

Table .1: Selected academic primary studies

No.	Title	Authors	Venue	Year	PETA types	Rank
P1	You've been warned: An empirical study of the effectiveness of web browser phishing warnings	Egelman S., Cranor L.F., Hong J.	Human Factors in Computing Systems	2008	Awareness	A*
P2	Do security toolbars actually prevent phishing attacks?	Wu M., Miller R.C., Garfinkel S.L.	Human Factors in Computing Systems	2006	Awareness	A*
P3	The emperor's new security indicators an evaluation of website authentication and the effect of role playing on usability studies	Schechter S.E., Dhamija R., Ozment A., Fischer I.	IEEE Symposium on Security and Privacy	2007	Awareness	A*
P4	Alice in warningland: A large-scale field study of browser security warning effectiveness	Akhawe D., Felt A.P.	USENIX Security Symposium	2013	Awareness	A*
P5	Protecting people from phishing: The design and evaluation of an embedded training email system	Kumaraguru P., Rhee Y., Acquisti A., Cranor L.F., Hong J., Nunge E.	Human Factors in Computing Systems	2007	Training	A*
P6	Security awareness of computer users: A phishing threat avoidance perspective	Arachchilage N.A.G., Love S.	Computers in Human Behavior	2014	Education	B
P7	Going spear phishing: Exploring embedded training, and awareness	Caputo D.D., Pfleeger S.L., Freeman J.D., Johnson M.E.	IEEE Security and Privacy Magazine	2014	Training	B
P8	Why phishing still works: User strategies for combating phishing attacks	Alsharnouby M., Alaca F., Chiasson S.	International Journal of Human Computer Studies	2015	Awareness	A
P9	A game design framework for avoiding phishing attacks	Arachchilage N.A.G., Love S.	Computers in Human Behavior	2013	Education	B
P10	Phishing threat avoidance behaviour: An empirical investigation	Arachchilage N.A.G., Love S., Beznosov K.	Computers in Human Behavior	2016	Education	B
P11	Security education against Phishing: A modest proposal for a Major Rethink	Kirlappos I., Sasse M.A.	IEEE Security and Privacy Magazine	2012	Education	B
P12	Phishing for phishing awareness	Jansson K., Von Solms R.	Behaviour and Information Technology	2013	Training	B
P13	Priming and warnings are not effective to prevent social engineering attacks	Junger M., Montoya L., Overink F.-J.	Computers in Human Behavior	2017	Awareness	B
P14	An experience sampling study of user reactions to browser warnings in the field	Reeder R., Felt A.P., Consolvo S., Malkin N., Thompson C., Egelman S.	Human Factors in Computing Systems	2018	Awareness	A*
P15	Who provides phishing training? Facts, stories, and people like me	Wash R., Cooper M.M.	Human Factors in Computing Systems	2018	Training	A*
P16	End-to-end measurements of email spoofing attacks	Hu H., Wang G.	USENIX Security Symposium	2018	Awareness	A*
P17	A multi-modal neuro-physiological study of phishing detection and malware warnings	Neupane A., Rahman Md.L., Saxena N., Hirshfield L.	Computer and Communications Security	2015	Awareness	A*
P18	Towards a contingency approach with whitelist- and blacklist-based anti-phishing applications: What do usability tests indicate?	Li L., Berki E., Helenius M., Ovaska S.	Behaviour and Information Technology	2014	Awareness	B
P19	What.Hack: Engaging Anti-Phishing Training through a Role-playing Phishing Simulation Game	Wen Z.A., Lin Z., Chen R., Andersen E.	Human Factors in Computing Systems	2019	Training	A*
P20	Towards preventing QR code based attacks on android phone using security warnings	Yao H., Shin D.	ACM Asia Conference on Computer and Communications Security	2013	Awareness	A*
P21	How effective is anti-phishing training for children?	Lastdrager E., Gallardo I.C., Hartel P., Junger M.	Symposium on Usable Privacy and Security	2019	Training	B
P22	An Empirical Evaluation of Security Indicators in Mobile Web Browsers	Amrutkar C., Traynor P., Van Oorschot P.C.	IEEE Transactions on Mobile Computing	2015	Awareness	A*

