Lista Nuove Lezioni Corso Social Network

Forma del corso

1. Tranne la prima lezione: si legge a casa la lezione, si compongono le domande e si postano con il proprio nickname e matricola nel forum commune delle domande. A lezione si usano le domande come traccia.
2. A lezione si chiede la connessione a Mentimeter e si intervalla la lezione con un question time ulteriore ed anonimo.

Id	Titolo	Slides	Key Concepts	Domande
X	Graph Theory	24	14	14
000	Psychological Groups: an introduction	28	17	17
001	Sense of Presence & Interactivity	63	57	57
002	Deindividuation & Social identity	76	67	67
003	Phantom Emotions	55	59	59
004	Cyber-Social Interaction	29	24	24
005	Online Social Influence	130	81	81
006	Personality and Web	36	42	42
007	The Self in the Web Age	103	75	75
008	The digital privacy paradox	15	13	13
009	Social Cognition on the Web	46	34	34
010	Social Networks and Digital Communities	160	122	122
011	On-line Collective Intelligence	223	85	85
012	From Digital Prosocial Behaviours to Online Moral Disengagement	48	26	26
013	Reputation and Cooperation in Virtual Environments	85	24	24
014	From the “Echo Chamber” effect to the Fake News Dynamics	8	8	8
015	Virtual Settings as Clinical Settings	61	23	23
016	The Web “Monster Manual”	13	12	12
Total	**18 - Topics**	**1203**	**783**	**783**

MODULI

Id	Titolo (Modulo)	Slides	Key Concepts	Domande
X.1	Nodes, Links and Matrices	24	14	14
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001.2	Interactivity	36	30	30
001.3	Virtual Social Facilitation	16	15	15
002.1	Deindividuation	17	23	23
002.2	M-SIDE Model	29	5	5
002.3	Deindividuation and Cognitive Dissonance	5	6	6
002.4	Social Identity in the Web age	13	19	19
002.5	Online Social Identity Salience	12	14	14
003.1	Emotional Experiences in Cyberspace	7	6	6
003.2	Internet-based interpersonal communication	17	18	18
003.3	Emotional effects of Presence and Ambiguity	22	28	28
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004.1	Social Relations in the age of Web	19	18	18
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005.1	Social Influence: an essential definition	22	17	17
005.2	Social Influence within Virtual Environments	19	15	15
005.3	Digital Conformism	29	23	23
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006.1	Personality and Virtual Environments	24	29	29
006.2	Personality and VirtHuLab experiments	12	13	13
007.1	A brief introduction to the Self	7	11	11
007.2	Self Expression on the Web	22	15	15
007.3	Online Self Disclosure	23	19	19
007.4	Constructing the Self in a Digital World	31	20	20
007.5	The Digital Self Hypothesys	20	10	10
008.1	From the Psychological construct of Privacy to the Digital Privacy	15	13	13
009.1	Netified: Social Cognition in Crowds and Clouds	17	13	13
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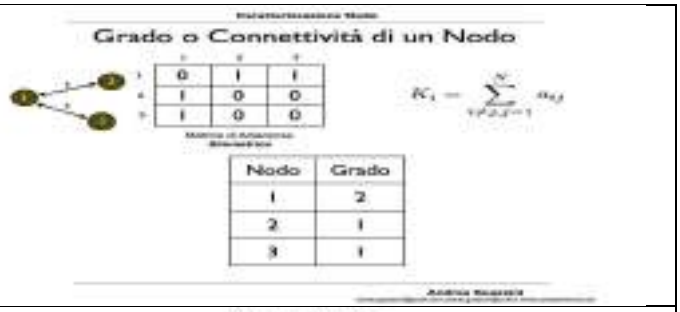
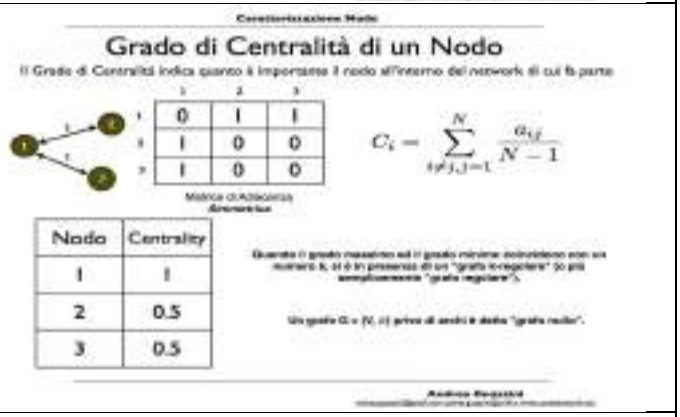
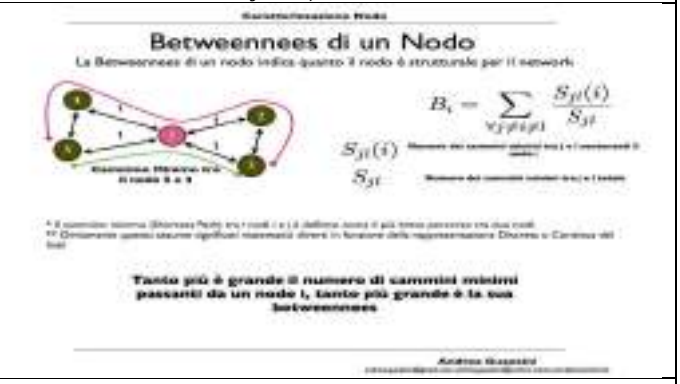
010.1	Virtual community participation and motivation	49	48	48
010.2	The Virtual Community	23	19	19
010.3	Social Networks and On-line Communities	19	14	14
010.4	On-line Social Support	25	20	20
010.5	Collective Digital Actions	29	12	12
010.6	A brand new classification for online social networks	15	9	9
011.1	Online Decision Making	25	19	19
011.2	Collective Intelligence	75	39	39
011.3	Empathy and Collective Intelligence	26	11	11
011.4	Collective Intelligence- the case of crowdsourcing	91	16	16
012.1	Digital Pro-Social Behaviour	24	15	15
012.2	On-Line Moral Disengagement	10	6	6
012.3	On-Line Bystander Effect	14	5	5
013.1	Evolution of Cooperative Behaviours	16	12	12
013.2	From Gossip to Digital Reputation	27	8	8
013.3	The “beauty of strangers effect”: complex on-line reputation dynamics	42	4	4
014.1	On-line Fake News Dynamics	8	8	8
015.1	From Virtual Settings to Clinical Settings	16	10	10

015.2	Cybertherapy	31	5	5
015.3	The Affinity System	14	8	8
016.1	The New Roles on the Web: work in progress	13	12	12

Key Concepts

Module X.1 – Nodes, Links and Matrices		
Id	Pay Off	Explanation
X.1.1	What's the maximum number of possible connections within a group (Network) of n subjects (nodes)?	The larger the group, the more ties are needed to join members to each other and to the group. The maximum number of ties within a group in which everyone is linked to everyone else is given by the equation $Links = \frac{n(n-1)}{2}$ But only if the graph style we choose is "undirected" and "not weighted" …. but in order to fill this gap, please stop here for a moment and make a step sideward, toward the graph theory ….
X.1.2	What's the definition of a Network in Graph Theory ?	I grafi sono strutture matematiche discrete che rivestono interesse sia per la matematica che per un'ampia gamma di campi applicativi. Un grafo è un insieme di elementi detti nodi o vertici collegati fra loro da archi o lati. Più formalmente, si dice grafo una coppia ordinata G = (V, E) di insiemi, con V insieme dei nodi ed E insieme degli archi, tali che gli elementi di E siano coppie di elementi di V Due vertici u, v connessi da un arco e prendono nome di "estremi dell'arco"; l'arco e viene anche identificato con la coppia formata dai suoi estremi (u, v). Un arco che ha due estremi coincidenti si dice ricorsivo.
X.1.3	What are the definition of Nodes and Links?	Il Nodo o Vertice di un network rappresenta l'unità elementare o microscopica del grafo, e quindi ne indica le unità statistiche. Il Link rappresenta invece la relazione esistente tra due Nodi e genericamente questa può essere rappresentabile in forma Discreta o Continua, Diretta o Non Diretta.
X.1.4	What are the 4 typologies of Networks we can obtain modifying the modality of links representation?	In funzione della modalità con la quale si rappresentano gli archi, si ottengono quattro tipologie generali di network: undirected-discrete (I), directed-discrete (II), undirected-weighted (III); directed-weighted (IV).
X.1.5	A network representation can be symmetric or asymmetric. Make an example of the two cases.	.. using paper and pen!

X.1.6	What's the Degree of a Node (Grado di connettività)?	
X.1.7	What's the Centrality Degree of a Node?	
X.1.8	What's the difference between Degree of a Node and Centrality Degree of a Node?	The Centrality degree is the degree normalized (i.e., divided by the maximum possible number of connections of the subject i).
X.1.9	What's the betweennees of a Nodes?	
X.1.10	Define the concepts of Hubs and Leaves in graph theory, and explain their differences.	I nodi che hanno un alto grado di Centralità sono detti Hubs, mentre quelli con centrality bassa sono solitamente definiti foglie. Il loro ruolo all'interno della diffusione delle informazioni all'interno di un network può essere significativamente diverso e non banale.
X.1.11	How Degree, Centrality and Betweennees can be used to characterize a Network?	Quando ci spostiamo dalla descrizione delle unità microscopiche di un network (i nodi), alle proprietà Globali del grafo che lo rappresenta, oltre alle vecchie dimensioni osservabili, nascono e possono essere definite nuove emergenti proprietà. Il Grado Medio, la Centrality Media e la Betweennees Media del grafo stesso.
X.1.12	What's the definition of Diameter of a Network?	Il Diametro di un Network è definito dal più lungo dei cammini minimi esistenti all'interno del network.
X.1.13	What's the Topology of a Network?	Una topologia di rete è la rappresentazione della struttura geometrica di una rete di relazioni. Un nodo può avere una o più connessioni con gli altri secondo differenti schemi. La topologia di rete è determinata soltanto dalla configurazione dei collegamenti tra i

		nodi. Per la precisione, solitamente non riguardano la topologia di rete: le distanze tra i nodi, le interconnessioni fisiche, le velocità di trasmissione, i tipi di segnale.
X.1.14	What's the relation between the number of nodes of a network (people) and the maximum number of possible connections within the network?	The larger the group, the more ties are needed to join members to each other and to the group. The maximum number of ties within a group in which everyone is linked to everyone else is given by the equation $Links = \frac{n(n-1)}{2}$ and the number of ties needed to connect all members grows exponentially as the group gets larger.

Module 000.1 –Definition and Description of Psychological Groups		
Id	Pay Off	Explanation
000.1.1	What's the definition of Group Dynamics?	Group Dynamics Group dynamics are the influential actions, processes, and changes that occur within and between groups. Groups come in all shapes and sizes and their functions are many and varied, but their influence is universal. the tendency to join with others in groups is perhaps the singles most important characteristic of humans, and the processes that unfold within these groups leave an indelible imprint on their members and on society. To understand people, one must understand groups and their dynamcs (Forsyth, 2004).
000.1.2	What are the fundamental elements required to define a Psychological Group?	A broad definition of Psychological Groups • A group faces with communication or mutual dependance. • Groups share purposes and goals, and only such a things turn a mere aggregate of individuals into a "group". • Groups share norms, roles and status (Social structure). • Groups come into existence when people became linked togheter by some type of relationship
000.1.3	What's a Multiplex Network?	Multiplex Network Such a feature suggests how reality is more complex than any toy-model. When nodes can be connected by more than one possible link, and/or when nodes can be connected on more than one possible space, sience uses to represent such a systema the concept of Multiplex or Coupled Networks
000.1.4	What's the possible and typical size of Psychological Groups?	Group Size A group can range in size from two members to many thousands. Very small collectives, such as dyads (two members) and triads (three members) are groups, but so are large mobs, crowds, and congregations (Simmel, 1902). Most groups, however, tend to be small, ranging between two and seven members (James, 1951). Classical researches have been confirmed by recent literature for what concern

		the fact that: "human groups gravitates to the smallest size, two" (Hare, 1976; Ruef, 2003).
000.1.5	What's the Bales' classification of possible Group Interactions?	Interaction • Relationship interaction (or socioemotional interaction) - Actions performed by group members that relate to or influence the emotional and interpersonal bonds within the group, including both positive actions (social support, consideration) and negative actions (criticism, conflict). • Task interaction - Actions performed by group members that pertain to the group's projects, tasks, and goals.
000.1.6	Describe the Circumplex Model of Group Tasks by McGrath.	Circumplex model of group tasks A conceptual taxonomy developed by Joseph McGrath that orders group tasks in a circular pattern based on two continua: cooperative–competitive and conceptual–behavioral. Each of these basic categories can be further subdivided, yielding a total of eight basic goal-related activities.
000.1.7	Describe the concept of Interdependence within Psychological Groups.	Interdependence Some groups create only the potential for interdependence among members. The outcomes of people standing in a queue at the checkout counter in a store, audience members in a darkened theater, or the congregation of a large mega-church are hardly intertwined at all. Other groups, such as gangs, families, sports teams, and military squads, create far higher levels of interdependency since members reliably and substantially influence one another's outcomes over a long period of time and in a variety of situations. In such groups the influence of one member on another also tends to be mutual; member A can influence B, but B can also influence A in return. In other groups, in contrast, influence is more unequal and more one-directional
000.1.8	Describe the concept of Structure of a Psychological Group.	Structure Group members are not connected to one another at random, but in organized and predictable patterns. In all but the most ephemeral groups, patterns and regularities emerge that determine the kinds of actions that are permitted or condemned: who talks to whom, who likes whom and who dislikes whom, who can be counted on to perform particular tasks, and whom others look to for guidance and help. These regularities combine to generate group structure—the complex of roles, norms, and intermember relations that organizes the group. (i.e. Structure is the result of the underlying pattern of roles, norms, and relations among members that organizes groups.)
000.1.9	What's the definition of Role within the domain of Group Psychology?	Role A coherent set of behaviors expected of people who occupy specific positions within a group. Roles specify the general behaviors expected of

		people who occupy different positions within the group. The roles of leader and follower are fundamental ones in many groups, but other roles—information seeker, information giver, elaborator, procedural technician, encourager, compromiser, harmonizer—may emerge in any group (Benne & Sheats, 1948).
000.1.10	What's the definition of Norm within the domain of Group Psychology?	Norm A consensual and often implicit standard that describes what behaviors should and should not be performed in a given context. Group members' actions and interactions are also shaped by their group's norms—consensual standards that describe what behaviors should and should not be performed in a given context.
000.1.11	Describe the concept of Unity within the domain of Group Psychology.	Unity Just as a book is not just a set of sequenced pages, so a group is not just the individuals who compose it. A group, viewed holistically, is a unified whole; an entity formed when interpersonal forces bind the members together in a single unit with boundaries that mark who is in the group and who is outside of it. Unitiy can be study by means of: Group Cohesion The strength of the bonds linking individuals to and in the group. All groups require a modicum of cohesiveness, else the group would disintegrate and cease to exist as a group (Dion, 2000).
000.1.12	What factors determine a group's entitativity?	Entitativity, according to Campbell, is substantially influenced by: Common fate: Do the individuals experience the same or interrelated outcomes? Similarity: Do the individuals perform similar behaviors or resemble one another? Proximity: How close together are the individuals in the aggregation?
000.1.13	How the Psychological Groups can be classified?	Group Calssification Primary Groups Secondary (Social) Groups Colllective Category
000.1.14	What's the definition of Primary Group?	Primary Groups primary group: A small, long-term group, such as families and friendship cliques, characterized by face-to-face interaction, solidarity, and high levels of memberto- group interdependence and identification; Charles Cooley believed such groups serve as the primary source of socialization for members by shaping their attitudes, values, and social orientation. (Cooley, 1909).
000.1.15	What's the definition of Secondary (Social) Groups?	Social Groups social group: A relatively small number of

		individuals who interact with one another over an extended period of time, such as work groups, clubs, and congregations. These groups are larger and more formally organized than primary groups, and memberships tend to be shorter in duration and less emotionally involving. The boundaries of such groups are more permeable, so members can leave old groups behind and join new ones. These groups are, in general, more instrumental ones: they are likely to stress the performance of tasks rather than enjoying relationships. Various terms have been used to describe this category of groups, such as secondary groups (Cooley, 1909), associations (MacIver & Page, 1937), task groups (Lickel, Hamilton, & Sherman, 2001), and Gesellschaften (Toennies, 1887/1963).
000.1.16	What's the definition of Collectives?	Collectives describe any aggregate of two or more individuals and, hence, would be synonymous with the term group (Blumer, 1951). Most theorists, however, reserve the term for larger, more spontaneous and looser forms of associations among people. Collectives are larger groups whose members act in similar and sometimes unusual ways.
000.1.17	What's the definition of Categories?	A category is an aggregation of individuals who are similar to one another in some way. For example, people who live in New York City are New Yorkers, Americans whose ancestors were from Africa are African Americans, and those who routinely wager sums of money on games of chance are gamblers. If a category has no social implications, then it only describes individuals who share a feature in common and is not a meaningful group. If, however, these categories set in motion personal or interpersonal processes—if two students in college become friends when they discover they grew up in the same town, if people respond to a person differently when they see he is an African American, or if a person begins to gamble even more of her earnings because her social identity includes the category gambler—then a category may be transformed into a highly influential group (Galinsky, Ku, & Wang, 2005). In such cases, categories can be higher in entitativity and essentialism than other types of groups.

