

Adolescents and trust in online social interactions *

A qualitative exploratory study

The SNs have become increasingly embedded in adolescents' daily life and their use has led to both benefits and risks concerning their potential impact on online interpersonal relationships. Moreover, studies suggest that adolescents perceive more benefits associated with extending online interpersonal networks than the potential costs that can derive from. Underlying this "interpersonal calculation", the online interpersonal trust could play a crucial role influencing the adolescent's choice to self-disclose, avowing possible concerns about privacy issues. However, it is still unclear how online trust can be conceptualized and those elements the sense of trust in online interactions is based on. Adopting the theory of the socio-cognitive model proposed by Castelfranchi and Falcone (2010), the present study attests that on-line trust is also a multi-component construct and that the attribution of factors, such as capacity/competence and disposition/availability, can do the difference in understanding the online interpersonal dynamics in adolescence.

Keywords: Trust, SN, Adolescents, interpersonal relationship, qualitative study

In the last decade, SNs have become increasingly embedded in adolescents' daily life. Their use has led to both benefits and risks concerning their potential impact on online interpersonal relationships. Adolescents are indeed engaged in those online social activities that are important to them: friendships and interactions between peers (Gross, 2004). These important motivations push young people to interact online not only to maintain but also to extend their network of interpersonal relationships (Subrahman yam & Greenfield, 2008). In this regard, recent literature has highlighted the potential risks for adolescents associated with self-disclosure (Taddei, Bastianina & Cont, 2013). Although teens can be aware of the potential risks resulting from the uncertain online relationship, at the same time they consider them necessary to establish new reciprocal exchanges in online contexts. A detailed self-presentation indeed allows them to reduce the uncertainty of online relationships (Tidwell and Walther, 2002) and to legitimize a person's access to a new group of online friends (Galegher, Sproull, & Kiesler, 1998). For adolescents, the benefits associated with the new opportunities for interpersonal exploration that the web offers would outweigh the potential costs that can derive from it. Underlying this "interpersonal calculation", the online interpersonal trust could play a crucial role (Colì et al., 2019). Some scholars have suggested that online trust directly influences the choice to disclose private information important to one's self (Fogel & Nehmad, 2009; Frye & Dornisch, 2010) and could moderate possible concerns about privacy issues (Olivero and Lunt, 2004). Although these studies highlight the significant role of online interpersonal trust, it is still unclear how online trust can be conceptualized and those elements the sense of trust in online interactions is based on. To fill this gap this study aims to examine the meaning of online trust for today's teenagers and its possible ingredients. In particular, by adopting the the sociocognitive theory for trust proposed by Falcone & Castelfranchi (2001; Castelfranchi & Falcone, 2010) - which consider trust as a complex mental attitude based on different mental ingredients, two of which are mainly: trustor's goals and beliefs (the main of whom are *competence* and *willingness* attributed by the trustor to the trustee) – we hypothesized that online trust is also a multicomponent construct and that the attribution to others of factors, such as competence and willingness, can make the difference in the understanding online interpersonal dynamics in adolescence.

Method

Participants. The study involved 10 adolescents, five males, and five females, aged 12 to 18 (M = 15.5). The participants were recruited with a non-probabilistic cascade sampling, in Italy.

Design. The data was collected through semi-structured indepth interviews (average duration 30 minutes), administered between December 2019 and January 2020, aimed at exploring the conceptualization of trust, with particular attention to its cognitive ingredients, i.e. competence, and willingness. The interviews were audio-recorded (upon participants' and their parents' informed consent) and subsequently transcribed faithfully.

Analysis. An inductive content analysis – carried out in parallel by the researchers to ensure the accuracy of the analysis work - was performed on the textual material using NVivo10 software (QSR International, 2012) and following the procedure described by Elo & Kyngäs (2008).

Results

What is trust

Trust is described as a relationship characterized by reciprocity, secrecy, and authenticity. Furthermore, trust is promoted by the knowledge that is established with a person over time, and by the SN in which the relationship itself takes place (see Tab. 1).

Technology, Mind & Society 2021

Main Categories	Subcategories
(n. Sources/References)	(n. Sources/ References)
Relationships	Reciprocity (4/4)
(8/8)	Secrecy (3/3)
	Authenticity (1/1)
Dynamics	Person (4/4)
(6/6)	Time (1/1)
	Type of SN (1/1)

Table 1. The conceptualization of trust

The competence beliefs

The competencies are related to the ability to manage both the modality and the content of communication, but also relationships, interacting in a respectful manner of the other; constructively use the SNs, for example, to encourage knowledge improvement and promote interpersonal relationships; manage the online self-presentation, both in terms of the richness and originality of the elements provided; have a critical spirit, knowing for example how to manage the social influence dynamics. Basic technical skills, relating for example to the use of applications connected to SNs, are also required (see Tab. 2).

