stimuli might also be interesting to look at; as a gateway towards the gratifications of sexting.

The control of non-nude personal pictures is also an interesting concept for instance especially if you would look at the circumstances under which they were posted online; for instance is it ok to use someone's picture if his facebook profile is accessible for everyone when you compare it to the secure status when it is only visible for their supposed friends.

LIMITATIONS

The stimuli were presented to every participant in a static order; A,B,C,D which makes it reasonable to suggest an order-effect.

There was a clear condition effect found in this study.

The supposedly random assignments towards the four conditions were far from random; probably because of the use by some of a direct link towards condition 1 instead of the random link provided.

REFERENCES

Alapo, L. 2009. *Adults try to stop overexposed pictures sent to teens via cell phones*. 15 March 2009. <http://www.knoxnews.com/news/2009/mar/15/teens-play-show-and-cell/>

Burgoon, J. K. (1982). Privacy and communication. In M. K. Burgoon (Ed.), *Communication yearbook* (Vol. 6, pp. 206-249). Beverly Hills, CA: Sage.

Burgoon, J. K., Parrott, R., Le Poire, B. A., Kelley, D. L., Walther, J. B., & Perry, D. (1989). Maintaining and restoring privacy through communication in different types of relationships. *Journal of Social and Personal Relationships*, 6, 131-158.

Chalfen, R. *It's only a picture': sexting, 'smutty' snapshots and felony charges*. *Visual Studies*, Vol. 24, No. 3, December 2009

Choi, S. 2009. *Sexting: Teen trend has serious consequences*. 30 March 2009, <http://www.kvbc.com/Global/story.asp?S=10095849&nav=15MV>

Ferguson, C. (2010). "Sexting Behaviors Among Young Hispanic Women: Incidence and Association with Other High-risk Sexual Behaviors." *Psychiatric Quarterly*: 1-5.

Giles, D. (2003). *Media Psychology*. Mahwah, NJ: Lawrence Erlbaum Associates

Gunter, B. (2002). *Media sex: What are the issues?* Mahwah, NJ: Lawrence Erlbaum Associates

Hastings K: Teenage commits suicide after 'sexting' a nude photo to her boyfriend made

her life a misery. *Daily Mail*, 2009. Retrieved 26/07/2011 from <http://www.dailymail.co.uk/tvshowbiz/article-1161112/Teenager-commits-suicide-sexting-nude-photo-boyfriend-life-misery.html>

Harris, R. J. (1999). *A cognitive psychology of mass communication* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

James, A. 2009. *Sexting popular among teens*. 11 February 2009. Originally published on Youthradio.org. http://www.huffingtonpost.com/youth-radio-youth-mediainternational/sexting-popular-among-tee_b_174043.html.

Jarvenpaa, S.L. and Tractinsky, N. (1999) Consumer Trust in an Internet Store: A Cross-Cultural Validation, *Journal of Computer-Mediated Communication*, 5(2).

Jones, A. 2009. *Parents, beware of the cell phone*. 13 April. <http://www.austinweeklynews.com/main.asp?SectionID=3&SubSectionID=3&ArticleID=2205&TM=83295.23>.

Kutchinsky, B. (1991). Pornography and rape: Theory and practice? Evidence from crime data in four countries where pornography is easily available. *International Journal of Law and Psychiatry*, 14, 147-164.

Lee, L. T., & LaRose, R. (1994). Caller ID and the meaning of privacy. *Information Society*, 4, 247-265.

Lenhart, A., *Teens and Sexting How and why minor teens are sending sexually suggestive nude or nearly nude images via text messaging* (2009). *Pew Internet & American Life Project*, Washington. <http://www.pewinternet.org/Reports/2009/Teens-and-Sexting.aspx>

Malhotra, N. K., Kim, S. S., & Agarwal, J. (2004). Internet Users' Information Privacy

Concerns (IUIPC): The Construct, the Scale, and a Causal Model. *Information Systems Research*, 15(4), 336-355. INFORMS: Institute for Operations Research. Retrieved from <http://isr.journal.informs.org/cgi/doi/10.1287/isre.1040.0032>

Mundorf, N., D'Alessio, D., Allen, M., & Emmers-Sommer, T (2007). *Mass Media Effects Research: Chapter 12 Effects of Sexually Explicit Media*. Mahwah, NJ Lawrence Erlbaum Associates.

Reeves, B. & Nash, C. *The Media Equation*. Stanford, California: CSLI Publications

Peter, Jochen and Valkenburg, Patti M.(2008) 'Adolescents' Exposure to Sexually Explicit Internet Material and Sexual Preoccupancy: A Three-Wave Panel Study', *Media Psychology*, 11: 2, 207 — 234

Renegade99 *Porn Star Tori Black's private hot photos leaked online [42 Photos]* Dec 19, 2010. <http://www.allvoices.com/contributed-news/7666306-porn-star-tori-blacks-private-hot-photos-leaked-online-42-photos>

Siegle, A. 2009. *Parental advisory - teen cell phones can mean time behind bars*. 12 April 2009. <http://articles.xtremeprofitsystem.com/family/family-parenting/family-parenting-teenagers/parental-advisory-teen-cellphones-can-mean-time-behind-bars/print>

Stephey, M. J. (2009). The top 10 everything of 2009: Top 10 buzzwords. Retrieved from http://www.time.com/time/specials/packages/article/0,28804,1945379_1944799,00.html

Westin, A. (1967). *Privacy and freedom*. New York: Atheneum.