

CyTRAP Labs GmbH

Why information security awareness initiatives have failed and will continue to do so

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Corporations and Member States of the European Union have made great efforts to raise user awareness regarding information security (e.g., ENISA study - <http://blog.cytrap.eu/?p=262>). As well, we can find many educational interventions that were designed to raise information security awareness by changing adolescents' knowledge, beliefs, or attitudes regarding information security. With additional training and information it was hoped that risk taking would change, thereby improving security and, most importantly, reducing malware infections that have also exacerbated the amount of spam we get thanks to botnets.

Unfortunately, these efforts have been largely ineffective. Adolescents and college-age individuals have in the past and will continue to take more risks than children or adults do, as indicated by statistics on automobile crashes, binge drinking, contraceptive use, identity theft and internet stalking.

What does this mean for the prevention of unhealthy risk taking in adolescence and information security related matters? Extant research suggests that it is not the way adolescents think or what they don't know or understand that is the problem. In fact, educational interventions designed to change how adolescents view risky activities on social networks in cyberspace or data privacy will not result in better prevention. However, shifting focus on limiting opportunities for immature judgment to have harmful consequences appears to be a more viable strategy.

In light of studies showing familial influences on psychosocial maturity in adolescence, understanding how contextual factors influence the development of self-regulation is a high priority to help improve information security. Limiting opportunities for immature judgment and how this might help in changing risk taking in adolescents (11 – 25 years of age – reasoning abilities and psychosocial capacities) when surfing the internet is at the core of this presentation.