Table 2. The competence beliefs

Main Categories	Subcategories
(n. Sources/References)	(n. Sources/ References)
Social norms	Communication (4/10)
(4/15)	Interaction (3/5)
Instrumental	Knowledge (2/2)
(4/6)	Relationships (2/2)
	Utility (1/1)
Self-presentation	Self-image (2/3)
(2/4)	Interaction modality (1/1)
Critical ability	Authenticity (1/4)
(1/8)	Social influence (1/3)
	Maturity (1/1)
Technical (1/1)	SN use (1/1)

The willingness beliefs

An indicator of the willingness is the presence of the other, inferred from an immediate and frequent interaction, but also from a closeness made up of openness, interest, and propensity to help. The communication also contains a series of indicators of willingness; in particular, this should respectfully take place, without invading others' private sphere, and be based on useful content. Willingness also means being reliable, that is authentic, consistent, and honest (Table 3).

Table 3. The willingness beliefs

Main Categories	Subcategories
(n. Sources/References)	(n. Sources/ References)
Presence	Interaction (7/17)
(9/25)	Proximity (6/8)
Communcation	Modality (2/2)
(4/4)	Content (2/2)
Reliability	Authenticity (1/1)
(2/3)	Consistency (1/1)
	Honesty (1/1)

Discussion

This study provides the adolescent's conceptualization of online trust, highlighting that it is a relational and reciprocal construct, multidimensional and dynamic. It changes based on the person with whom we interact and the context, i.e. the type of SN, in which the relationship takes place. Both competence and willingness are two ingredients of great importance for the attribution of trust. Concerning competence, the skills related to communication management - both in terms of content and terms of form - prevail. About willingness, a series of clues relating to the presence of the other - such as comments and responses to photos, stories, and polls, but also simple likes - prevail. Knowing these elements, even more so in a virtual environment where face-to-face communication is lacking, can be particularly useful for understanding online interpersonal dynamics in adolescence, and being able to plan interventions aimed at preventing the risks to which daily, in trusting the others, adolescents are exposed. Future studies could provide a broader picture of the trust components, also concerning other dimensions, such as risky online behavior.

References

- Castelfranchi, C., & Falcone, R. (2010). *Trust Theory: A Socio-cognitive and Computational Model*. John Wiley and Sons, Hoboken, NJ.
- Colì, E., Paciello, M., Falcone, R., Saleri, G., Pepe, M., & Pedon, A. (2019). Interpersonal trust in adolescence: a preliminary study on online/offline social interactions and life satisfaction. Revista INFAD de Psicología. *International Journal of Developmental and Educational Psychology*, 1(2), 343-352.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. Journal of advanced nursing, 62(1), 107-115. https://doi.org/10.1111/j.1365-2648.2007.04569.x
- Falcone, R., & Castelfranchi, C. (2001). Social Trust: A Cognitive Approach, in Trust and Deception in Virtual Societies by Castelfranchi C. and Yao-Hua Tan (eds), Kluwer Academic Publishers, pp. 55-90.
- Fogel, J., & Nehmad, E. (2009). Internet social network communities: Risk taking, trust, and privacy concerns. *Computers in human behavior*, 25(1), 153-160. https://doi.org/10.1016/j.chb.2008.08.006
- Frye, N. E., & Dornisch, M. M. (2010). When is trust not enough? The role of perceived privacy of communication tools in comfort with selfdisclosure. *Computers in Human Behavior*, 26(5), 1120-1127. https://doi.org/10.1016/j.chb.2010.03.016

Galegher, J., Sproull, L., & Kiesler, S. (1998). Legitimacy, authority, and community in electronic support groups. *Written communication*, 15(4), 493-530. https://doi.org/10.1177/0741088398015004003

- Gross, E. F. (2004). Adolescent Internet use: What we expect, what teens report. *Journal of applied developmental psychology*, 25(6), 633-649. https://doi.org/10.1016/j.appdev.2004.09.005
- Olivero, N., & Lunt, P. (2004). Privacy versus willingness to disclose in ecommerce exchanges: The effect of risk awareness on the relative role of trust and control. *Journal of economic psychology*, 25(2), 243-262. https://doi.org/10.1016/S0167-4870(02)00172-1
- QSR International (2012). NVivo 10 Computer software. Melbourne: Author. http://www.qsrinternational.com
- Subrahmanyam, K., & Greenfield, P. (2008). Online communication and adolescent relationships. *The future of children*, 119-146. https://doi.org/10.1353/foc.0.0006
- Taddei, S., & Contena, B. (2013). Privacy, trust and control: Which relationships with online self-disclosure? *Computers in human behavior*, 29(3), 821-826. https://doi.org/10.1016/j.chb.2012.11.022
- Tidwell, L. C., & Walther, J. B. (2002). Computer-mediated communication effects on disclosure, impressions, and interpersonal evaluations: Getting to know one another a bit at a time. *Human* communication research, 28(3), 317-348. https://doi.org/10.1111/j.1468-2958.2002.tb00811.x