Module 001.1 – The Sense of Presence		
Id	Pay Off	Explanation
001.1.1	Definition of Virtual Settings	"Real or simulated Environment in which a perceiver experiences telepresence"
001.1.2	Definition of Telepresence	the "experience of *Presence* in an environment by

		means of a communication medium
001.1.3	Definition of Sense of Presence by Steuer(1)	Usually presence is defined as the “sense of being there” (Steuer, 1992) Or as the “feeling of being in a world that exists outside of the self” (Riva, & Waterworth, 2003)
001.1.4	Definition of Sense of Presence in terms of internal functional space (2)	The embedding of sensory reffered properties into an internal functional space
001.1.5	Sense of Presence as factor to shift from meaning as comprensibility to meaning as significance	Meaning-as-comprensibility refers to extent to which the event fits with our view of the world (e.g., as just, controllable, and nonrandom), whereas meanig-as-significance refers to the value or worth of the event for us (Janoff-Bulman, 1997).
001.1.6	Telepresence as an extension of the self	When we use a VS system (i.e., we experience *Telepresence*) we feel (i.e., represent) our self-image projected onto the virtual system, as a part of, or an extension of the body/self (James, 2001).
001.1.7	Cognitive representation of Telepresence should comprised of	Neural representations about the dimension, posture and movements of the corresponding body parts in relation to the environmental space, and for the self the integration of such an information with our self representation. Thus, its production requires integration of somatensory, cognitive (intrinsic), and visual (extrinsic) information of our own body in space (Iriki, 2001).
001.1.8	Relation between Telepresence Integration level and degree of conscious	The more the integration is effective, the more the information itself becomes accessible at a conscious level and can be modified easily (Baars, 1997)
001.1.9	Definition of Proto-self	Proto-self: Structures that regulate and represent the body's internal states. Proto-self is a coherent collection of neural patterns that map, moment by moment, the state of the physical structure of the organism in its many dimensions. We are not conscious of the proto-self.
001.1.10	Definition of Core Self	Emergent process that occurs when an organism becomes consciously aware of feelings associated with changes occurring to its internal bodily state; it is able to recognize that his thoughts are his own, and that they are formulated in his own perspective. It develops a momentary sense of self, as the brain continuously builds representative images, based on communications received from the Protoself. The image is a result of mental patterns which are caused by an interaction with internal or external stimulus.
001.1.11	Definition of Autobiographical Self	When consciousness moves beyond the here and now, Damasio’s third and final layer emerges as Extended Consciousness. This level could not exist without its predecessors, and, unlike them, requires a vast use of conventional memory. The autobiographical self draws on memory of past experiences which involves use of higher thought. This autobiographical layer of self is developed gradually over time. Working memory is necessary for an extensive display of items to be recalled and referenced. Linguistic areas of the brain are activated to enhance the organism's experience, however language is not necessarily required.
001.1.12	What’s the theoretical relation	The more the three layers are integrated (focused on the

	between the Degree of Presence and Self Layers?	same event) the stronger the intensity of the *Presence* feeling.

Module 001.2 – Interactivity		
Id	Pay Off	Explanation
001.2.1	Roger's (and William's) definition of interactivity	Users' control: the degree to which participants in a communication process can exchange roles and have control over their mutual discourse, i.e. narratives (Rogers, 1995; Williams et al. 1988)
001.2.2	Shin's definition of Interactivity	The users' ability to control the flow of information is the one that determines the degree of interactivity.
001.2.3	Liu and Shrum definition of Interactivity	The degree to which two or more communication parties can act on each other, on the communication medium and on the messages and the degree to which such influences are synchronized
001.2.4	Ha and James definition of Interactivity	As consisting of playfulness, choice, connectedness, information collection and reciprocal communication.
001.2.5	Interactivity as a characteristic of the medium	Some scholars regard interactivity as the functional features of the medium
001.2.6	Heeter (2000) suggested six dimensions to assess the measure of interactivity for a medium:	1. Complexity of available choice 2. Amount of effort users must exert to access information 3. Responsiveness of the medium 4. Monitoring information use 5. Ease of adding information and 6. Facilitation of interpersonal communication.
001.2.7	Model of Interactivity of Liu and Shrum	Liu and Shrum (2002) modeled online marketing web features alongside three dimensions of interactivity: 1- active control 2- synchronicity 3- two-way communication.
001.2.8	Advertising and Interactivity?	Advertising effectiveness is associated with interactivity
001.2.9	Interactivity and Website quality?	Interactivity improves businesses website quality and attract customers
001.2.10	What are the Features that help improve Interactivity?	Synchronicity, speed, presence and control.
001.2.11	What's the correlation between Need For Closure and perception of the level of websites' interactivity?	They found that low NFC users prefer a higher level of interactivity than high NFC users.
001.2.12	What's the relation between Locus of Control and perception of Web Interactivity?	They found internally controlled users more likely to perceive a higher level of interactivity than those oriented to external 'locus of control'.
001.2.13	What's the relation between Direction ofommunication, control on the communication and perception of Interactivity?	The direction of communication and control over the communication process influences the dimensions of the perceptions of interactivity. In particular interactivity increases when the control is high and when the communication is bi-multidirectional
001.2.14	What's the relation between users' involvement and interactivity?	Users' involvement as an effect of interactivity in the marketing field.
001.2.15	What's the effect of Interactivity on distance learning environments?	Higher interactivity leads learners to increase and refine their evaluation of the learning process. And by the studies of Dozier, the use of highly interactive social constructivist instructional approaches in computer-mediated and other learning environments must be

		supported.
001.2.16	What's a possible negative or problematic consequences of Interactivity?	Communication processing loads. i.e. Interactivity can increase such a loads.
001.2.17	What's the Interactivity Paradox?	Subjects evidently enjoyed news site interactivity and the active involvement it entailed more than reading electronic text, but this form of online participation produced a certain amount of disorientation, exacting a cognitive and emotional cost.
001.2.18	By the study of MacLean from the Interactivity displayed by the messages from a subject, what's possible to forecast?	Correlations between the motivation students had to post messages and the levels of interactivity displayed by the messages.
001.2.19	Sukpanich defines Machine Interactivity and Person Interactivity as factors affecting the on-line purchase intentions.	Machine interactivity is positively associated with online purchase intentions. Person interactivity was positively associated with online purchase intentions through its influence on social telepresence, subjective norms, perceived behavioural control and trust.
001.2.20	What's the relastion between Interactivity and Mutual awareness?	Interactive media users felt higher levels of mutual awareness with the animated characters presented
001.2.21	Interactivity and Vividness of a website affect the buying behaviour?	Respondents' buying behaviour was significantly influenced by the characteristics of interactivity and vividness.
001.2.22	The research of Wang (2000) suggests a peculiar relation between interactivity and effectiveness of a political campaign.	Moderate interactivity yielded more effects than either high or low interactivity, suggesting a curvilinear relationship reminiscent of other communication variables.
001.2.23	What's the effect of telepresence and interactivity on the intention to revisit a website?	Although interactivity had a strong effect on telepresence, it did not show the same significant effect on website revisiting intentions.
001.2.24	What's the definition of subjective and objective interactivity?	The paradox is that even when research defines interactivity in a particular setting as high or low, users can subjectively have different feelings, experiences, or perceptions of interactivity of different levels or intensity. Therefore, subjective and objective interactivity might diverge.
001.2.25	Sohn and Leckenby (2002) defined expected interactivity as:	'the extent of interactivity that a person expects to experience during a prospective interaction with the medium'. The expected interactivity of any individual would be based on their unique personal characteristics, different psychological variances and mostly based on subjective experience with interactivity.
001.2.26	Explain how Newhagen defines interactivity as Symbolic process.	Symbolic Interactivity an information-based process, embedding meaning in symbols, that takes place within the individual.
001.2.27	Interactivity as parameter to distinguish new and old media	Interactivity is arguably the single most important feature that distinguishes mass communication via the Web from traditional mass media. Unlike newspapers and television, the Web offers unlimited potential for interacting with information instead of simply transmitting it.
001.2.28	New media are no longer perceived as media of communication, instead they are represented as source of	Users are active participants rather than passive recipients of communication. The flow of information is decidedly two-way, in stark contrast to the

	interaction. Why?	unidirectional transmission epitomized by traditional mass media. As a result, psychologically speaking, the computer is no longer seen as a mere medium of communication but as a source of interaction (Sundar and Nass 2000).
001.2.29	Computer users mindlessly apply _____ to their interactions with computers	rules of human–human communication (Nass and Moon 2000). They indeed are polite to computers, apply gender stereotypes and generally behave socially in front of the computer (Reeves and Nass 1996).
001.2.30	Interactivity brings human to develop long-term affiliations with particular device, showing..?	Furthermore, they tend to form long-term affiliations with particular computer terminals, showing anthropomorphic loyalty toward specific terminals (Sundar 2004a).

Module 001.3 – Virtual Social Facilitation		
Id	Pay Off	Explanation
001.3.1	What are the main experimental results support the evidences of an On-line Social Facilitation effects from Walker, Sproull and Subramani (1994)?	Walker, Sproull, and Subramani (1994) investigated participants' responses to a synthesized talking face displayed on a computer screen in the context of a questionnaire study. Compared to participants who answered questions as presented via a text display on a screen, participants who answered the same questions spoken by a talking face spent more time, made fewer mistakes, and wrote more comments. This study supports the view that electronic performance monitoring (EPM) influences productivity in a manner that is consistent with the social facilitation framework (Aiello & Kolb, 1995). This study showed that computer-based performance monitoring (CPM) can have a positive impact on productivity. Subjects who were monitored only on the data entry task attempted more entries and keyed more entries correctly on that task than subjects who were not monitored at all (Kolb & Aiello, 1997).
001.3.2	What were the arousal effects of responding to a talking-face display in the experiment of Sproull et al. (1996)?	This study presents evidence that people respond to a talking-face display differently than to a text display. They report themselves to be more aroused (less relaxed, less confident) (Sproull, Subramani, Kiesler, Walker, & Waters, 1996).
001.3.3	What was the main result of the experiment by Rickenberg & Reeves, (2000) about virtual social facilitation?	The perception of being monitored by an animated character has the same effects performance as being monitored by a human, either electronically or in person (Rickenberg & Reeves, 2000).
001.3.4	What are the effects of the presence of an avatar, in terms of Social Facilitation Effect?	Research reports significant social inhibition effect between participants being observed by agent-avatars compared to those observed by human-avatars (Blascovich, Loomis, Beall, Swinth, Hoyt, & Bailenson, 2002) . Another study has been observed that, for a series of verbal, spatial, and mathematical tasks, the social facilitation effect can be evoked by virtual humans (Park & Catrambone, 2007).
001.3.5	Describe the main results of the	A study of Zanbaka et al. found that participants were

	experiment of Zanbaka et al about the effects of the Avatar telepresence on human performance.	inhibited while performing complex math problems when in the presence of a human, virtual human projected life-size, and a virtual human in an immersive virtual environment (Zanbaka, Ulinski, Goolkasian, & Hodges, 2007).
001.3.6	What experimental results seems to contraddict the Virtual Social Facilitation Hypothesys?	In a study on the persuasiveness of a lifestyle mobile coaching application using social facilitation, wasn't found difference between achieving lifestyle goals between a group with social facilitation and a group without (Gasser, Brodbeck, Degen, Luthiger, Wyss, & Reichlin, 2006). Through three manipulations aimed at mimicking social facilitation effect demonstrated in previous research, no significant effects on performance could be replicated. This suggests that this social psychology principle may not be applicable in a human-machine interaction paradigm (Baldwin, Branyon, Sethumadhavan, & Pak, 2015).
001.3.7	What aspects of Virtual Dynamics Ergonomics related to the technological systems appeared to influence the Virtual Social Facilitation?	Monitoring and feedback can. The positive effect of monitoring in the virtual presence setting resembles the findings in the physical presence setting. Feedback however is different in that regard. Its influence can be considered significant only in the virtual presence setting. Measurement does not increase performance in either setting (Niehaves & Tavakoli; 2012). Designing spaces in which social interactions are maximized can influence social facilitation (Goel, Junglas, Ives, & Johnson; 2012).
001.3.8	What's the empirical relation between face expression and Virtual Social Facilitation?	The face with "more" expression (the stem face) led to greater engagement than did the face with "less" expression (the neutral face). Note that engagement does not mean liking. Respondents assessed the stem face less positively than the neutral face and assessed both faces less positively than the text condition (Walker, Sproull, & Subramani; 1994).
001.3.9	What's the empirical relation between Locus of Control and Virtual Social Facilitation?	Significant effect came from the assessment of locus of control. Interface designers may want to avoid using animated characters when they know that they are designing for people with an internal locus of control. The addition of characters may make interactions more robust, however, when users perceive that they lack control over their success (Rickenberg & Reeves; 2000).
001.3.10	What's the empirical relation between Gender and Virtual Social Facilitation?	In a study there was a gender difference: the results indicate that women perceived more evaluation potential when 'Clip' was present than when 'Clip' was not present. We argue that women tended to experience social inhibition in study one due to the arousal associated with evaluation apprehension when 'Clip' was present. In contrast, men, who experienced little evaluation apprehension in the presence of 'Clip' appear to enjoy a social facilitation response to the computer icon. (Hall & Henningsen; 2008).
001.3.11	What's the empirical relation between On-line gambling behaviour, Virtual Settings and Virtual Social Facilitation?	A study on social facilitation in online and offline gambling support hypothesis that both social facilitation and medium (i.e., online or offline) may increase players' risk-taking behaviour, a priori it would suggest

		there should be a significant interaction between the two (Cole, Barrett, & Griffiths; 2011).
001.3.12	What are the empirical evidences suggesting a Virtual Social Facilitation even within the Virtual reslity.enhanced exercise experience?	Virtual reality-enhanced exercise A study on social facilitation in virtual reality-enhanced exercise suggested that social facilitation interacts with an exerciser's competitive orientation. However, in this study, participants who were lower on competitiveness maintained their initial level of exercise effort, and thus effort did not appear to be adversely affected by the introduction of on-screen competitors (Anderson-Hanley, Snyder, Nimon, & Arciero; 2011). This study suggests also that working out with a superior virtual partner can be effective for enhancing exercise performance (Köhler effect) (Anderson-Hanley, Snyder, Nimon, & Arciero; 2011).
001.3.13	What is the effects of degree of telepresence on Virtual Social Facilitation?	Presence Condition - Presence conditions: neither the hypothesis that social facilitation is observable when embodiment is low, nor the hypothesis that social facilitation varies as a function of humanness was supported in the current experiment (Hertz & Wiese; 2017).
001.3.14	What's the difference between males and females, for what concern the Sofical Facilitation by Robots?	Findings indicate that males tend to think of the robot as more human-like and accordingly show some evidence of "social facilitation" on an arithmetic task as well as more socially desirable responding on a survey administered by a robot. In contrast, females saw the robot as more machine-like, exhibited less socially desirable responding to the robot's survey, and were not socially facilitated by the robot while engaged in the arithmetic tasks (Schermerhorn, Scheutz, & Crowell; 2008).
001.3.15	What's the Potential of Electronic Performance Monitoring (EPM) in terms of Virtual Social Facilitation?	Electronic Performance Monitoring Potential In line with motivational research, the results support the hypotheses that in the presence of Electronic Performance Monitoring (EPM), individuals would experience a more positive subjective mood state for easy tasks and a more negative subjective mood state for difficult tasks. The fundamental implication of these findings is that the implementation of a system of electronic monitoring, if an individual is performing an easy task, may result in this individual having a more positive mood state (Davidson & Henderson; 2000).

Module 002.1 – Deindividuation		
Id	Pay Off	Explanation
002.1.1	Deindividuation and conformism (Spears, 2017)	When people are immersed in the crowd, in a situation that provides group immersion and anonymity, salience and impact of social factors increase, leading to greater conformity to specific (i.e., local) group norms.
002.1.2	What's the first definition of Deindividuation effect provided by Zimbardo (1969)?	In the crowd humans become disinhibited and behave anti-normatively and irrationally, as a consequence of reduced self-awareness and accountability.
002.1.3	What's the definition of Self Awareness?	Self-awareness is the capacity for introspection and the ability to recognize oneself as an individual separate

		from the environment and other individuals.
002.1.4	What's the definition of Public Self Awareness?	Public self-awareness describes an increased focus on those aspects of the self-observable by other people.
002.1.5	Early versions of Deindividuation theory suggested that it was a consequence of what?	Early versions of deindividuation theory saw this as a consequence of reduced self-awareness and accountability.
002.1.6	Diener and Coll. Defined Deindividuation as:	Diener and others later focused more exclusively on loss of self as the core psychological process underlying deindividuation.
002.1.7	What's the criticism of Reicher to the Deindividuation theory of Zimbardo?	The psychological process proposed by deindividuation theory (a loss of self) did not (always) occur in the crowd. A meta-analysis of empirical deindividuation research confirmed there was no consistent empirical evidence for the processes it proposed (Postmes, 1998). To the contrary: anonymity and reduced self-awareness enhanced sensitivity to local norms.
002.1.8	Reicher challenged the conceptualization as a loss of self, because …	Individuals do not have a unitary sense of self. Social identity theory, for instance, points out that one's sense of self is made up of personal identity and multiple social identities, all of which combine to shape one's personality. Social identities are likely to become the basis for self-definition when that social identity is salient, such as when making comparisons between "them" and "us".
002.1.9	What's the definition of Depersonalization in Social identity Research?	In social identity research, the term depersonalization refers to a switch to a group level of self-categorization in which self and others are seen in terms of their group identities.
002.1.10	What's the definition of Depersonalization according to Self-categorization theory?	According to self-categorization theory, depersonalization makes perceptions of the outgroup more stereotypical. Self-perceptions also shift: self and other ingroup members become interchangeable, and the individual self-stereotypes in terms of group attributes.
002.1.11	What's the effect of Depersonalizastion on ingroup tendencies?	Depersonalization thus transforms individuals into group members who regulate their behavior according to in-group norms.
002.1.12	What's the main difference between Deindividuation asnd Depersonalization?	Importantly, and in contrast to deindividuation, the psychological state of depersonalization does not imply a loss of rationality or behavioural disinhibition; rather, the individual behaves rationally and regulates behaviour according to ingroup standards.
002.1.13	Lea and Spears in the 1991 complicated the model of deindividuation effect introducing an interaction between …	Anonymity changes the relative salience of personal vs. social identity, and thereby can have a profound effect on group behavior. SIDE proposes that there are no blanket indiscriminate effects of anonymity, but that anonymity effects are influenced by, and can only be understood through, their interaction with the social context.
002.1.14	What can induce a Deindividuation State?	Deindividuation Dynamics (State) can be induced by anonimity, low identifiability and physical isolation, in particular when group is salient for the subject (e.g., a quite typical condition in virtual environments).
002.1.15	What's the relation between deindividuation and conformism?	Such a state produce a tendency to adopt local social norms, and to conform more to the social pressure, in

		order to “reduce” the deindividuation state.
002.1.16	The Cognitive SIDE theory describes the deindividuation state as: ..	A case where, the process of depersonalization is accentuated and cognitive efforts to perceive the group as an entity amplified, as results of the decreased visibility of the individual within anonymous groups. That enhances the salience of the shared social identity.
002.1.17	The Strategic SIDE theory analyzes: …	Analyzes how the distinctive features of a communication technology affect the ability of the group to express their identity when an out-group has more power than the ingroup, and where the norms of both groups are at odds with each other.
002.1.18	SIDE theory explains how group immersion and anonimity affect the relative salience of personal and social identities.	Group immersion and anonymity have cognitive consequences that affect the relative salience of personal and social identities. These factors do not produce a loss of self as proposed by deindividuation theory. Rather, anonymity and immersion in the group can enhance the salience of social identity and thereby depersonalize social perceptions of others and the self.
002.1.19	SIDE explanation of visual anonimity effects.	SIDE argues this occurs principally because (visual) anonymity obscures individual features and interpersonal differences. As a result of the decreased visibility of the individual within anonymous groups, the process of depersonalization is accentuated, and cognitive efforts to perceive the group as an entity are amplified.
002.1.20	Does Anonimity affect automatically the salience of social identity?	No
002.1.21	If the subjects interact anonymously in the absence of any specific social identity or group boundaries, what’s will be the effect of anonimity following the SIDE model?	If individuals interact anonymously in the absence of any specific social identity or group boundaries, anonymity would have the reverse effect of accentuating one’s isolation from the group or by further obscuring group boundaries.
002.1.22	The effect of reduced public self-awareness has a theorethical relation with the size of the group. What?	This effect is expected stronger when a larger (versus smaller) group of other customers is present.
002.1.23	What’s the relation between Public Self Awareness and emotional discomfort and disinibition of behaviour?	Reduced levels of public self-awareness are associated with a decrease in person's emotional discomfort and disinhibition of behavior, resulting from the deindividuation effect reducing pressure to conform to other's expectations.