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P23	Building anti-phishing browser plug-ins: An experience report	Raffetseder T., Kirda E., Kruegel C.	International Workshop on Software Engineering for Secure Systems	2007	Awareness	A*
P24	Fishing for phishers. Improving Internet users' sensitivity to visual deception cues to prevent electronic fraud	Moreno-Fernández M.M., Blanco F., Garaizar P., Matute H.	Computers in Human Behavior	2017	Training	B
P25	Put your warning where your link is: Improving and evaluating email phishing warnings	Petelka J., Zou Y., Schaub F.	Human Factors in Computing Systems	2019	Awareness	A*
P26	Spear phishing in a barrel: Insights from a targeted phishing campaign	Burns A.J., Johnson M.E., Caputo D.D.	Journal of Organizational Computing and Electronic Commerce	2019	Training	B
P27	Evaluation of a mandatory phishing training program for high-risk employees at a US healthcare system	Gordon W.J., Wright A., Glynn R.J., Kadakia J., Mazzone C., Leinbach E., Landman A.	Journal of the American Medical Informatics Association	2019	Training	A
P28	Phishy - A serious game to train enterprise users on phishing awareness	Gokul C.J., Pandit S., Vaddepalli S., Tupsamudre H., Banahatti V., Lodha S.	Annual Symposium on Computer-Human Interaction in Play Companion Extended Abstracts	2018	Training	A*
P29	The design and evaluation of a theory-based intervention to promote security behaviour against phishing	Jansen J., van Schaik P.	International Journal of Human Computer Studies	2019	Awareness	A
P30	Impact of security awareness training on phishing click-through rates	Carella A., Kotsoev M., Truta T.M.	IEEE International Conference on Big Data	2017	Training	B
P31	Evaluation of personalized security indicators as an anti-phishing mechanism for smartphone applications	Marforio C., Masti R.J., Soriente C., Kostiaainen K., Čapkun S.	Human Factors in Computing Systems	2016	Awareness	A*
P32	Measuring the effectiveness of embedded phishing exercises	Siadati H., Palka S., Siegel A., McCoy D.	USENIX Workshop on Cyber Security Experimentation and Test (co-located with USENIX Security symposium)	2017	Training	A*
P33	The description-experience gap in the effect of warning reliability on user trust and performance in a phishing-detection context	Chen J., Mishler S., Hu B., Li N., Proctor R.W.	International Journal of Human Computer Studies	2018	Awareness	A
P34	An investigation of phishing awareness and education over time: When and how to best remind users	Reinheimer B., Aldag L., Mayer P., Mossano M., Duezguen R., Loft-house B., von Landesberger T., Volkamer M.	Symposium on Usable Privacy and Security	2020	Training	B
P35	Investigating Teenagers' Ability to Detect Phishing Messages	Nicholson J., Javed Y., Dixon M., Coventry L., Ajayi O.D., Anderson P.	IEEE European Symposium on Security and Privacy Workshops	2020	Education	A*
P36	Engaging users with educational games: The case of phishing	Dixon M., Nicholson J., Arachchilage N.A.G.	Human Factors in Computing Systems	2019	Education	A*
P37	How persuasive is a phishing email? A phishing game for phishing awareness	Fatima R., Yasin A., Liu L., Wang J.	Journal of Computer Security	2019	Education	B
P38	Employees' Behavior in Phishing Attacks: What Individual, Organizational, and Technological Factors Matter?	Shahbaznezhad H., Kolini F., Rashidirad M.	Journal of Computer Information Systems	2021	Training	B
P39	Intelligent explanation generation system for phishing webpages by employing an inference system	Ramesh G., Selvakumar K., Venugopal A.	Behaviour and Information Technology	2017	Awareness	B
P40	Deterrent effects of punishment and training on insider security threats: a field experiment on phishing attacks	Kim B., Lee D.-Y., Kim B.	Behaviour and Information Technology	2020	Training	B