Module 002.2 – mSIDE		
Id	Pay Off	Explanation
002.2.1	What’s the purpose of mSIDE model?	Modeling the multidimensional phenomenon of deindividuation, taking into account the direct effects and the mediated effects of the critical variables.
002.2.2	In the mSIDE experiment we found that two groups seeded with two different local norms, behave differently when they had to donate in the game What was the results?	Adherence to the group norm, with a drift toward the natural tendencies for what concern donation in the ultimatum game which is 4.23 (Tisserand, 2014)
002.2.3	In the mSIDE experiments, what psychological variables appeared as decreasing the deindividuation in	Use of the internet, Extraversion, Openness, Locus of Control External, Social Domimance Orientation

	virtual environments?	
002.2.4	In the mSIDE experiments, what psychological variables appeared as increasing the deindividuation in virtual environments?	Social desiderability, Sense of virtual community, Importance of Social Networks (SNs) contacts
002.2.5	The mSIDE experiment highlighted some fundamental interactions between the critical factors of deindividuation. Make and example.	Deindividuation is a complex and dynamic phenomenon; Complexity is heightened by the effects of critical variables that are sometimes different (i.e., opposites) if we consider existing mediations; An example of this is represented by the effects produced by the Salience of social identity.

Module 002.3 – Deindividuation and Cognitive Dissonance		
Id	Pay Off	Explanation
002.3.1	The Cognitive Dissonance process can be divided in Type A and Type B. What's the difference?	Type A: Existing conflictual cognitions (e.g., Beliefs) Type B: Absence of accessible answers (e.g., Beliefs)
002.3.2	In the Classical conception of deindividuation, what's the relation between deindividuation and cognitive dissonance?	Deindividuation always increases Cognitive Dissonance (Sande & Zanna, 1987)
002.3.3	Modern conception of deindividuation represents its relation with the cognitive dissonance as theorethically mediated by …. ?	The self-awareness state of the subjects, or in other words, the salience of social identity within the social setting the subjects are experiencing.
002.3.4	What's the effect of Deindividuation on Cognitive Dissonance when the Public Awareness is high?	In this condition the Deindividuation increases the cognitive dissonance, increasing the probability of a Type B Dissonance.
002.3.5	Whne the Deindividuation decreases the Cognitive Dissonance within a social setting?	When the Public Awareness is low, and the Personal Awareness rules the subjects' psychological representation of the setting.
002.3.6	How the Cognitive Dissonance derived by a lack of behavioural support from a salient group can be reduced?	If the Social Identity is salient, the subjects show a greter attitude to change. In the opposite case, they show a reduced levels of group identification

Module 002.4 – Social Identity in the Web age		
Id	Pay Off	Explanation
002.4.1	Early evidences from Matheson and coll., regarding the selw-awareness in Computer Mediated Communication (CMC), showed that …	People actually become more (privately) self-aware in CMC.
002.4.2	Following the SIDE model is possible to derive a three step model to forecast the effects of deindividuation. Describe such a model.	The basic model describing the cognitive component of SIDE can be summarized in three steps: 1. which identity is salient? 2. the influence of anonymity, and 3. the (psychological and behavioural) outcomes
002.4.3	When group identity is salient the depersonalizing effects of anonymity are likely to lead to a range of group-	Heightened group salience, self-stereotyping in group terms, group cohesiveness and conformity to group norms (i.e., group-based social influence).

	related outcomes, make some examples.	
002.4.4	In intergroup contexts, classic correlates of intergroup behaviours are also likely to manifest themselves, make some examples.	Differentiation, competition, in-group bias.
002.4.5	In which experimental condition, usually the Group polarization in the normative direction appears as greatest?	In the anonymous-group identity condition (depersonalization).
002.4.6	What's the main difference between anonymous-group and individual conditions, in terms of polarization effects due to deindividuation dynamics?	While in the anonymous group identity condition a polarization effect has been described, in the anonymous individual identity condition an evidence of reliable depolarizatio has been found.
002.4.7	In what conditions groups tend to conform to the primed norm, and to grew stronger the effects over time?	Postmes et al. (2001) found that groups tended to conform to the primed norm, and this effect grew stronger over time, but only in the anonymous condition.
002.4.8	What preconditions are required to have an enhancing effect of anonymity on group based influence?	Other studies also provide evidence of anonymity enhancing group-based influence confirming that the salience of group identity and a group norm are important preconditions for this pattern (Sassenberg and Boos, 2003)
002.4.9	On the basis of Self-Categorization Theory, what kind of relation we should expect between anonimity and social attraction?	Self-Categorization Theory Prediction Following self-categorization principles we would expect social attraction (attraction to the group or its prototype) and group cohesiveness to be enhanced under conditions of anonymity. This is what was found in a study by Lea et al. (2001). As predicted, anonymous discussion conditions led to greater group attraction and cohesiveness and these were mediated by self-categorization as a group member and also stereotyping of other group members.
002.4.10	What's the interaction between group salience and self-categorization processes?	More recently Lea et al. have also shown that self-categorization processes mediate anonymity effects on group attraction under high (but not low) group salience
002.4.11	What relation has been found by Cress (2005) between anonimity and knowledge sharing within groups?	Cress (2005) found that anonymity increases knowledge sharing within groups, but only for those whose social identity is salient.
002.4.12	What relation has been found by Tanis and Postmes (2005) between anonimity and trust in dyads?	Tanis and Postmes (2005) found a comparable effect of anonymity on trust in an otherwise very different study of sharing in dyads.
002.4.13	What's the interplay between anonimity and shared group identity that can be revealed analyzing the paralinguistic features of the CMC interactions?	Lea and Spears (1992) found that recipients' evaluations of paralanguage use (typographic tricks such as emoticons) in text messages were negative between anonymous individuals, but positive if they shared a group identity with the anonymous sender.
002.4.14	What's the paradox revealed by Tanis and Postmes (2003) regarding the perception and the tendency to cooperate with an anonimous interactor?	Tanis and Postmes (2003) demonstrated in a series of five studies of dyadic (intragroup) interaction that anonymous in-group members leave more negative impressions and are considered more ambiguous characters as individuals, but they are nonetheless preferred in collaboration. Further studies have linked the latter effect to the enhanced perception of a shared

		identity in anonymous dyads (Postmes and Tanis 2006).
002.4.15	What's the relation between Saliency of Social Identity and group perception in terms of similarities and differences?	One process associated with salient social identities is the accentuation of intergroup differences as well as intragroup similarities (Tajfel 1978).
002.4.16	What's the condition posed by Reicher, to mantain the enhancing effect of anonimity and depersonalization?	In line with depersonalization principle in the SIDE model these processes will be enhanced by anonymity, so long as the group boundaries remain distinct and group identities salient (Reicher 1984).
002.4.17	The divergence/convergence group process has a relation with the depersonalization. What?	As predicted, the depersonalized groups tended to diverge as a result of discussion whereas individuated groups actually converged (depolarization). Groups tended to converge in the individuated conditions but this effect was attenuated (rather than showing actual differentiation) in the depersonalized conditions. (Postmes et al. 2002).
002.4.18	Describe how the Depersonalized conditions bias the perception of ing-group and out-group.	In the depersonalized conditions participants identified more with the in-group, saw the out-group as more homogeneous, held more negative stereotypes of the out-group, and were more likely to see group members as interchangeable by making more within than between group recall errors.
002.4.19	Lee (2004) showed greater confirmity under depersonalized representations only in a certain experimental condition. What?	Lee (2004) showed greater conformity under depersonalized representations but only in intergroup conditions, in other words conditions that naturally render group identity salient.

Module 002.5 – Online Social identity Salience		
Id	Pay Off	Explanation
002.5.1	What's the difference between personal and social identity?	Personal identities = elements of individuals' self concepts which define them as individuals Social Identities = elements of individuals's self concepts which they derive from membership in social groups
002.5.2	How is defined the Social Identity Development by Tajfel and Turner?	Internalization of characteristics of their group (norms) that influence their behaviour and attitude. (Tajfel & Turner, 1986)
002.5.3	What psychological theories can be used to predict the evolution of self-concept within the virtual environments?	Theory to Study the Evolution of Self Concept in Virtual Environments • Social Identity Theory (Tajfel & Turner, 1979) • Self – Categorization Theory (Turner et al., 1987) • Social Identity Model of Deindividuation Effects (Spears & Lea, 1992)
002.5.4	The Social Identity Theory would predict the Individuals as always motivate dto establish and maintain a positive differentiation between the ingroup and the outgroup. Why?	Because part of their self-esteem derives from the groups to which they belong, individuals would be motivated to establish and maintain a positive differentiation between the ingroup and the outgroup.
002.5.5	Social identity theory predictions for what concern the Online Social identity Salience.	1 - Because part of their self-esteem derives from the groups to which they belong, individuals would be motivated to establish and maintain a positive differentiation between the ingroup and the outgroup.

		2- Individuals will typically attend to information that continues to support differences between groups to maintain the social identity of the group. 3- Group members try to differentiate their own groups from relevant comparison groups and any threats to diminish this differentiation generate attempts to restore the differentiation between groups. 4- People also are affected in their social perception, judgment, and behavior by their membership in various social groups.
002.5.6	What's the prediction of SIDE Model for what concern the Social Identity Salience dynamics within virtual environments?	1 - The scarcity of individuating information combined to a salient social identity enhances group salience; 2- The anonymity of others leads to depersonalization: individuals reason on the basis of social categories and see themselves and others as prototypical group members; 3- Individual identity is replaced by group identity; individuals categorize themselves into the more salient group, enhancing ingroup affiliation and identity.
002.5.7	What's the opportunity given by the Virtul Environments, posed under attention by Suler (2002)?	Cyberspace gives people the opportunity to focus on and develop a particular aspect of who they are, with the chance to express and explore facets of their identity that they do not express in their face-to-face world. (Suler, J. R., 2002)
002.5.8	How recent new memberships changes affect virtual teams in terms of Social Identity?	Virtual teams, with recent new membership changes, have a lower level of shared social identity, lower levels of team effectiveness and greater levels of conflict. (Stendal, K., & Fuller, R., 2017)
002.5.9	What's the effect of prior experience in the process of entry into a team?	Prior experience facilitating entry into the team. If the virtual environment emphasizes the outgroup nature of the new team member, its acceptance by the group is slowed. (Stendal, K., & Fuller, R., 2017)
002.5.10	What are the effect of Social Identity Cues on group performance?	Examining the effect of Social Identity Cues (SIC) in real and virtual settings, the performance (brainstorming) increases in both situations but it is more creative in a context of anonymity than in face-to-face. • More group identification in the virtual context • SIC improved in virtual environments the performance in the absence of out-group (Guegan, J. et al., 2017)
002.5.11	How people express social identity on a social network:	• Language is strongly associated with our social identity (Scott, 2007) • People are aware, either implicitly or explicitly, of the social identity of their interlocutor and change their language usage accordingly. (Tamburrini, N et al., 2015) • Twitter users vary specific language characteristics according to whether they have sent conversational messages to members of the same community or to members from other communities. (Tamburrini, N et al., 2015)
002.5.12	How people identification with a social group can affect the perception of a brand?	People identification with the social group has important effects, for instance on their love for a Facebook brand in terms of attachment to the brand,

		positive effects in response to the brand, positive evaluations of the brand and passion for it (Vernuccio, 2015)
002.5.13	The interesting results of Vernuccio et al (2017) describe the relation between brand and online social dynamics. How?	• Users gain great social experiences from branded online communities; • Social-interactive engagement has positive effects on brand love through the psychological effects related to how the individual perceives his or her self, based on his or her belonging to the social group of the brand fan page.
002.5.14	How people express social identity on multiplayer online games?	In a within-game context, favoritism for the in-group is very strong, and evaluation of and identification with the in-group are moderated by the interview context and the level of category inclusion (i.e., nice, rude, aggressive, friendly). Players give more positive responses when describing members of their own group; Despite its virtual nature, the guild appears to make a strong contribution to the social identity of participants. *Players have a sense of community* (a sense of belonging within the gaming or the game community), *social identities* (such as gamer and guild or group member) and *social support from their relationships with other players*. () The *identification of several different social identities among the participants* reveals the potential importance of social identities in governing the social relationships

Module 003.1 – Emotional Experiences in Cyberspace		
Id	Pay Off	Explanation
003.1.1	Phantom Emotions are the product of two psychological phenomena. What?	1. The natural tendency, based on personal needs and wishes, to fantasize (i.e., organize the reality) and close gaps in subjectively important information in ambiguous situations; 2. And the common use of a made-up persona to represent one's identity in virtual environments.
003.1.2	What elicits Phantom emotions during an on-line experience?	An individual online genuinely experiences an emotion – be it attraction or repulsion, lust, love, hate, or jealousy, for adaptive reasons – although these emotional sensations are based, in principle, on false objective foundations. Moreover, not only is the external information inaccurate (or entirely false), but the personal emotions are elicited (or triggered) by illusionary objects momentary believed to be authentic and real.
003.1.3	What's the main theorethical assumptions regarding the relation between emotions and cognitive processing?	Theories relating to the generation of emotions underline the fundamental role of numerous cognitive-processing mechanisms and the dynamic interaction among these processes in contributing to the production of emotion (O'Rorke and Ortony 1994; Ortony et al. 1988).
003.1.4	Describe the four components model of emotions by Reeve (2005)	*An Emotion can be describe as a multidimensional concept that is known to have four basic components (Reeve 2005):*

		- subjective, *which refers to a phenomenological experience;* - biological, *which refers to bodily arousal;* - purposive, *which relates to motivational state toward action;* - social, *which refers to the communicative aspect*
003.1.5	Definition of Phantom Sensation	Personal emotions experienced in Internet-based communication – especially text-based as most Internet communications are based, in principle, on what is labelled as phantom sensations. That is, although these emotions are subjectively experienced as authentic, wellfounded and even rational, they frequently rely on erroneous information that the interacting parties – self and partner/s – supply simultaneously and actively, apparently out of a need to satisfy psychological needs, whether the motivation for doing so is malicious or innocent.
003.1.6	What's the principal factor eliciting emotions during virtual experiences?	Internet-based communication channels connect people. When these people then communicate with one another, the personal experience – in addition to the mere exchange of information – involves the eliciting of feelings and emotions (Levine 1998; Mantovani 2001a; McKenna et al. 2002).

Module 003.2 – Internet-based interpersonal communication		
Id	Pay Off	Explanation
003.2.1	Why Virtual Environments can prevent from common stereotypes and what's the effect of this property on the on-line emotional activation?	As a result, common stereotypes and stigmatic attributions relating to ethnicity, age, disability and the like – all commonly influential, visible personal characteristics – can be entirely absent in the complexity of interpersonal interaction online, obviously assuming they are unknown to the communicating parties (Spears et al. 2002). Consequently, emotional effects (i.e., affects, attitudes, behaviours) normally caused and elicited by these attributions and stereotypes (Blair 2002) – including on the Internet when such details are known (Postmes and Spears 2002) – are absent, too.
003.2.2	Describe the "Keyboard Lion Effect"	In a virtual situation in which identifiability is absent, accelerated aggressive behaviours might be expected (Douglas and McGarty 2001), possibly because of the cognitive processes of attribution, unlike a similar interpersonal situation offline.
003.2.3	What's some independent effects of typing communication via internet, described by Pickett, Suler and Pennabacker?	1. Interpersonal verbal messages do not include voice, which is another major vehicle providing meta-communication features of human messages through such factors as loudness, intonation, pitch and breaks (e.g., Pickett 1998), as well as recognition of some personal traits, such as gender and age. 2. Messages can easily be saved, retrieved, copied, forwarded, encrypted and backed-up – features

		that go beyond more conventional 'snail mail', or traditional handwriting communication. This characteristic opens up a wide range of opportunities that might directly affect people's experiences with interpersonal communication in a manner that they would ordinarily not experience in other modes of communication (Suler 2004a). 3. When a person writes, they tend to express things that might not be expressed at all in other modes of communication or that might be expressed differently (Pennebaker et al. 2003; Barak and Miron 2005).
003.2.4	What's the consequence of the experience of aloneness in writing, induced by the Virtual Environments, on the writers feeling?	Apparently, this feature also owes to the experience of aloneness in writing, or a sense of complete privacy (Ben-Ze′ev 2003; Viseu et al. 2004) that produces an as-if feeling of self-talk in stark contrast to actually speaking with a partner.
003.2.5	On what dimensions Esterling and Pennebaker studied the effects of special psychological influence of writing?	Cumulative experimental and clinically oriented research has consistently provided evidence of the special psychological influence of writing in effecting emotions and consequent behaviours (Esterling et al. 1999; Pennebaker et al. 2003).
003.2.6	Cupchik et al. compared the emotional effects of writing and reading, finding that…?	Clinical experience, as well as research, shows that reading, too, exerts a tremendous emotional effect, one that is perhaps stronger than other channels of communication (Cupchik et al. 1998).
003.2.7	In the studies of Suler (2004) what effects in the partners were created by textual relations?	The textual relations created between partners in online communication contribute to augmented interpersonal openness and closeness, despite the physical distance and the mediation of complicated technology (Suler 2004a).
003.2.8	In terms of synchronicity, what levels can be described about Virtual Communication?	Communication might be: • entirely synchronous (e.g., chat room), • entirely asynchronous (e.g., email), or • under the user's control in regard to the degree of synchronicity (as in instant messaging).
003.2.9	What's the benefit of a flexible degree of synchronicity, discovered by Newhagen, Rafaeli e Suler?	The flexible degree of synchronicity – also termed elasticity of synchronicity (Newhagen and Rafaeli 1996) or temporal fluidity (Suler 2004a) – allows better control of immediacy, as well as better reflection, than does a rigid type of interaction, such as in-person, non-mediated, face-to-face communication.
003.2.10	What's the definition of Multi-conversing communication method?	The unique ability of online communication to control the level of synchronicity also enables a special method of human communication – multi-conversing, which allows people to communicate in parallel with different people on different subjects, sometimes on different communication channels and yet to engage in independent, confidential individual conversations.
003.2.11	Describe some effects characterizing the online communication related with the multiconversing experience.	The multiconversing experience itself is usually a source of stimulation and excitement (Ben-Ze′ev 2004). The excitement is an addition to the psychological effects of the very dynamic interactivity that is inherent in online communication, far beyond what people experience in offline contacts (Sundar 2004; Sohn and

		Lee 2005).
003.2.12	What's the Internet Communication Richness?	*Internet Communication Richness* *Internet Communication can employ various add-ons to simple language, such as still pictures, animation and multimedia, as well as supply links to numerous websites (a capability termed hypertextuality). Such features not only contribute to the design and attraction of communication but also make it more efficient in terms of operating a multisensual channel of communication for the more effective delivery of messages and information.*
003.2.13	Why Emoticons are so widely adopted by people for the internet based communication?	The common use of emoticons (i.e., small textual or graphic signs, such as a 'smiley', that users add to their textual messages) compensates, at least to some degree, for the lack of non-verbal cues and can enrich the colourfulness of communication (Walther and D'Addario 2001).
003.2.14	What's the effect of an Avatar for what concern the communication of emotions?	By using more advanced design technology, avatars (i.e., individually selected graphic representations of users) may be used to establish – or influence – perceptions related to mood, gender and credibility (Nowak and Rauh 2005), as well as to enhance the communication of emotions (Kamada et al. 2005).
003.2.15	What's the factors that elicited the Online Disinhibition Effect?	The Online Disinhibition Effect The special communication features cited above – though perhaps mainly the factors of anonymity, lack of eye contact and the mode of writing – create the psychological phenomenon known as the 'online disinhibition effect' (Joinson 1998, 1999, 2001, 2003; Suler 1996–2005, 2004b).
003.2.16	What's the two phenomena revealed by Joinson as consequences of the Online Disinhibition effect?	The Online Disinhibition Effect occurs when individuals tend to behave in ways they would not act in face-to-face interaction. As is clear from the term, 'online disinhibition' occurs because typical personal inhibitions diminish when communicating in cyberspace, thereby creating two phenomena: People reveal personal information about themselves that they would not regularly disclose, in terms of the nature of the content, depth of exposure and time required to disclose it (See Module – Online Self Disclosure). The second phenomenon, which is related to the previous one, is that many people tend to behave in the way of acting out when online
003.2.17	People reveal personal information about themselves that they would not regularly disclose, in terms of the nature of the content, depth of exposure and time required to disclose it. This personal opening-up is characterized by the disclosure of a wide range of intimate contents and feelings as Internet surfers have experienced to a great extent (Joinson	Tidwell and Walther (2002) argued that accelerated intimacy and disclosure in computer mediated communication, in contrast to face-to-face communication, was a direct result of and perhaps compensation for, the lack of non-verbal communication cues that make people feel closer to one another, as suggested by the Uncertainty Reduction Theory (Berger and Calabrese 1975). Tidwell and Walther (2002), too, referred to online disinhibition by stating that 'the absence of nonverbal cues, as well as

	2003). Make some examples.	editing capabilities, identity cues and temporal characteristics may prompt CMC users to engage in selective self-presentation and partner idealization, enacting exchanges more intimate than those of FtF counterparts' (pp. 319–320).
003.2.18	Many people tend to behave in the way of acting out when online. Report the main difference between off-line and on-line perception of the behaviour.	Offline, this behaviour is typically characteristic of problematic children: their reactions are impulsive and they exhibit disruptive, annoying and anti-social behaviours (Suler and Phillips 2000; Joinson 2003; Thompson 2003). On the Internet, because communication is text-based, such actions are considered destructive and harassing, though in different ways from offline communication (Ybarra and Mitchell 2004; Barak 2005).

Module 003.3 – Emotional Effects of Presence and Ambiguity		
Id	Pay Off	Explanation
003.3.1	What's the definition of Immersion regarding the virtual environments?	Immersion That is, this person's senses become quite isolated or disconnected from the offline environment (often called the 'real world') and are completely (or at least predominantly) submerged in the wide-scope of information flowing out from the computer.
003.3.2	How is defined the construct of Presence by Jacobson (2001), within the context of text-based virtual environments?	In the context of text-based virtual environments, presence can be described as a feeling of getting lost or wrapped up in the representations of the text – of being involved, absorbed, engaged, or engrossed in or by them . . . Conceptualized as flow, presence refers to a merging of action and awareness, during which a person loses self-consciousness and a sense of time, focusing on the present and blocking out the past and the future . . . . Presence may also be said to entail an unselfconscious transparency in which a participant enters a virtual world, looking through rather than at the text that represents it. (Jacobson 2001)
003.3.3	What's the relation between presence and empathy?	Not surprisingly, the personal state of 'being there' is clearly associated with the concept of empathy; that is, the ability to experience the 'as if' condition (and emotional state) of another. Indeed, an individual's empathic tendency was found to moderate personal experiences of presence (Nicovich et al. 2005).
003.3.4	What's the psychological effects of presence in virtual environments?	The 'as if' potential, or virtual, experience of presence induces dramatic: 1- cognitive, 2- affective and 3- motivational effects in the participating individual (Gaggioli et al. 2003), 4- and it apparently affects modes of thought, as well (Granic and Lamey 2000).
003.3.5	What processes can affect Guillibility on-line?	Emotional arousal, information processing and cognitive awareness while experiencing presence in an immersive virtual environment have significant effects on gullibility, which subsequently increases one's

		vulnerability to persuasion. Experiences of presence on the one hand and emotions on the other, it is argued, are conceptually orthogonal to each other (Robillard et al. 2003); that is, the two states are considered distinct constructs.
003.3.6	What's the relation between the concept of presence in the cyberspace and the concept of Flow?	As mentioned by Jacobson (2001), the construct of presence is closely related to the concept of 'flow' (Csikszentmihalyi 1975, 1982). In the VR environment, including cyberspace on the Web, people's minds flow, as it were, in the virtual space, a mental condition in which they tend to forget their mind states and problems and, instead, integrate themselves with keyboard and monitor into cyberspace (Chen et al. 2000; Chen 2006). As shown by Chen et al. (2000), Web users experience a fading away of their physical world and live through the present issues they are debating and the words and sentences they are typing and reading.
003.3.7	What's the population for which the Cyber Flow (i.e., Presence) is more impacting?	Personal, powerful experiences of presence and flow are typical of users of computer mediated communication and considerably influence their physiological, affective, cognitive and behavioural reactions (Chen 2006).
003.3.8	What's the cybertime?	Web users who experience flow feel as though there is no separate 'me', but a merging of human and machine occurring. During flow episodes, there is the loss of a sense of time and hours feel like minutes, mostly of enjoyable moments. This view is closely related to Strate's (2003) concept of 'cybertime', in which VR elicits a subjective sense of illusory virtual time.
003.3.9	How people usually react to the effects of presence, flow and cybertime displacements from reality? (Suler, 1996-2005)	In this situation (i.e., presence, flow and cybertime), an individual often attempts to clarify absent or unclear details in their environment by projecting from their own personal repertoire (Fenichel 2004; Suler 1996–2005).
003.3.10	What's Suler referring to with the term 'Black Hole Phenomenon'?	Suler (1996–2005), described a psychological analysis of a user of email communication that dealt with the person's non-replying to email. Calling this a 'black hole phenomenon', he suggested that multiple psychological processes come into play in generating personal dynamics in this ambiguous situation.
003.3.11	What the definition of e-rotic transference in virtual environments?	Gabbard (2001) referred to powerful sexual desires induced by what he termed 'e-rotic transference' in communicating with unknown, ambiguous partners. In this context, transference refers to an unconscious process of projecting onto others in the present environment feelings and attitudes – from hate and hostility to love and affection – that possibly were originally linked with significant figures in one's early life.
003.3.12	What's the PersonTechnology Transference?	Walker et al. (2003) reported on an experiment that exemplified the existence of persontechnology transference. Using participants' attributional ratings, they were able to show evaluative and emotional references that could explain pathological behaviours,

		such as phobia and addiction. Civin (2000) analysed romantic relationships initiated online as a result of individuals' projections onto one another that basically reflected needs for relatedness. Weinberg (2002) analysed transference and countertransference processes in online group (email list) dynamics that exist between group participants and moderator.
003.3.13	What's the psychoanalytic explanation of the concept of Presence as result of a Psychological Projection within a virtual environment?	This relational process, which in some ways is similar, though not necessarily identical, to the psychoanalytic concept of projection is perhaps psychodynamic in nature in that it involves the complicated operation of mental mechanisms and a broad range of origins, such as basic instincts, personality needs and values, memories and associations, wishes and daydreams, habituated responses and the various possible conflicts among them (Turkle 2004).
003.3.14	What's the definition of Projection Process?	The process of projection entails the use of a person's personal dynamics of personality for perceptions, attributions and interpretations of others, on the one hand and the use of 'objects', on the other. Although objects might include anything in one's virtual (or real) environment, a person likely projects her or his own dynamics onto other people.
003.3.15	What's the relation between projection and cyber-attraction?	Civin (2000), applying psychoanalytic views, showed how intergender relationships formed through email were reinforced and accelerated by mutual projections. Mantovani (2001a) and Ben-Ze′ev (2004) emphasized that cyber-attraction involved the idealization of virtual partners. Levine (2000) refers to ambiguous, unclear, incomplete and missing personal information in cyberspace encounters as a possible catalyst of online attraction.
003.3.16	What aspects of virtual environments contribute to the Ambigous Nature of Cyberspace (Mantovani, 2002)?	The Ambigous Nature of Cyberspace Mantovani (2002) referred to three aspects that contributed to the ambiguous nature of cyberspace: • user's self-presentation, involving the fabrication of any appearance at will; • the social context, which refers to the lack of visible social cues and the reliance on an assumptive social environment; estimation of the reality of the situation, which is related to the subjective perception of the virtual reality of what is individually experienced in electronic environments.
003.3.17	What's the Mantovani's definition of The Ubiquity of Mediation?	The ubiquity of mediation The factors of the Mantovani model, assign a major role to an individual's cognitive processes, referred to by Mantovani as 'the ubiquity of mediation' (2002: 319), by which he stresses the overwhelming and critical human experience in cyberspace over mere technology.
003.3.18	Adopting a Psychoanalytic point of view, what's the explanation of the Cyberspace effectiveness in eliciting strong emotions?	Cyberspace elicits strong emotions Cyberspace ambiguity lays the grounds for what psychoanalysis considers optimal for generating highly active psychodynamic processes, such as projection and transference (Bordin 1955), which, in turn, elicit a

		person's strong emotions.
003.3.19	How and why Avatar should be adopted for Psychotherapy purposes (Gaggioli, Ookita, Suler)?	Avatars and Group Therapy to Enhance Emotional Activation Gaggioli et al. (2003b) proposed the use of avatars in group therapy conducted in a virtual environment, as the avatars would reflect patients' perceived selves and interact with other patients' projected, socially meaningful avatars. The specific choice of avatars, according to this conception, might have significant therapeutic meaning. Ookita and Tokuda (2001), who supplied an empirical evaluation of an online counselling group based on the participants' 'projective agents', on which they projected their personality characteristics. Suler (1996–2005) listed and described a number of uses of avatars in an online virtual environment, each characterized by some distinctive 'personality', for possible productive use in social interactions in cyberspace.
003.3.20	Describe the Instinctive Need for Cognition Model	Instinctive Need for Cognition Model This model ascribes a major motivational role to the instinctive need for cognitive orientation, which refers to the generation of meaning; this includes components of beliefs about self, norms, goals and environment, that are manifested in behavioural intent and planned behaviour (Kreitler 1976; Kreitler and Kreitler 1990). This model has much relevance in the context of cyberspace, as it argues that individuals – based on inherent, instinctive needs – strive for explanations to reduce the strain caused by a lack of cognitive orientation.
003.3.21	How the Instinctive Need for Cognition Model has been validated?	Consistent with the Instinctive Need for Cognition Model, some studies have found a significant relationship between, on the one hand, the design and navigation of information websites, as well as Web-based communication platforms and, on the other, user satisfaction and performance (e.g., Galimberti et al. 2001; Gamberini and Valentini 2001). These models can explain, for example, van Oostendorp's and van Nimwegen's (1998) finding that variables related to the design and navigability of online newspapers affect users' performance and satisfaction in reading them.
003.3.22	How the Cognitive Need for Closure Model interprets the effects of ambiguity in Virtual Environments?	Cognitive Need for Closure Model Another relevant model that pertains to Internet users' motivation to reduce vagueness relates to the cognitive need for closure (e.g., Kruglanski and Webster 1996). According to this view, individuals act on a level congruent with their personal need for closure when seeking information consistent with their prior personal knowledge. Amichai-Hamburger et al. (2004) showed how the need for closure, in addition to a website's level of interactivity, influenced participants' Internet-surfing behaviour.

003.3.23	How the Cognitive Dissonance Theory would explain the online ambiguity effects?	Cognitive Dissonance Model of Ambiguity Effects According to this conception, people who communicate in cyberspace or use online tools for browsing the net and obtaining information tend to distort information or change their attitudes and/or behaviours to maintain cognitive consistency
003.3.24	Describe the Uncertainty Reduction Theory	Uncertainty Reduction Theory According to this viewpoint (Berger and Calabrese 1975; Berger and Gudykunst 1991), people actively engaged in seeking information about others – by collecting data, conversing, interrogating and using their own judgements – want to reduce uncertainty about other persons. All these activities take place because, as the theory assumes, uncertainty is an unpleasant state for the individual; hence, they take actions to avoid it.
003.3.25	What's the Brashers explanation of the construct of Uncertainty, and of its consequences?	Uncertainty According to Brashers,'uncertainty exists when details of situations are ambiguous, complex, unpredictable, or probabilistic; when information is unavailable or inconsistent; and when people feel insecure in their own state of knowledge or the state of knowledge in general' (2001: 478). Based on the cognitive appraisal view of emotion and much research in a variety of areas in behaving under uncertain circumstances, positive (e.g., hope), negative (e.g., anxiety), neutral (e.g., indifference) and combined reactions might occur under these circumstances – all based on the different perceptions, attributions and appraisals of the situation that different people might hold. People, then, may manage uncertainty to reduce and avoid negative or enhance and maintain positive experiences.
003.3.26	What are the definitions of Imagination and Imagery, and what about the role of Cyberspace in filling their gap?	Imagination and Imagery Imagination entails the general cognitive capacity of human beings to fantasize about the nature of others, both people and environments or objects, through ideas, narratives, concepts, explanations, assumptions and beliefs (Thomas 2003). Imagery refers to the visual representation of imagined objects – namely, assigning them forms (Thomas 1999). Cyberspace thus presents a classic environment for filling in gaps through and by virtue of one's personal psychological repertoire. This is where imagination and imagery are played out.
003.3.27	Where and why the effects of ambiguity are greater, between real and virtual environments?	Thus, imagination and imagery, as two cognitive capacities, bring into play an individual's psychological drives through inherently automatic, unintentional, unwitting and usually unknowing processes. In the context of online communication, in which ambiguity prevails, the role of imagination in generating emotions in cyberspace is even greater than in actual-space.
003.3.28	How ambiguity can promote the birth of cyber relationships?	In experiencing virtual communication in cyberspace through the dynamic operation of the mechanisms and processes of inherent motivations, imagination and imagery, individuals relatively quickly transform

		communication into relationships. That is, they convert an exchange of messages into interpersonal contact, which is accompanied by a broad range of emotions (Galimberti et al. 2001; Mantovani 2001a; McKenna and Green 2002; Riva 2002; Sassenberg 2002).