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No.	Title	Authors	Venue	Year	PETA types	Rank
P41	How Experts Detect Phishing Scam Emails	Wash R.	ACM Human-Computer Interaction (/CSCW)	2020	Education	A
P42	Analysis of publicly available anti-phishing webpages: Contradicting information, lack of concrete advice and very narrow attack vector	Mossano M., Vaniea K., Aldag L., Duzgun R., Mayer P., Volkamer M.	IEEE European Symposium on Security and Privacy Workshops, Euro S and PW 2020	2020	Education	A*
P43	Forcing Johnny to login safely	Herzberg A., Margulies R.	Journal of Computer Security	2013	Awareness	B
P44	Training johnny to authenticate (Safely)	Herzberg A., Margulies R.	IEEE Security and Privacy Magazine	2012	Awareness	B
P45	I don't need an expert! making url phishing features human comprehensible	Althobaiti K., Meng N., Vaniea K.	Human Factors in Computing Systems	2021	Education	A*
P46	Be the Phisher - Understanding Users' Perception of Malicious Domains	Quinkert F., Degeling M., Blythe J., Holz T.	ACM Asia Conference on Computer and Communications Security	2020	Education	A*
P47	To click or not to click is the question: Fraudulent URL identification accuracy in a community sample	Pearson E., III, Bethel C.L., Jarosz A.F., Berman M.E.	IEEE International Conference on Systems, Man, and Cybernetics	2017	Education	B
P48	Facts and stories in phishing training: A replication and extension	Marsden J., Albrecht Z., Berggren P., Halbert J., Lemons K., Moncivais A., Thompson M.	Human Factors in Computing Systems	2020	Training	A*
P49	UI-dressing to detect phishing	Iacono L.L., Nguyen H.V., Hirsch T., Baier M., Moller S.	IEEE International Conference on High Performance Computing and Communications	2014	Awareness	A
P50	A Case Study of Phishing Incident Response in an Educational Organization	Althobaiti K., Jenkins A.D.G., Vaniea K.	Proceedings of the ACM on Human-Computer Interaction (/CSCW)	2021	Education	A
P51	Knowledge and capabilities that non-expert users bring to phishing detection	Wash R., Nthala N., Rader E.	Symposium on Usable Privacy and Security	2021	Education	B
P52	Examining Factors Impacting the Effectiveness of Anti-Phishing Trainings	Sumner A., Yuan X., Anwar M., McBride M.	Journal of Computer Information Systems	2021	Training	B
P53	Simulated Phishing Attack and Embedded Training Campaign	Yeoh W., Huang H., Lee W.-S., Al Jafari F., Mansson R.	Journal of Computer Information Systems	2021	Training	B

Table .2: Selected grey primary studies

No.	Title	Author	Page no.	Link	Date	PETA type	Tier type
P54	Phishing defense and governance, how to improve user awareness, enhance controls and build process maturity	ISACA	1	https://terravasecurity.com/white-papers/	2019	Training, awareness	1st
P55	How to avoid phishing simulations false positives?	Terranova-security	1	https://terravasecurity.com/phishing-simulations-false-positives/	27-Jan	Training	3rd
P56	Why is phishing awareness training important?	Terranova-security	1	https://terravasecurity.com/why-is-phishing-training-so-important/	20-Aug	Training	3rd
P57	Gone phishing tournament, phishing benchmark, global report	Terranova-security website crawling		https://terravasecurity.com/gpt-thank-you/	2021	Training	1st
P58	2022 state of the Phish, an in-depth exploration of user awareness, vulnerability and resilience	Proofpoint	1	https://www.proofpoint.com/us/resources/threat-reports/state-of-phish	2022	Training	1st

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No.	Title	Author	Page no.	Link	Date	PETA type	Tier type
P59	How to transform employee worst practices into enterprise best practices	KnowB4	1	https://info.knowbe4.com/wHITEpaper-employee-worst-best-practices-enterprise-security?hsLang=en	-	Training	1st
P60	Example security awareness, training policy guide	KnowB4	1	https://info.knowbe4.com/wp-example-sat-policy-guide?hsLang=en	-	Training	1st
P61	Building an effective and comprehensive, security awareness program	KnowB4	1	https://info.knowbe4.com/wp-building-effective-comprehensive-sat?hsLang=en	-	Training	1st
P62	Buyers guide to phishing training	Hoxhunt	4	https://www.hoxhunt.com/ebooks/the-buyers-guide-to-phishing-training	2020	Training	3rd
P63	How eckes-granini group transformed cybersecurity awareness with Hoxhunt	Hoxhunt	4	https://www.hoxhunt.com/case-studies/how-eckes-granini-group-transformed-cybersecurity-awareness-with-hoxhunt	-	Training	2nd
P64	Ramboll educates employees on email-based threats with Hoxhunt	Hoxhunt	4	https://www.hoxhunt.com/case-studies/ramboll-educates-employees-on-email-based-threats-with-hoxhunt	-	Training	2nd
P65	Ordermark built to last with cybersecurity awareness as foundation	Hoxhunt	4	https://www.hoxhunt.com/case-studies/case-study-ordermark-is-built-to-last-with-cybersecurity-awareness-as-a-cultural-foundation	-	Training	2nd
P66	How agricultural technology leader, Kverneland group sewed awareness training and reaped resilience	Hoxhunt	4	https://www.hoxhunt.com/case-studies/how-kverneland-group-sewed-awareness-training-and-reaped-resilience	-	Training	2nd
P67	5 Tips for evaluating phishing simulation solutions	PhishLabs	10	https://www.phishlabs.com/blog/5-tips-for-evaluating-phishing-simulation-solutions/	2/17/2016	Training	3rd
P68	How to run simulated phishing campaigns	Agari	16	https://www.agari.com/email-security-blog/how-to-run-simulated-phishing-campaigns/	1/5/2021	Training	3rd
P69	Best practice phishing simulation	SoSafe	16	https://sosafe-awareness.com/resources/guides/bpr-phishing/	2019	Training	1st