Module 003.4 – Cyber Emotions		
Id	Pay Off	Explanation
003.4.1	What's the psychological dynamics and factors that promote Cyber (Phantom) Emotions?	When individuals engage in the common type of virtual relationship, the autonomic operation of the motivational processes on the one hand and imagination and imagery processes on the other cause them to become usually highly immersed in and, therefore, fascinated, preoccupied and captivated by the experience of flow and presence.
003.4.2	What's the Online Self-Reference effect?	Online Self-Reference As a result, especially in online interpersonal interactions (in contrast to Web browsing as such), people tend to develop certain cognitions: they strongly believe in the validity of their observations and deductions, including their attribution of traits to others (Markey and Wells 2002; Rouse and Hass 2003);
003.4.3	How Personal Convictions can affect Cyber Emotions Dynamics?	Personal Conviction and Cyber Emotions Personal conviction, which goes hand in hand with imagined scenarios and imageries, with gullibility, as well as with the disinhibition of personal content and behaviours that are normally inhibited, operates quickly and powerfully to develop authentically experienced emotions (Ben-Ze′ev 2003, 2004; McKenna and Seidman 2005). Such emotions include, for example: • sincere empathy toward others (Preece 1999; Preece and Ghozati 2001), • hate (Lee and Leets 2002; Levin 2002), • love (Cornwell and Lundgren 2001; Whitty 2003a, 2003b; Ben-Ze′ev 2004) and • aggression (Cunneen and Stubbs 2000).
003.4.4	What are the major biases affecting the Cyber Emotions Dynamics?	It should be kept in mind, however, that the emotional experiences are generated, or inflamed, by – in many cases – false, arbitrary, biased, exaggerated, manipulated, misleading, or invalid information that is created by online partners or by self-imagination. Evidently, such experiences are also influenced by: 1. stigmatic impressions (Wildermuth 2004), 2. being helped or being offered help (Blair et al. 2005), 3. response time (Tyler and Tang 2003), 4. the revelation of deception (Birchmeier et al. 2005), 5. judgements of content and style (Savicki et al. 2003), 6. perception of gender-role (Dorer 2002), 7. being ignored (Williams et al. 2000), 8. the purposive nature of the interactive messages (Lee 2005a) and

		9. stereotypes and expectations (Epley and Kruger 2005).
003.4.5	Why the Cyber Emotions are always experienced as completely well founded?	The Ghost Nature of Cyber Emotions Because of the psychological processes responsible for their generation, emotions based on wishful thinking and deprived needs and expectations, influenced by misinformation or disinformation, together with the massive catalyzing effect of online disinhibition, are personally experienced as though completely well-founded. And, indeed, on the individual's subjective level of experience, these emotions are in no way different from emotions based on actual, genuine relationships (Döring 2002a; Sassenberg 2002).
003.4.6	What's the definition of Phantom Emotions?	Phantom Emotions The result of the psychological phenomena under the natural tendency, based on personal needs and wishes, to fantasize and so close gaps in subjectively important information in ambiguous situations on the one hand and the common use of a made-up persona to represent one's identity in virtual environments, on the other – unavoidably creates 'phantom emotions'.
003.4.7	What's the definition of Phantom Recall?	Phantom Recall The term 'phantom recall' was adopted (Brainerd et al. 2003) to designate metaphorically a certain type of vividly experienced, illusory memory; with similar logic to the concept of 'phantom emotion'

Module 004.1 – Social Relations in the age of Web		
Id	Pay Off	Explanation
004.1.1	What's the definition of Cyberspace?	Cyberspace It is generally understood that cyberspace is the (social) space generated by software within a computer that produces a virtual reality
004.1.2	What's the definition and consequences of Digital Divide?	The 'digital divide' is a critical social issue because it tends to represent and reinforce socioeconomic divides, including social interaction.

004.1.3	What are the possible origins of Digital Divide dynamics?	Individuals can participate in, or be excluded from, networks of information and communication by virtue of which side of the digital divide they are on (Katz and Aspden 1997a, b, 1998; Rice et al. 2001).
		• In the US differences can be explained by basic demographic/socio-economic factors such as:
		  • income, age, education and, in the case of race, awareness of the Internet (Hoffman 1998; Katz and Aspden 1997b, 1998; Katz and Rice 2002; Net users 2001; NTIA 2002; Walsh et al. 2001).
		• More complex forms of divide exist, such as those based on:
		  • conceptualizations of access (Liff and Shepherd 2004),
		  • kinds of usage (Net users 2001),

		• differences in use by sex within ethnic groups (Shade 2004) or by race within low-income groups (Mossberger et al. 2003), • by those with sight, hearing or mobility disabilities (NTIA 2002) • and across national boundaries (Anderson and Tracey 2002: 144–146; Chen et al. 2002: 84; Rose 2004).
004.1.4	What's a possible classification of Social Interaction in the Web age?	Social interaction is a broad concept, with many different components. The dedicated surveys usually incorporated a small set of variables that represent three main dimensions of social interaction: - Offline interpersonal; - Offline mediated; - Online interaction.
004.1.5	Why is important to study the impact of ICT (information and communication technologies) on Social Interaction Dynamics between humans?	Social interaction issues are particularly significant because they are central to notions of how the Internet might reconfigure access to information, people, services and technologies, such as in changing personal relationships with family, pairs, colleagues and friends (Dutton 1999, 2004). This may affect social capital through decreased or increased social interaction with others. Thus there is a need to understand in what ways, within different contexts, the Internet might reduce, maintain or increase current forms of social interaction and expression, or foster new forms. (Hiltz and Turoff 1995; Parks and Floyd 1996; Turkle 1996).
004.1.6	What are possible negative effects of Internet on the quality and quantity of social interaction?	1. Some researchers have argued that information and communication technologies (ICTs) are inherently impersonal and mediating and enable deception and misinformation, which could undermine their role in enabling the formation of meaningful interpersonal relationships (Stoll 1995; Turkle 1996). 2. Internet detracts from meaningful real-world communities and reduces social capital (Beniger 1987; Gergen 1991; Kiesler et al. 1984; Nie 2001), for example because spending more time on the Internet 'crowds out' more meaningful relationships and higher quality communications and decreases meaningful social interaction and social integration (Kraut et al. 1998; Selnow 1994; Putnam 2000). 3. There is some evidence that Internet use is associated with social withdrawal, such as the way it can provide some protection from anxiety by those who are shy (Birnie and Horvath 2002). Riphagen and Kanfer's (1997) survey showed that email users and non-users had similar numbers of relationships, but users had more distant relationships, suggesting those came at the cost of local interactions.
004.1.7	What was the first results of the HomeNet study by Kraut et al.	Provided one of the earliest quantitative field surveys of Internet use which found negative effects of Internet use

	(1998)?	on social interaction. They recruited 96 volunteer families and provided them with computers and dial-up Internet access and then surveyed these novice users for three years. • At the midpoint, those who used the Internet most reported lower levels of family face-to-face communication and interaction in social circles, as well as greater loneliness, depression and stress. The authors concluded that Internet use displaces interactions with close social ties. Nie and Hillygus (2002) also found, through a cross-sectional time diary study, that interactions with family members decrease with more Internet use.
004.1.8	How social interaction, creativity, and emotional and informational support can be provided by Internet?	A context for social interaction, creativity and emotional and informational support, is provided by the Internet, including through the use of. • discussion lists and newsgroups; • health and psychological support groups; • Internet Relay Chats; • Multi-User Dungeons (MUDs) and online dating services (Baym 1995; Katz and Rice 2002; Matei and Ball-Rokeach 2001; Rice 1987a, b; Rice 2001).
004.1.9	What was the latter evidencies from the HomeNet study, and how they changes the main results of the study?	• The heaviest Internet users were happier and had more social contacts, including increased social interaction with family members increased (Gershuny, 2002), • Internet users were involved in as much social activity as non-users and that new users actually increased the time they devoted to social and leisure activities. • People who had more experience using the Internet were more likely to have called a friend or relative 'yesterday' just to talk and also turn to more people for help. • In addition, controlling for demographic variables, Internet experience was significantly associated with perceived increases in those users' connection with friends and family and their ability to meet new people (Howard 2004: 15–16).
004.1.10	What was the conclusion of the Carnegie-Mellon HomeNet study replication?	The Carnegie-Mellon HomeNet study replication • LaRose et al. (2001) analysed a survey replication of the HomeNet data with different causal assumptions, they found no direct influence of Internet use on depression. • Rather, that relationship was mediated by self-efficacy and expectations of experiencing stressful situations on the Internet and email was used to communicate with close associates to obtain social support which helped to reduce depression. Thus, they argue, increased depression among the novice users in the HomeNet study arose because they did not have enough self-efficacy to handle sufficiently

		the stresses of using the new technology in their home.
004.1.11	What's the state of the art about the relation between Internet Usage and Social Deficits?	Katz and Aspden (1997a), in apparently the first national random study of users and non-users, found that there was no social deficit for users compared to nonusers.
004.1.12	What's the state of the art about the quantity of contacts with Family and Internet Usage?	Looking at this subject but with different data several years later: Robinson et al. (2000) concluded that Internet users engage in more telephone and face-to-face communication with friends and family than non-users.
004.1.13	What's the expected role of Internet communication on Online friendships?	The degree that email and Internet communication masks some interpersonal behaviours and cues, it may well foster more honest and insightful online friendships (McKenna and Bargh 2002).
004.1.14	What's the classification of social ties proposed by Boase et al. (2006)?	Core Vs Significant Ties This study distinguished two types of relations: 1. 'core ties' (very close relationships involving frequent contact, important matters, or help) and 2. 'significant ties' (lower levels of these relationships).
004.1.15	What's the effect of Internet Dynamics on Core and Significant ties?	People who keep in contact with most of their core ties via email also keep in touch with 25 per cent more of their core ties by telephone than non-emailers and people who keep in contact with most of their significant ties via email also keep in touch with 50 per cent more by in-person contact. Controlling for other factors, such as income, education, network size, or more diverse occupational networks, Internet users were also more likely to get help on up to eight issues from their core as well as significant ties (such as in caring for someone with a major illness, finding a new place to live, changing jobs, deciding for whom to vote, etc.) compared to non-users and for more issues. Further, Internet users have more significant ties (though not more core ties) and 31 per cent report that using the Internet increased the number of their significant ties and 28 per cent said core ties increased.
004.1.16	Why Women tend to use email to support family relationships more tha men do?	Women tend to use email to support family relationships (elderly parents, siblings, extended family), keep in touch with distant people and enjoy email more than do men for such purposes. The authors conclude that email better fits women's 'expressive style,' involving 'emotional intimacy and sharing of personal information Boneva et al. (2001).
004.1.17	What's the potential, grounding the Camfield Estates-MIT Community Connections Project, in terms of benefit of Web-base social interactions on social ties?	• Strengthened and expanded local ties (visiting others' homes, talking to others, recognition of others, emailing other residents, phoning other residents, greater connection to friends and family in the area); • Being better informed about local activities, including increased communication flow in the development (such as calendars of events and discussion forums); • Increased motivation to be informed locally, nationally and internationally and increased

		confidence in themselves and their ability to learn (transition to a sense of competency and activeness and awareness of skills and abilities of the community). • Over time, more neighbours were known and chatted with (although they were more geographically dispersed around the suburb) and an increase in neighbourhood interaction, discussion and mobilization around local issues increased (Hampton and Wellman 2003).
004.1.18	What the explanation of Turklòe (1995) about the potential of CybrDating, and its attractiveness?	While early theories on computer-mediated relating (CMR) presented a rather negative view of online relationships, later theorists argued that the Internet provides a unique way to get to know others as well as to self-disclose to others. The ways individuals go about developing these relationships varies according to which space the relationship is initiated in cyber space. Sherry Turkle (1995) have argued that cyberspace provides an opportunity for individuals to experiment with identity and transcend their traditional roles.

Module 004.2 – Online trust		
Id	Pay Off	Explanation
004.2.1	What's the psychological definition of trust?	Though there is continuing discussion about the definition of trust, from a psychological perspective it can be broadly defined as 'confident expectations of positive outcomes from an intimate partner' (Holmes and Rempel 1989: 188). More specifically, trust can be conceptualized as a three-part relation, involving two individuals and an action: a person trusts another person to do (or not do) a specific action (Hardin 2001). On the Internet, a primary form of trust may involve sharing information. Individuals may trust others to provide honest and accurate information, or to keep private information confidential. This trust may expand to include in-person meetings or other responsibilities.
004.2.2	What are the principal critical factors for Online Trust?	Online Trust Critical Factors • False identities are easy to create and difficult to verify (see, for example, Van Gelder 1985; Turkle 1995). • Visual and non-verbal cues are typically absent, despite the technical possibilities for video and audio transmissions. • Because individuals communicating online are likely to be geographically distant from one another, it is often impossible to rely on mutual acquaintances to vouch for the trustworthiness of a person

004.2.3	What's the difference between Real and Computer Mediated friendship and trust development?	It is complex. Revealing personal appearance and other identity details typically takes place later in an Internet relationship (e.g., McKenna et al. 2002). There is some evidence that in-person friendships are higher in quality than online friendships in the early stages, but that these differences are diminished in relationships lasting a year or more (Chan and Cheng 2004). However, other research suggests that Internet relationships can progress to intimate levels more quickly than in-person relationships (Walther 1996; McKenna et al. 2002). Individuals may be willing to share more intimate information with online partners, because those partners are not connected with the person's existing social circle and thus cannot pass sensitive information along to those individuals (cf. Derlega and Chaikin 1977).
004.2.4	Online deception itself may sometimes be a product of a lack of trust.	• Individuals (particularly women) concerned about their safety may be reluctant to reveal their real names, ages, or other personal details that may make them vulnerable (e.g., Whitty and Gavin 2001). • Individuals low in generalized trust are more likely to use false identities online (Uslaner 2004). • Of course, online deception may have other roots as well, including psychiatric illness, identity play, or the desire to reveal a true or ideal self (see Joinson and Dietz-Uhler 2002). • People who lied to their Internet partner trusted that partner less (Joinson, 2007) Online deception may be even more difficult to detect because non-verbal and paralinguistic cues to deception are eliminated. ● Individuals are not particularly good at detecting deception even in face-to-face contexts, however; studies have shown accuracy only slightly greater than chance (e.g., DePaulo 1994).
004.2.5	How experience with computers (i.e. time spent) can effect the trust development?	• More time spent online (both in number of years using the Internet and number of hours used per day or week) may make people less wary of the technology itself, as people gain a greater understanding of how various aspects of the Internet work and this comfort may extend to the interactions that take place on the Internet. Of course, a longer amount of time spent online also provides more time for relationships to develop. • A study of chat room users suggested that the more time individuals spent in chat rooms, the more likely they were to have received emotional support from them. Conversely, people who spent few hours per week on chat rooms were more likely to have lied in chats (Whitty 2002).

		• Obviously, with increasing experience in the relatively low-information environment of the Internet, individuals may learn to identify or seek out more accurate cues to trustworthiness.
004.2.6	Make some example of how Personal Factors can influence Online Trust.	• Perceptions of an Internet partner's personality – particularly their degree of friendliness and secondarily their intelligence – are positively related to trust (Green 2005). • People who are bright and kind inspire trust even on the web. • Similarity also matters, though similarity in values and personality is more important than similarity in background • Although people in longer relationships are generally aware of their partner's race, trust does not seem to be significantly affected by being a member of the same or a different ethnic group (Green 2005). This may be a key difference between relationships formed online rather than in person: similarity may be based on internal, psychological similarities rather than more categorical or superficial ones (see also Bargh et al. 2002).

Module 005.1 – Social Influence: an essential definition		
Id	Pay Off	Explanation
005.1.1	What are the features provided by the brain evolution to facilitate the creation of social bonds?	Brain evolution provided some interesting features to facilitate the creation of Social Bonds • To distinguish more easily in-group members from out-group members (Ackerman et al., 2006) • Social exclusion involves the same physiological mechanisms of physical pain (Eisenberg & Lieberman, 2004) • Similarity heuristic and empathy (Park, Schaller & Van Vugt, 2008)
005.1.2	What's the evolutionary basys of conformity?	Conformist behavior like mimicry or imitation help human beings perceive similarity and recognize other people as members of their in-group.
005.1.3	What are two essential benefits provided by conformism in humans?	- Reproduction → group acceptance and membership - Protection → inhabitants of areas with higher prevalence of disease are more conformist (Neuberg et al, 2010; Murray & Schaller, 2012)
005.1.4	Social Influence can be considered as the complex result of Intrapersonal and interpersonal social phenomena, what?	- Social identity - Self-categorization - Social biases and heuristics - In-group favoritism - Social norms
005.1.5	Through which mechanism the Slef Percetion brings to a weaker sense of differentiation?	Comparison with other in-group members and assimilation of features that characterize the reference group
005.1.6	Describe the loop by which the Social	A Weaker sense of differentiation from onse side

	biases and the Social Heuristics reinforce the self categorization within a group dynamics.	activates directly the self categorization process, from the other amplify the in-group perception. In-group dynamics produces: out-group bias, In-group favoritism and Social inference bias. Such three processes all affect the Self-Categorization processing.
005.1.7	How can be defined the Informational Influence?	When a task is difficult or ambiguous, conformity occurs as an attempt to provide a correct answer. The Informational influence can be defined as: “an influence to accept information obtained from another as evidence about reality” (Deutsch & Gerard, 1955)
005.1.8	How can be defined the Normative Social Influence?	Even if the subject were aware of the incorrect nature of the answer provided by the majority, they did not want to be pointed at as outsiders and break the group’s norms. The Normative influence can be defined as: “an influence to conform to the positive expectation of another member of the group” (Deutsch & Gerard, 1955)
005.1.9	What factors can affect conformity (at least)?	Factors that influence conformity • Group size (3+) (Asch, 1956) • Unanimous majority (Asch, 1951) • Type of task - informational influence (difficulty/ambiguity) (Cialdini & Trost, 1998) • Personality traits - Agreeableness, Conscientiousness, Closeness and Emotional Stability (Jensen-Campbell et al., 2002; DeYoung, Peterson & Higgins, 2002) • Age - older people conform less (Pasupathi, 1999) • Gender - when sticking to the gender role, women tend to conform slightly more (Eagly & Wood, 1991) • Culture - collectivists conform more (Bond & Smith, 1996)
005.1.10	How can be defined in general the psychological dynamics of Social Influence?	Any social interaction involves a substantial amount of social influence, as the person initiating communication aims to influence the counterparts the other communication partners to show a certain behaviour (e.g., to answer a question), to influence their attitude (e.g., that online interaction is useful), or simply to inform them (e.g., about a talk by an invited speaker). Social influence can be defined as the influence of a person or a group on an individual’s thoughts, actions and physical states. Within this, attitude change is a particular type of social influence.
005.1.11	In the studies of Deutsch and Gerard, Social influnece can be distinguished in wo subtypes, what?	Deutsch and Gerard (1955) suggested distinguishing social influence resulting from ‘normative’ needs from social influence resulting from ‘informational’ needs. • When the influence is based on normative needs, individuals comply with the influence to conform with other people’s expectations. • People who are influenced for informational reasons are motivated by validity concerns.
005.1.12	Why the dual distinction of Social Influence proposed by Deutsch and Gerard has been questioned?	Many authors have pointed out, Deutsch and Gerard’s (1955) concept of normative influence actually refers to compliance (e.g., Allen 1965). Deutsch and Gerard’s (1955) definition of informational influence has also been questioned. Importantly, some informational influence is based on group-normative

		processes, and some have argued this needs to be considered as a separate form of influence. This perspective has been advanced in social identity theory (Tajfel and Turner 1979) and self-categorization theory (Turner et al. 1987).
005.1.13	What are the definition of Personal and Social identities within the domain of Social Identity Theory?	The Social Identity Theory suggests that the self-concept consists of a personal identity and (many different) social identities. • Personal identity refers to those aspects of individuals' self-concepts which define them as idiosyncratic individuals. • Social identities are those elements of individuals' self-concepts which they derive from membership in social groups. By means of their social identities individuals internalize characteristics of the groups to which they belong (i.e., their norms), and are in turn influenced by those groups and their norms in their behaviour and thinking.
005.1.14	How, According to the social identity approach, the normative processes related to social identity can affect our interactions with in- and out-group members?	Opinions and arguments in line with in-group norms are seen as more valid than those differing from them (Turner 1991). In other words: other in-group members' attitudes serve as standards for validity judgments (i.e., they are considered more seriously) and can therefore elicit informational influence. Sassenberg et al. (2005) labelled this type of social influence norm-based influence.
005.1.15	How the saliency of Personal Identity affects the Social influence dynamics?	However, social influence also takes place for purely informational reasons. This is likely to occur when personal identity is salient (i.e., people perceive themselves as distinct individuals and not as members of a group). It has been argued that individuals influence each other more strongly the closer their interpersonal bonds are (Postmes and Spears 2000; Sassenberg and Boos 2003), and that social influence is also driven by individuals' striving for distinctiveness from the communication partners and by their attempt to fulfil other personal needs when personal identity is salient (Spears et al. 1990).
005.1.16	What's the definition of Interpersonal Influence?	When personal identity is salient, personal needs channel how relevant others are used as sources of social validation of information. This kind of (informational) social influence under a salient personal identity can be labelled interpersonal influence.
005.1.17	How many forms of Social Influence can be distinguished in the modern approach?	In sum, three forms of social influence can be distinguished: 1. compliance, 2. norm-based influence, 3. interpersonal influence.

Module 005.2 – Social Influence within virtual environments		
Id	Pay Off	Explanation

005.2.1	What are the (main) features of CMC that must be take into consideration in order to understand the Online Social Influence?	There are three contextual features that differ between CMC and face-to-face (ftf) communication and that are especially relevant concerning social influence (Spears and Lea 1994): 1. Anonymity 2. Identifiability 3. Physical isolation
005.2.2	What's the preliminary effects of online anonimity?	Anonymity The hyperpersonal communication model (Walther 1996) as well as the social identity model of deindividuation effects (SIDE) (Spears and Lea 1992, 1994; Reicher et al. 1995; Postmes et al. 1998) suggest that, due to anonymity, users of CMC typically have less access to information about their communication partners. In turn, each of the remaining social cues has a stronger impact.
005.2.3	What's the preliminary effects of online identifiability?	The reduced transfer of information is not restricted to messages that are received, but it also applies (in a potentially different way) to sent messages. In other words, in CMC people are less identifiable than in ftf communication. If they become aware of this fact, they will also feel less identifiable and as a result fear the consequences of their actions less (Reicher and Levine 1994). This in turn cannot only lead to uninhibited presentations of the actual self, but also to strategic and unrealistic presentations of the self (Walther 1996).
005.2.4	What's the preliminary effects of online Physical Isolation?	A feature that CMC shares with all other media is that it allows communicators to be physically isolated – from each other, but also from other people. Above and beyond anonymity and low identifiability, which are outcomes of the physical isolation, physical isolation can also have direct and independent effects on the psychological state. In physical isolation, for example, attention can be directed freely towards the self or any object of interest, relatively independently of others' efforts to attract or retain that attention. As a result, in CMC attention is more likely to be directed to the self. Research has indeed shown that private self-awareness – i.e., a focus on thoughts, feelings, and perceptions (Prentice-Dunn and Rogers 1982) increases in CMC compared to ftf communication (Franke 1997; Matheson and Zanna 1998, 1999; Joinson 2001; Sassenberg et al. 2005).
005.2.5	What can be predicted about the impact of anonymity and low identifiability by the SIDE model, on the three forms of social influence?	As mentioned above, models such as SIDE and the hyperpersonal perspective propose that the relative anonymity (or lack of cues) in CMC increases the value attached to the remaining information (i.e., each bit of information receives more attention). SIDE has become a dominant framework for the study of social influence in CMC.
005.2.6	What's the relation between the Social Categorization of the Self and the Social Influneces Processes?	It suggests that the social categorization of the self and other group members as different individuals (i.e., when personal identities are salient) or as members of social groups (i.e., when social identities are salient) is a key factor guiding social influence processes.
005.2.7	What's the SIDE predictions	In communications in which personal identity is initially

	concerning the interplay between Saliency of Social/Personal Identities and Social Influence?	salient, individual needs and attitudes related to them are more important and will be accentuated in CMC compared with ftf communication. Conversely, when social identity is initially salient, the impact of social factors is amplified in CMC and thus attitudes will be oriented to a larger degree towards group norms. SIDE predicts that when personal identity is salient, CMC (compared with ftf interaction) will lead to less social influence, and that when social identity is salient, CMC will lead to an increase in normative social influence, understood as a form of autonomous self-expression. Hence, anonymity impacts on norm-based and interpersonal influence.
005.2.8	How and why Personal Identity mitigates the effects of Anonimity on Online Social Influence dynamics?	Anonymous interaction in CMC will lead to less adherence to group norms when personal identity (compared to social identity) of the interaction partners is salient, because under this condition group members will seek to differentiate themselves as individuals from the collective (cf. Spears et al. 1990). In anonymous CMC interaction partners with a salient personal identity tend to show less interpersonal influence then when personal identity is salient and the others are not anonymous. This is due to the fact that anonymity increases the salience of personal identity (just as it increases the salience of social identity) and in turn leads the interacting individuals to stick to their personal thoughts and individual needs (Spears and Lea 1992). Anonymous CMC also reduces interpersonal influence when personal identity is salient, because it is harder to establish and maintain interpersonal bonds in anonymous communication. Thus, the better the interpersonal relation is, the more interpersonal influence can be exerted. Compared to non-anonymous groups participants in anonymous CMC insisted more on their personal views, which is indicated by a higher number of remarks, longer remarks and more equal participation within the group (Lea and Spears 1991). Spears et al. (1990) found support for these predictions concerning social influence: less attitude change towards the group norm was found in anonymous CMC when personal identity was salient both compared to when social identity was salient and also when personal identity was salient in non-anonymous communication (for similar findings see Sassenberg and Boos [2003]).
005.2.9	What's the core effect that explain the reduction of interpersonal influence under conditions of anonimity?	Overall these results confirm that interpersonal influence under conditions of anonymity is reduced, because individuals are more aware of their personal needs, and this appears to obstruct the ability to exert effective interpersonal influence.
005.2.10	Is the Conformity, in term of Social Influence, affected by Anonimity or	In SIDE's analysis, conformity to another's expectations is not affected by anonymity (the ability of

	Identifiability?	me to see them) but by identifiability (the ability of them to see me). The low identifiability in CMC will most likely lead to a decrease in conformity – offering the subject greater strategic freedoms for resistance of social pressure. Thus, identifiability is relevant for conformity but not for interpersonal or norm-based influence.
005.2.11	What's the predictions of SIDE model about effects of Physical Isolation on the different types of Social Influence?	Spears and Lea (1994) suggested that isolation leads to heightened private self-awareness. Therefore, it might be relevant for those types of influence that are based on the self: interpersonal influence (because the personal self is especially relevant for this type of influence) and norm-based influence (because the social self is especially relevant for this type of influence). On the one hand, research has shown that CMC heightens private self-awareness compared to ftf communication (Matheson and Zanna 1988, 1989; Joinson 2001; Sassenberg et al. 2005). On the other hand, anonymity and identifiability do not impact on private self-awareness (Postmes and Spears 1998; Postmes et al. 2001).
005.2.12	What's the role of Private Selw Awareness in Social Influence Dynamics?	Private self-awareness is known to hinder social influence (Scheier 1980; Froming and Carver 1981). Studies of interpersonal interaction in CMC (compared with ftf interaction) confirm that private self-awareness plays a role, too. Studies of interpersonal interaction in CMC (compared with ftf interaction) confirm that private self-awareness plays a role, too. Sassenberg et al. (2005) found a mediation by situational variations of private self-awareness and a moderating impact of trait private self-awareness
005.2.13	What are the findings by Sassenberg et al. (2005), regarding the effects of Physical Isolation on Interpersonal Influence?	Sassenberg et al. (2005) found a mediation by situational variations of private self-awareness and a moderating impact of trait private self-awareness: - First, the impact of the communication medium on interpersonal influence (less attitude change in CMC than in ftf communication) was mediated by situational variations of private self-awareness. - Secondly, interpersonal differences in private self-awareness moderated the impact of the communication medium on interpersonal influence: Interpersonal influence is only stronger in ftf compared to CMC for individuals high in trait private self-awareness. Taken together, physical isolation in CMC reduces interpersonal influence by increasing levels of private self-awareness that is situationally induced. Chronic differences in private self-awareness moderate the impact of the communication media on interpersonal influence.
005.2.14	What are the Gender effects on the Social Influence Dynamics in Virtual Environments?	In a study on the moderating impact of gender on the influence of single persuasive messages on attitudes Guadagno and Cialdini (2002, Study 1) found that

		females show less attitude change from emails than from ftf communication, whereas males changed their attitudes to the same extent in both media. Similar gender differences also occurred for social influence on behaviour. Male subjects agreed more readily to a request asking them to participate in an online survey when the solicitor (i.e., an individual with a persuasive motive) was female and non-anonymous, whereas females did not show this heightened readiness to non-anonymous mail, regardless of the solicitors' gender (Guéguen and Jacob 2002). Males have been found to be influenced more in CMC than in ftf communication, because communication via CMC generally has an independent style (Guadagno and Cialdini 2002, Study 2).
005.2.15	What's the relation between Style of the message and social influnece in CMC?	More recent research suggests that not the interindividual differences per se but the match between an individual's attributes and the communication medium and style fosters attitude change. Messages in a communication style matching the target's gender (i.e., 'cooperative' for females and 'independent' for males) do not lead to media differences in attitude change. Luna et al. (2003) found that websites in a second language with simple messages exert more social influence than those with complex messages. In contrast, websites in a first language with complex messages elicit more influence than if they have simple messages. In other words: the match between the communication style on the one hand and the target of communication on the other hand is an important precondition for interpersonal influence. Higher levels of interpersonal influence will occur, the more there is a match between the communication style and the target of a message (e.g., high complexity fits high competence).

Module 005.3 – Digital Conformism		
Id	Pay Off	Explanation
005.3.1	What's the relation between Norm Based Influence and Anonimity?	The results supported the predictions derived from SIDE: participants showed more attitude change towards the group norm in anonymous compared to non-anonymous CMC. This basic finding (i.e., higher levels of anonymity lead to more norm-based influence when social identity is salient) has been replicated several times using different manipulations of anonymity, various forms of CMC, and different measures of social influence (for overviews see Postmes et al. 1998; Spears et al. 2001, 2002). Postmes et al. (2001), for example, used the same paradigm as Spears et al. (1990) in a social welfare context. In line with their predictions, participants in anonymous CMC more often came to a decision in line with the activated norm and used more words that were

		related to this norm (compared to participants in non-anonymous CMC). In a second study, the norm was only activated in half of the group members. Again more attitude change towards the group norm and more communication content consistent with this norm was found in the anonymous condition for both participants who had received a norm-activating treatment and also for those who did not receive this treatment. These findings demonstrate that group members in anonymous CMC adhere more strongly to the norm of an interacting group by means of their communication content and their attitudes, independent of whether they personally know about the norm before the discussion or not.
005.3.2	Describe how Social Identification and Categorization processes mediate the effects of anonimity on Norm Based Influence	In their studies, Postmes et al (2001), describe the impact of anonymity on norm adherence was indeed mediated by social identification with the ad hoc group (i.e., an indicator of social identity salience). Postmes et al. (2001) found evidence for the processes that SIDE proposes underlie the impact of anonymity on norm-based influence (see also Lea et al. 2001): anonymity increased the salience of the social categorization and that in turn lead to more norm-based influence.
005.3.3	How can be constrasted the on-line Norm Based Influence under anonimity conditions?	This can be contrasted with private self-awareness, which does not appear to impact on norm-based influence. For example, private self-awareness could not be shown to explain influence effects in either comparisons of anonymous vs. identified CMC (Postmes et al. 2001) or in comparisons of ftf versus CMC discussions (Matheson and Zanna 1989).
005.3.4	What CMC related factor (i.e., anonimity, social identity, and physical isolation) does not affect the On-line Norm Based Influence?	Anonymity and the Salience of social identity seem to be the most important factors for norm-based influence in CMC, consistent with predictions of the SIDE model. Physical isolation leading to heightened private self-awareness does not seem to be an important factor for norm-based influence in CMC.
005.3.5	What are the fundamental prerequisites for on-line norm-based influence?	The importance of the a-priori existence of an unambiguous group norm has been demonstrated by Sassenberg and Boos (2003; see also Waldzus and Schubert 2000). In their studies, which also used an attitude change paradigm, more social influence was only found in anonymous CMC (compared to non-anonymous CMC and ftf communication) when social identity was salient and participants were informed about the norm attached to the social category providing the basis for this social identity. When no norm was provided, anonymity did not impact on social influence (compared to non-anonymous CMC) or even lead to less social influence (compared to ftf communication), despite social identity being salient. In sum, anonymity only increases social influence in CMC when the group norm is known (at least to a substantial part of the group) and the respective social

		identity is salient. Both are prerequisites for norm-based influence.
005.3.6	What's the difference Between Common Identity and Common Bond Groups, and why they differ in terms of norm-based influence potential?	The extent of norm-based influence in CMC and the impact of anonymity on this type of influence not only depends on the existence of a group norm, but also on the type of group. Social identity theory and SIDE focus (as indicated by their names) on groups that are contributing to their members' social identity. Prentice et al. (1994) distinguished these so-called common identity groups from common bond groups. • Common identity groups stick together because group members feel strong ties to the group as a whole, and for their members norms are very important because they are part of the self-image and therefore norm-based influence is very likely to occur. • Common bond groups are held together because their members have strong interpersonal ties (e.g., as in peer groups). In contrast, for members of Common bond groups the group and its norms are not a part of their identity. Hence, norm-based influence is not very likely to occur in these groups.
005.3.7	Make an example of Common Identity Groups and Common Bond Groups considering a possible chat/forum web based interaction.	Sassenberg (2002) has shown that both types of groups (i.e., Common identity and common bounds groups) exist on the Internet. 1. Chats set up to discuss a certain topic (e.g., a specific software) fit the criteria for common identity groups (so-called on-topic chats) 2. Chats serving as a forum to get to know other people fit the criteria for common bond groups (so-called off-topic chats).
005.3.8	What's the interplay between anonimity and type of group (i.e., common identity vs common bond) in terms of Norm Based Influence On-line?	In on-topic chats the adherence to group norms (i.e., the use of similar smileys and acronyms by members of one group) is, as expected, higher than in off-topic chats. This difference is due to the higher social identification with on-topic compared to off-topic chats. In line with the idea that norm-based influence is fostered by anonymity in CMC, Postmes and Spears (2000) found that social influence in anonymous CMC (compared to non-anonymous CMC) was higher in common identity groups. However, in common bond groups anonymity led to a decrease in social influence. In sum, norm-based influence and its increase due to conditions of anonymity is restricted to common identity groups and does not occur in common bond groups.
005.3.9	How it is possible to drive the On-Line Norm Based Influence within a group dynamics?	Some studies suggest that statements indicating agreement by not expressing a deviant opinion and sticking to the topic are driving the norm-based influence in the group process (e.g., Sassenberg and Postmes 2002).
005.3.10	Describe how anonymity can also increase the risk of intergroup conflict (as Postmes et al. (2002) have shown).	They found more norm-based influence within each of the groups in anonymous discussions, but differences in attitudes between the two groups increased more due to anonymous than due to non-anonymous discussion

		settings. This effect results from the tendency of groups and their members to differentiate themselves from other groups (Haslam et al. 1998). Hence, anonymity increases the likelihood that members of a group stick to their norm and therefore show stronger agreement within the group during CMC discussions. Disagreement between groups, however, becomes more pronounced in anonymous than in non-anonymous discussions. Additional evidence for norm-based influence on a behavioural levels stems from Lea and Spears (1991), who found stronger norm-based influence in anonymous CMC co-occurred with fewer messages and greater equality in participation, indicating that less disagreement occurred in these groups.
005.3.11	How anonimity in CMC can impact on the social influence of a subject?	Postmes and Spears (2002) showed at the intergroup level that anonymity in CMC can also impact on the social influence target person's attempt to exert influence: when gender stereotypes (i.e., gender norms) are activated males tend to dominate in anonymous communication, but only if the communication is about stereotypic male topics. • Here the males follow the group norms when the gender categorization is especially salient. • Hence, they exert social influence by being dominant as a result of norm-based influence (i.e., in line with stereotypically male norms).
005.3.12	What's the relation between Norm Based Influence and Assimilation and Differentitation processes?	Overall, these studies show that norm-based influence resulting from anonymity increases the display to attitudes and behaviour that are in line with group norms. Thus, within-groups assimilation and between-groups differentiation takes place.
005.3.13	What arew the effects of Visual Cues during on-line interactions and the conformism?	→ Higher levels of conformity were found in the live-video condition than in the photo-only condition → In situations where people have to take a decision about a fact, they have themselves influenced by a deviant majority opinion, even when they claim to be sure of their decision. The more social cues of the group are present, the stronger this effect is. (Laporte, 2010) → Both those in CMC and FTF groups were attentive to the social situation and managed their impressions to conform to majority. → When visual information was absent, participants did not conform, even when the group was unanimous. Adding visual information to CM communication affected feelings of social distance and thus conformity (Schlosser, 2009).
005.3.14	What were the results from the experiment of Sacconi and Faillo (2010) adopting the exclusion game, that evidenced the spontaneous emergence of Conformism during on-line interactions?	→ Most players choose strategy "the powerful players get all the pie" in both the rounds of the first phase. → In the second phase, a large number of players agreed on the fairness rule (33, 33, 33%) . → For a significant number of subjects, having agreed on a rule seems to have been sufficient reason to generate expectations about reciprocal conformity.

		→ A significant number of those players who act egoistically in phase one and who agreed on the rule of equal division in phase two, decided to implement the rule in phase three.
005.3.15	What the effects of task difficulty on the tendency to conform on-line?	→ The Conformity group conformed to a greater degree than the chance of participants in the Control group giving the same incorrect answer. → The conformity increased with higher task difficulty (Rosander & Eriksson, 2012).
005.3.16	What were the results concerning the effects of on-line Conversational Silences on Conformism (Postmes & Gordijn, 2013)?	Postmes & Gordijn (2013), investigated whether brief conversational silences can motivate people to shift their attitudes to be in line with group norms in CMC. → The results demonstered an interaction between the effects of Conversational Silence, and the Motive to Belong and the degree of conformity. The higher the Motive to Belong the more positive is the effect of conversationl silences on conformity.
005.3.17	Group norms have been experimentally manipulated through the use of different gaming environments that were inherently either cooperative or competitive (Hughes & Louw, 2013).What effects have been found about the Number of aggressive expression?	In the cooperative group norm conditions, no aggressive messages were sent. Aggressive messages (such as calling another player 'gay') were witnessed between players in the competitive group norm condition.
005.3.18	Is it possible to observe On-Line norm based influence from robots to humans?	Even the artificial nature of possible interactors has been studied considering its effects on Digital Conformism: → In all conditions, there is a clear and strong effect of conformity induced by the human peer group. → Nevertheless, the robots appear to elicit slightly higher rates of the conforming judgements than the baseline data, although the rates are markedly lower than for the humans. (Brandstetter et al, 2014). In the experiment of Xu and Lombardi (2017), the results showed that → Users have the tendency to conform to unanimous group norms even exhibited by computer agents. →Group identification would exert influence on users' attitude change, even in the non interdependence condition (even the minimal color cues can lead to users' identification with group members). → Group identification with multiple computer agents had influence on both users' attitude change and behavioral change.
005.3.19	What's the general effects of social pressure between text compared to video condition for what concern conformity?	→ There is not a difference in the social pressure in the text condition compared to the video condition. → No statistical difference was found between the two groups, participants in both conditions conformed (Devers et al, 2012)
005.3.20	In experiments by Beran et al. (2015) the physical isolation has been show to be able to affect the conformity behaviours. In which condition we have this experimental results?	When subjects are involved in an in-ingroup dynamics by means of the introduction of confederates (i.e., enhancing a Social Identity). → Participants who saw incorrect responses given by confederates before responding, obtained fewer correct

		responses than did participants who saw no responses from confederates. → The isolated group members are more likely to display more normative conformity behaviors (Beran et al, 2015).
005.3.21	How the Prosocial Conformity Theory described the complex dynamics of Prosocial Norms (Nook et al, 2016)?	Like other forms of social influence, prosocial norms can transcend the immediate imitation of others behaviors. The influence of prosocial conformity extends from action to action (Studies 1-2), action to emotion (Study 3), emotion to emotion (Study 4), and emotion to action (Study 5).
005.3.22	What's the complex relation between On-line Aggressive behaviour and Anonimity, discovered by Rösner & Krämer (2016)?	→ It was found significant main effect of the group norm, but no (direct) effect of anonymity on aggressive language use in online comments. → Anonymity interacted with the group norm and indirectly affected aggressive language use: Participants exposed to an aggressive norm used more aggressive expressions when they were anonymous. The data, furthermore, suggests a tendency that users' conformity to an aggressive social norm of commenting is stronger in an anonymous environment, which is in line with the SIDE model (Rösner & Krämer, 2016)
005.3.23	How using an fMRI tecniques, it would be possible to predict the degree of conformity of a subjects, and how it has been demonstered?	Using a Cyberball game, we show that individual differences in the degree to which key brain regions (e.g. bilateral TPJ) implicated in social pain and mentalizing change their connectivity with the rest of the brain in response to social exclusion predict conformity to peer attitudes in a driving simulator (Wasylyshyn et al, 2017).

Module 005.4 – Online Social Influence: A VirtHuLab experiment		
Id	Pay Off	Explanation
005.4.1	How Lee (2004) demonstered the SIDE predictions regarding the relation between Depersonalization and Conformity?	Depersonalization in anonymous settings can lead to higher levels of conformity, because of a stronger perception of group norms. This explanation is proven by the fact that providing visual cues to the subjects, decreases the social influence effect (Lee, 2004).
005.4.2	What about the Asch experiment replications in virtual environments?	Asch experiment replications: • Conducted through chat interaction -> No conformity (Laporte, van Nimwegen, Uyttendaele, 2010) • Conducted in Second Life -> Asch's conformity levels (Kraemer, 2013)
005.4.3	Is the Informational Influence affecting the conformity behaviours even on-line?	Testing informational influence - The task difficulty manipulation showed a strong effect of informational social influence online (52,6% of conformity). The levels of conformity increased with the difficulty of the task (Rosander & Eriksson, 2012)
005.4.4	What's the role played by Gender and Culture in virtual conformity experiments?	Testing gender - No differences between men and women (Rosander & Eriksson, 2012) Testing culture - Users from collectivistic cultures conform more even online (Cinnirella & Green, 2007)

005.4.5	In the VirtHuLab experiment abour On-line Social Influence, what was the effect of task ambiguity on the conformity dynamics?	Conformity is higher with more ambiguous tasks
005.4.6	What's the magnitude of Normative Influence (i.e., Asch task) in virtual environments revealed by the VirtHuLab experiments about Online Social Influence?	Normative influence (in Asch's task) is significantly weaker in virtual environments
005.4.7	What's the experimental relation between entropy of a stimulus and Conformity (i.e., Virthulab experiments)?	There is a significant relation between conformity and entropy (ambiguity), with conformity increasing with higher entropy.
005.4.8	What's the experimental relation between Anonimity and Conformity (i.e., Virthulab experiments) when the social identity is not stressed (i.e., salient)?	Subjects conform less when completely anonymous
005.4.9	What's the experimental relation between Physical Isolation and Conformity (i.e., Virthulab experiments) when the social identity is not stressed (i.e., salient)?	Subjects conform more when alone in a room. The physical presence of other subjects in the same room, decreases conformity
005.4.10	What's the interaction emerged by the VirtHuLab experient about on-line social influence, between physical isolation and anonimity?	If group/single condition and anonymity interact, the highest conformity is produced by the single condition with partial anonymity
005.4.11	In the VirtHuLab experiment about on-line social influence, by Coppolino et. Al (2016), what were the effects of personality traits on conformism?	Neuroticism, Extraversion and Agreeableness decrease conformity, while Closeness, Self-Efficacy and State Anxiety increase it.
005.4.12	In the VirtHuLab experiment about on-line social influence, by Coppolino et. Al (2016), what were the effects of type of task and entropy on the answers' delay??	Subjects become less nimble in providing their answers according to ambiguity of tasks and entropy
005.4.13	What were the neurphysiologocal evidences that emerged by the VirtHuLab experiment about On-line social influence, during the stimulus presentation?	At 150-200ms the N200 is more depolarized for conformists (mistake detection) and by 250-500ms the same subjects show a greater polarization of P300 (behavior adjustment). The LPP shows the consequent emotional regulation.
005.4.14	What were the neurphysiologocal evidences that emerged by the VirtHuLab experiment about On-line social influence, during the decision making?	The greater depolarization between -200 and 0ms for nonconfomists' RP indicates pre-motor planning and the polarization between 0 and 500ms (ERN) shows the awareness of the answer's nonconformity
005.4.15	What about the behaviour of the N220 wave in the VirtHuLab experiments about On-line social influence?	The N200 appears to be higher with high entropy in non-confomist subjects
005.4.16	What are the five general results found by the Psychosocial experiment about On-line social influence, provided by Coppolino-Perfumi et al (i.e., VirtHuLab, 2016)?	1. Normative influence is less effective in virtual environments 2. Informational influence is still strong in virtual environments 3. Partially anonymous and alone subjects conform more

		4. Some personality traits such as Closeness, Self-Efficacy and State Anxiety increase conformity, while Neuroticism, Extraversion and Agreeableness decrease it 5. Under conformity pressure, subjects take longer to provide an answer
005.4.17	What are the three general results found by the Neurophysiological experiment about On-line social influence, provided by Coppolino-Perfumi et al (i.e., VirtHuLab, 2016)?	1. Conformist subjects are actually aware that the group's answer is wrong and they have to adjust their behavioral tendency to yield to the majority 2. Nonconformist subjects have to make an effort to go against the majority 3. Nonconformists N200 is higher with more entropic stimuli and this indicates a stronger cognitive effort

Module 005.5 – Online Radicalization: A VirtHuLab experiment		
Id	Pay Off	Explanation
005.5.1	What's the operative definition given by Moscovici & Zavalloni (1969), linking together discussions and riky shift phenomenon?	Group discussions to consensus resulted in statistically significant shifts toward the extremes of the scales […] groups accept higher levels of risk than do the individuals who make up the group (Moscovici & Zavalloni, 1969).
005.5.2	What0's the Group Polarization?	Group polarization arises when members of a deliberating group move toward a more extreme point in whatever direction is indicated by the members' predeliberation tendency (Sunstein, 2002).
005.5.3	What are the main results from research confirming the presence of polarization and risky shift phenomeno vene within the virtual environments?	As it happens in real settings (Moscovici & Zavalloni, 1969) also in virtual environments the group discussion – in order to reach to a mutual decision – leads toward a polarization of the responses. The Polarization Dynamic may occour in virtual environoments too (Spears, Lea & Lee, 1990; Gerstenfeld, Grant & Chiang, 2003; Sunstein, 2008; Guadagno, Muscanell, Rice & Roberts, 2013) causing a "Potential Radicalization Process" of the subjects. The subjects who interact anonymously inside of a Network are more influenced by the significant norms of the group (Guadagno, Muscanell, Rice, & Roberts, 2013). An anonymity condition, togheter with the lack of physical stimuli, can cause a decrease of the interpersonal differences increasing at the same time the attachment and the identification with the in-group (Spears, Lea & Lee, 1990) and, as consequence, this could increase the "*Potential Radicalization*" phenomenon.
005.5.4	In the VirtHuLab experiments about On-line radicalization, what was the general preferred approach to the "moral judgement" requested by the group condition?	The sample prefered a "gentle approach" compared to revenge (Table 5.2.1).
005.5.5	In the VirtHuLab experiments about On-line radicalization, what was the	The subjects who interacted to each other via chat (i.e., "Virtual Setting") were more influenced by the

	effect of the experimental condition on the tendency to agree with the majority?	Polarization effect (Table 5.2.2) in accordance with the groups norms concerning the final decision. The interaction in virtual condition increase the likelihood to be polarised by the majority
005.5.6	In the VirtHuLab experiments about On-line radicalization, what was the effect of the experimental condition on the tendency to punish?	The likelihood of punishment for the test subjects is major in "malevolent" (i.e., pro-sanction) virtual interactions
005.5.7	What was the amount of explained variance by the best statistical model derived on the experimental data, for what concern the "On-line radicalization potential (i.e., the increase of risk shift phenomenon occurance during a negative polarization received by the others)?	The model explained the 11% of variance and therefore the tendency of the subjects to be polarized towards a "malevolent" position
005.5.8	In the VirtHuLab experiments about On-line radicalization, what were the relations between personality and psychological traits and the quality of the final opinion?	Only consciousness trait seems to have and independent effect, with a positive relation between consciousness and the tendency to be polarized. Surprisingly, a lot of psychological traits seem to increase their "radicalization" whenever interacting ina virtual environments. (I.E., Consciousness, AGREEABLENESS, NEVROTICISMS, GENERAL SELF EFFICACY, SOCIAL ANXIETY, NEED TO BELONG, ATTENTION, COGNITIVE COMPLESSITY, PERSEVERANCE, ATTENTIONAL IMPULSIVITY, NOT-PLANNED IMPULSIVITY, SNS USAGE)
005.5.9	In the VirtHuLab experiments about On-line radicalization, what were the combined effect of "setting" and "Negative polarization from the group" in terms of tendency to punish, emerging by the multivariate analysis? Describe the best statistical model derived by the experimental data.	• The interaction between "Virtual environment" and "Malevolent in-group" increases the likelihood of punishment • The likelihood of punishment is increased by the Consciousness • The likelihood of punishment is increased by Need to Belong only in Virtual Environment The best statitiscal model derived by the experimental data explained the 25% of variance, in other words an increased of radicalized people of 1 over 4.

Module 006.1 – Personality and Virtual Environments		
Id	Pay Off	Explanation
006.1.1	What factors related to the Virtual Environments, have been the first to be studied as Personality "activators"?	Internet psychological context and Internet use involve special factors which together create a unique psychological environment for the user. McKenna et al. (2002) suggest four major factors that differentiate between Internet interaction and face-to-face interaction: 1. Greater anonymity; 2. The diminution of the importance of physical appearance; 3. Greater control over the time and pace of interactions; 4. The ease of finding similar others.
006.1.2	What's the "Web feeling of	Web Feeling of Confidence

	confidence"?	Internet surfing allow us to meet the world from our own territory, and this may well provide us with a strong sense of security which leads to feelings of confidence (Amichai-Hamburger, 2005) McKenna et. al (2002) have shown that people have a greater sense of control in online environments. People tend to feel less anxious when they interact online, rather than in FtF, so inviting significant self disclosure (Ben-Ze'ev, 2005) The internet allows individuals to participate in social and collaborative enterprises, and this may have special meaning for individuals with physical or psychological limitations (Blair, 2006; Warr, 2008)
006.1.3	What's the potential of Finding similar others on the Internet?	Maslow's (1971) hierarchy of human needs includes the need to belong to a group as one of the basic humam requirements. Tajfel and Turner (1986) explain that being a member of a group that shares your goals and interests is one of the major ways through which to enhance self-esteem. The individual identity is enrich (and polarized) significantly by means of the exploration and identitifaction within the web of similar (or so perceived) others (Amichai-Hamburger, 2012) Moreover people from stigmatized group are more likely to be involved in a news group of similar others and considered their belonging to the group as more important to their identity (McKenna and Bargh, 1998). Visiting websites of people who are similar may make people feel that their group are much larger than they had imagined. And Youn and Lee (2002) four that adult video gamers demonstrated more tolerance towards their peers in social interactions in comparison to nongamers.
006.1.4	What's the "Poor get richer effect"?	The "Poor get richer" effect says that those who are poor socially offline become richer socially online (Maldonado et al, 2001)
006.1.5	What's the Internet empowerment effect on Socially shy, closed, introverted and neurotic people?	Socially shy, closed, introverted and neurotic may undergo a transformation and become higly interactive, open, social beings with a large network of online connections (Hamburger & Ben-Artzi, 2000)
006.1.6	What's the interaction between introversin and Internet social dynamics?	Introverts perceive the online world as a preferred social environment over the offline world. and feel that their relationships on the net are more special than their relationships offline (Amichai-Hamburger, 2002) Introverted subjects send messages with an extroverted tone. These messages contain more information thean those sent by extroverted subjects. It seems that on the net, introverts do not act in accordance with their usual behavior patterns (Maldonado, 2001) Nevertheless, Introverts who use the net reported higher level of loliness as compared with surfers who are extroverts (Kraut, 2002), and invest more effort into building and designing their personal profile on Facebook. They place more personal information on their Facebook profiles than extroverts (Social Anxiety???).

		Finally, Introverts tend to build a more attractive avatars in comparison with extroverts (Dunn & Guadagno, 2012)
006.1.7	What are the personality features related with blogging within the results of Guadagno et al?	Guadagno, et al 2008, found that personality characteristics related to blogging are openness to new experiences and neuroticism, with no relation between introversion and blogging.
006.1.8	What's the interaction between extraversion and Internet social dynamics?	Extroverted made greater use of the net as a social tool (for social interaction) as compared to introverts. Extroverts who have highly developed social skills and make more friend offline, finally make more friends even on the net (Kraut, 2002) In Facebook extroverts have more social interactions in social network than introverts (Amichai-Hamburger & Vinitzky, 2010) The size of the social network of introverts tend to be smaller than those of extroverts. Introverts nevertheless do invest more effort into building and designing their personal profile on Facebook. They place more personal information on their Facebook profiles than extroverts (Social Anxiety???).
006.1.9	Indicate what's the relation beetween Need for closure personality trait, and the number of hyperlinks of a web service? And why?	Amichai-Hamburger et al. (2004) found that people with a low need for closure preferred a website with many hyperlinks over one that was relatively flat: people with a high need for closure preferred the flat website over the one with many hyperlinks. People who have a high need for closure are motivated to avoid uncertainties. They tend to 'freeze' the epistemic process (Kruglanski and Freund 1983), and to reach conclusions speedily. They tend to get locked into conceptions and ignore contradicting information. People with a low need for closure are predisposed to unfreeze many alternative hypotheses and to test as many implications of their own hypothesis as possible.
006.1.10	What's the effect of time pressure on the relation between Need for closure and number of hyperlinks of a web page?	When they were under time pressure the results were reversed, namely, people with a high need for closure preferred a website with many hyperlinks over one that was relatively flat. People with a low need for closure preferred the flat website over the one with many hyperlinks.
006.1.11	Does the Need for closure affect the tendency to estalish new Internet relationships?	When it comes to the social aspect of the Internet, it seems likely that people with a low need for closure will be willing to explore their identity on the net and are open to finding new relationships there, while those with a high need for closure will be more inhibited about exploring their identity or starting new Internet relationships.
006.1.12	What's the Epistemic Freezing?	People who have a high need for closure are motivated to avoid uncertainties. They tend to 'freeze' the epistemic process, a process called 'epistemic freezing' (Kruglanski and Freund 1983), and to reach conclusions speedily. They tend to get locked into conceptions and ignore contradicting information. People with a low need for closure are predisposed to unfreeze many alternative hypotheses and to test as many implications

		of their own hypothesis as possible.
006.1.13	Give a definition of Need for Cognition?	People vary in how they treat information. The best-known effort to define and measure this tendency was performed by Cacioppo and Petty (1982), who created the 'Need for Cognition' variable. This refers to an individual's tendency to engage in and enjoy effortful cognitive endeavours. It is considered a stable trait that may be influenced by certain situational factors (Cacioppo et al. 1996).
006.1.14	Describe some effects of Need for Cognition on Internet behaviour.	Those with a low need for cognition do not enjoy cognitive efforts and when dealing with complicated issues will prefer to rely on the opinion of others, preferably experts, while individuals with a 'high need for cognition' are those who possess a natural motivation to seek knowledge and so will acquire more information and engage with it (Verplanken et al. 1992). Amichai-Hamburger found a clear difference in the willingness of individuals with a low need for cognition to return to the site in favour of an interactive site (a site with many hyperlinks). This preference was not found among individuals with a high need for cognition. It appears that the need for cognition determines one's susceptibility to peripheral cues, such as the site's appearance. Das et al. (2003) found that people who enjoy cognitively demanding processing tasks are more likely to use the Internet information search tools since they enjoy this activity in a similar way.
006.1.15	Give a definition of Locus of Control	People with an external locus of control believe that life events are the result of external factors, like chance or luck. People with an internal locus of control believe in their own ability to control their life events (Rotter 1966, 1982).
006.1.16	What are the peculiarities of the Internet usage by people with Internal Locus of Control?	People with an internal locus of control expect that their efforts will lead to success and therefore are highly motivated to master their environment (Phares 1976). People with an internal locus of control felt higher control over the web interaction process and procedures and had a higher trust in online transaction safety as compared with those with an external locus of control (Sohn and Leckenby 2001). People with a high internal locus of control use the Internet as a supplement to other activities and in a more goal-directed manner, for example, as a tool to search for information to complete a task, or to reduce purchase uncertainties, whereas people with an external locus of control tend to use the Internet more experimentally as a substitute for other activities, such as spending time with friends.
006.1.17	What are the peculiarities of the Internet usage by people with External Locus of Control?	People with an external locus of control use the Internet more for inclusion, as compared with people with an internal locus of control (Flaherty et al. 1998). People with an external locus of control tend to spend greater amounts of time surfing the net than surfers with an internal locus of control. However, they are less likely to engage in goal-directed

		behaviours such as shopping, making purchases and gathering product information (Hoffman et al. 2002).
006.1.18	Give a short definition of Sensation Seeking trait.	Sensation-seeking focuses on the need for new and varied experiences through uninhibited behaviour: these include dangerous activities, a non-conventional lifestyle and a rejection of monotony (Zuckerman 1971).
006.1.19	Give a short definition of Risk Taking personality trait.	Risk-taking is a personality dimension; people vary as to the degree to which they are ready to take an action that involves a significant degree of risk (Levenson 1990).
006.1.20	What's the relation beetween Sensation seeking, Risk Taking and Flaming?	Alonzo and Aiken (2004) found that sensation-seeking predicted flaming (posting hostile and insulting messages) on the net. There was a stronger prediction for males than for females. They suggest that anonymity on the net encourages people to act without inhibitions and to engage in taking risks in flaming activity for entertainment and to pass the time.
006.1.21	Define the Extroversion and neuroticism (as measured by Eysenck's Personality Inventory EPI)?	The extrovert is outward oriented, whereas the introvert is inward oriented. The neurotic person is an anxious, worried individual who is overly emotional and reacts too strongly to all types of stimuli (Eysenck and Eysenck 1975).
006.1.22	Describe some effects of Extroversion on Internet behaviour, specifying the Gender effects.	Extroverts 'rejected the social communal aspects of the Internet and were negatively correlated to statements like I use the Internet "because I feel more comfortable talking to people on line".' They were interested in voicing their opinion, but not in listening to that of others. Extroverts rejected the use of the net for information, but surfed for alternative news. Amiel and Sargent (2004) found no link between extrovert personalities and random surfing or sex website use. The authors explain these differences by stating that this use is much more in line with psychoticism which Hamburger and Ben-Artzi (2000) did not measure. Hamburger and Ben-Artzi (2000) analysed levels of extroversion and neuroticism and Internet use and found that these showed different patterns for men and women in their interactions with the Internet services scale. For men, extroversion was positively linked to the use of leisure services and neuroticism was negatively related to information services, whereas for women, extroversion was negatively related and neuroticism positively related to the use of social sites. Women have higher self-awareness and are more likely to use their social network for support. The differences found in the extra-neurotic personalities in their Internet behaviour are consistent with those found in the main personality theories of Weaver (2001). Nevertheless, Amiel and Sargent (2004) continued this work, and found that gender differences can disappear under certain conditions (!).
006.1.23	Describe some effects of Neuroticism	Hamburger and Ben-Artzi (2000) and Amiel and

	on Internet behaviour.	Sargent (2004) found that people who scored high on the neuroticism scale reported that they used the net for the feeling of belonging to a group. Amiel and Sargent (2004) found that those scoring high on the neuroticism scale expressed a high interest in alternative news and the need to learn about potential threats. Extroverts rejected the use of the net for information, but surfed for alternative news. Amiel and Sargent (2004) found that people scoring high on neuroticism expressed a high motive for the need to acquire information. They also found that neuroticism demonstrated a need for information and belonging, a preference for alternative news (as opposed to mainstream or interactive news) and the need to be informed of possible dangers. Neurotics did announce a social communal motive, but practically all were negatively related to some of the social services as text messaging tools (interpersonal/group communication) or willingness to engage in discussion.
006.1.24	Define the Psychoticism factor of the PEQ-Revised.	The EPQ-R questionnaire includes psychoticism, in addition to extroversion and neuroticism. Psychotics show disregard for authority, social norms and rules. They are unlikely to feel sensitivity to the feelings of others (Eysenck et al. 1985).
006.1.25	Describe some peculiarities of Internet behaviour associated with the Psychotic Personality trait.	Amiel and Sargent (2004) found that people high on psychoticism showed a lack of interest in the social communal aspects of the net. However, they demonstrated an interest in more sophisticated and deviant aspects of the net. They showed a great interest in using file-sharing services (pirated materials) and pornography. They were interested in learning what could happen to them, but not what could happen to others.
006.1.26	Give a definition of Coscientiousness following the construct assessed by NEO-P-R of McCrae and Costa.	Conscientiousness refers to the way in which we control, regulate and direct our impulses. People with a level of conscientiousness are well organized, governed by their task. In contrast, low conscientious people are impulsive.
006.1.27	Give a definition of Agreeableness following the construct assessed by NEO-P-R of McCrae and Costa.	Agreeableness refers to individual differences in cooperation and the ability to build social harmony with others. Agreeable individuals have an optimistic approach to the world. They are friendly, helpful and willing to compromise in favour of others. Disagreeable individuals put their own needs ahead of the need to get along with others. They do not trust others and therefore express more hostility and less cooperativeness than agreeable individuals.
006.1.28	Give a definition of Openness to Experience following the construct assessed by NEO-P-R of McCrae and Costa.	Openness to experience describes a dimension of cognitive style that distinguishes imaginative, creative people from down to earth, conventional people. Open people are intellectually curious and appreciative of art. They tend to be more aware of their feelings and to think and act in individualistic and nonconforming ways, as compared

		to more closed people.
006.1.29	What's the Heinström (2005) calssification of information-seeking general patterns?	Heinström (2005) examined the link between personality and information-seeking. She found three general patterns for information-seeking Fast surfing people who skim are disorganized, not task oriented and have a low need for achievement. For these people, the depth and quality of information is a minor consideration, as against the need for speed. Broad scanning people who tend to be flexible in their information-seeking, utilizing a wide range of sources. Their broad scanning searches are developed gradually rather than being planned. Deep diving people who are hard workers, desire quality rather than quantity. They put much effort into information seeking, but do not necessarily search for information in a broad manner.

Module 006.2 – Personality and VirtHuLab Experiments		
Id	Pay Off	Explanation
006.2.1	What Personality Factors (i.e., from the Big Five Model) emerged to decrese conformity in Virtual Environments, within the VirtHuLab experiment about Online Social Influence?	Neuroticism, Extraversion and Agreeableness decrease conformity
006.2.2	What Personality Factors (i.e., from the Big Five Model) emerged to increase conformity in Virtual Environments, within the VirtHuLab experiment about Online Social Influence?	Closeness, Self-Efficacy and State Anxiety increase conformity
006.2.3	What Personality Factors appear to increse the Deindividuation following the m-SIDE model proposed by the VirtHuLab experiments?	The Deindividuation is increased by Social Desirability, Sense of virtual community, and Importance of SNS contacts.
006.2.4	What's the relation between Extroversin and Deindividuation effects of Virtual Environments, (VirtHuLab m-SIDE experiment)?	Extroverted people appear to be influenced by the Virtual nature of the setting, appearing less "Deindividuated" (i.e., less conformist) in such a condition. As a consequence Extroversion can be considered as a Protective Factor decreasing deindividuation in virtual environments.
006.2.5	What's the relation between Coscientiousness and Deindividuation effects of Virtual Environments (VirtHuLab m-SIDE experiment)?	Coscientiousness is the trait associated to the maximum level of conformity, nevertheless those people are suscebtiple to the Virtual nature of setting, which decreases their Deindividuation. As a consequence Coscientiousness can be considered as a Protective Factor decreasing deindividuation in virtual environments.
006.2.6	What's the relation between Openness and Deindividuation effects of Virtual Environments (VirtHuLab m-SIDE	Openness is the trait associated with the maximum degree of unconformity, and those people are very suscebtiple to the Virtual nature of the setting in terms

	experiment)?	of Deindividuation, decreasing their level of deindividuation in such a a condition. As a consequence Openness can be considered as a Protective Factor decreasing deindividuation in virtual environments.
006.2.7	What's the relation between Virtual Sense of Community (vSOC) and Deindividuation effects of Virtual Environments (VirtHuLab m-SIDE experiment)?	The Virtual Sense of Community (vSOC) increases the level of Deindividuation in virtual environments, if compared with real ones. As a consequence Virtual Sense of Community can be considered as a Risk Factor increasing deindividuation in virtual environments.
006.2.8	What's the relation between Social Desirability and Deindividuation effects of Virtual Environments (VirtHuLab m-SIDE experiment)?	Social Desirability is the best promoting factor for conformity, and those people become even more conformist (i.e., more deindividuated) whenever immersed into a Virtual Setting. As a consequence Social Desirability can be considered as a Risk Factor increasing deindividuation in virtual environments.
006.2.9	What's the relation between Social Dominance Orientation and Deindividuation effects of Virtual Environments (VirtHuLab m-SIDE experiment)?	The Social Dominance Orientation (SDO) preserves people from Deindividuation in general,m and in particular within virtual environments motre than in real ones. As a consequence SDO can be considered as a Risk Factor increasing deindividuation in virtual environments.
006.2.10	What's the relation between Locus of Control and Deindividuation effects of Virtual Environments (VirtHuLab m-SIDE experiment)?	People with an external Locus of Control are heavily Deindividuated by Virtual environments. As a consequence an External Locus of Control can be considered as a Risk Factor increasing deindividuation in virtual environments
006.2.11	In the VirtHuLab experiments about cooperation (i.e.m, Crowdsourcing) in virtual environments, what personality factors appeared to increase the tendency to cooperate, and what to reduce it?	Nevroticism, Conscientiousness, Honesty and Sense of Community appear to increase the general tendency to cooperate within a Virtual environments task. At the contrary, Surgency and State anxiety reduce such a tendency.
006.2.12	What emerged from the VirtHuLab experiments about on-line radicalization, for what concern the relation between Personality and Virtual Environments?	Conscientiousness, Agreeableness, Nevroticism, General Self Efficacy, Social Anxiery, Need to Belong, Attention, Cognitive Complexity, Perseverance, Attentional impulsivity, all, and for different reasons, increase the potential of Online Radicalization.
006.2.13	What emerged from the VirtHuLab experiments about the online bystander effect, for what concern the relation between Personality and such a phenomenon?	Conscientiousness and Openness appear as traits reducing th Bystander effect online, while the Social deisrability and the General Self Efficacy appear to increase it.

Module 007.1 – A brief introduction to the Self		
Id	Pay Off	Explanation
007.1.1	What's the Cooley's definition of Reflected Self?	The Reflected Self Theory It was Cooley (1902) who, a century ago, first introduced the idea of a reflected or looking glass self. Cooley argued that the self we create for ourselves is a reflection of how we perceive that others view us. That

		is, we look to others to see how we are perceived and then incorporate those views or perceptions into our self-concept. In Cooley's view, changes in one's self-concept occur when there are changes in the way others perceive oneself.
007.1.2	What are at leat four biases affecting the Self representation of a subject that can be very relevant to understand Virtual Environments Social Dynamics?	Cultural Norms and Standards Mead (1932) built on Cooley's theory by suggesting that the self-concept is also affected by the way a person believes wider society views them, based on cultural norms and standards. Specific Others Bias However, as Tice (1992) has noted, the social interactionist idea of a looking glass self may be too simplistic. A growing body of empirical evidence shows that while people are indeed adept at knowing how others in general view them, they are not very good at discerning how they are viewed by specific others (e.g., Ichiyama 1993; Kenny and DePaulo 1993). Homogeneity Bias Further, as Shrauger and Schoeneman (1979) argue, people often see 'through the glass darkly', meaning that they often have certain a priori conceptions of self that they then believe (wrongly) others believe true of them as well (see also Kenny and DePaulo 1993). Social Domain Bias In addition, we may tend to 'be' and to be perceived by others quite differently across different social domains. For instance, a person may have a cool and radical image among friends, while with co-workers she is hardworking and conscientious.
007.1.3	What was one of the firsts definition of Multiple Selves, provided by James in the 1892?	Mutliple Selves William James noted, 'A man has as many social selves as there are individuals who recognize him' (1892: 179).
007.1.4	What's the difference between Public and Private Ego, as it was described by Goffman, Jung and Baumeister?	Private and Public Self One important historical version of the multiple self notion is the distinction between the public and private self (e.g., Baumeister 1986). Both Goffman (1959) and Jung (1953) focused on this distinction. Unconscious Ego For Jung, one's conscious ego (the self that is presented to others) is less authentic than is the unconscious ego – in other words, according to Jung, one's real individuality resides in one's private self.
007.1.5	What's the definition of Possible Selves?	Possible Selves Markus and Nurius (1986) first broached this concept of possible selves. Possible selves are those selves that we possibly might become in the future. They include versions of self that we would like to become as well as those we hope to avoid becoming (i.e., the 'dreaded self')
007.1.6	What's the definition of Ideal Self?	Ideal Self Along similar lines is the conception of the 'ideal self', which contains those attributes of self-hood that we would ideally like to possess and which we strive to become. (Higgins 1987).

007.1.7	What's the definition by Rogers of True Self?	True Self Rogers (1951) and Horney (1946), argued that aspects of self that go unexpressed and are not acknowledged by others nonetheless remain a fundamental part of an individual's sense of self. These self-defining yet unexpressed aspects of self make up what Rogers (1951) called the 'true self '. The true self, on the other hand, is said to be comprised of those qualities a person feels they do indeed possess at present but that are not fully expressed in social life. The true self differs conceptually from the ideal self and from possible selves in that it actually exists psychologically; it is a current rather than a future version of self.
007.1.8	How the Concept of True Self by Rogers was linked to the Jung's concept of Persona?	Unconscious Self and Persona Rogers' (1951) conception of the true self was informed by Jung's (1953) distinction between the unconscious self and the persona, or the public, enacted version(s) of self.
007.1.9	How is defined the Actual Self?	Actual Self Actual self is your representation of the attributes that you believe you actually possess, or that you believe others believe you possess (Higgins 1987). The "actual self" is a person's basic self-concept. It is one's perception of their own attributes (intelligence, athleticism, attractiveness, etc.). Moreover, the actual self is defined as those features readily express to others in everyday lives. In other words, the public versions of self that we generally share with others
007.1.10	How is defined the Ought Self?	Ought Self The ought self contains those qualities an individual feels obligated to possess and express and the actual self those they embrace themselves and actually, readily express to others in their everyday lives. In other words, these are the public versions of self that we generally share with others.
007.1.11	What are the evidences that support the introduction of thye concept of Relational Self?	Social Side of the Self Rather, one also tends to incorporate one's important relationships – along with one's important group identities (Tajfel and Turner 1986; Deaux 1996) into one's sense of self. Self and Others Considerable research has shown the strong, even automatic associations between representations of significant others and of the self. By unobtrusive and sometimes subliminal priming techniques, activation of the significant other representation causes activation of those aspects of the self related to the type of person one is when with that other person (Andersen and Chen 2002).

Module 007.2 – Self Expression on the Web		
Id	Pay Off	Explanation
007.2.1	What factors transform Internet in a	Internet as a Virtul Laboratory for Self Development

	virtual laboratory for Self development, in the hypothesis of Sherry Turkle?	What are these special features and how do they facilitate greater self-expression and disclosure?. Several unique aspects of the Internet enable people to • take on various personae, • to express hidden facets of themselves without fear of disapproval or sanctions from those in their real life social circle, • to bypass many of the other barriers to self-expression that exist in face-to-face and telephone interactions (see McKenna and Bargh 2000).
007.2.2	How the Internet Dynamics can help to Socially Validate people's selves?	Web communication provides people the opportunity to easily find others who share important aspects of identity – hobbies, political views, sexual preferences – and who may not be readily identifiable in one's community. Membership and participation in such identity-relevant groups provides the opportunity to share these important parts of self with similar others and to have them socially validated (McKenna and Bargh 1998, Howard et al. 2001; Joinson 2001, Joinson and Paine, 2007)
007.2.3	Why Social Anxiety can be moderated during Online Interactions?	Research has shown that in Internet interactions socially anxious individuals feel more comfortable and confident than when interacting face-to-face (McKenna et al. 2005, 2006). Interacting in the absence of physical cues and features on the Internet may enable these people to develop relationships that otherwise would not have started in the first place (McKenna and Bargh 1999). For the socially anxious, interacting in the physical absence of the other removes many of the situational factors that spark anxiety (e.g., Leary 1983). Social anxiety has also proven to be a more reliable predictor of who will be more likely to feel that they can better express the true self on the Internet rather than in traditional face-to-face venues (McKenna et al. 2002).
007.2.4	What's the On-Line Strategic Self Presentation?	On-Line Strategic Self Presentation Because online interactions are at the minimum slightly asynchronous (as in instant messaging) and at the maximum wholly asynchronous (as in email) an individual has more time to formulate, and even edit, what they wish to say than usually is the case when one engages in synchronous, spoken interactions. In the absence of one's physical presence, there is no 'leakage' of non-verbal cues accompanying one's stated information. In other words, one is able to consciously engage in more strategic self-presentation online.
007.2.5	What is postulated by the On-Line True Self Expression Hypothesys?	On-Line True Self Expression Hypothesys 1. An individual's true self concept to be cognitively more accessible during an Internet interaction with a new acquaintance than in a traditional, face-to-face interaction. 2. Conversely, if a person typically expresses the actual self in the face-to-face environment, then the actual-self concept should be cognitively more accessible during face-to-face than during

		Internet interactions. Bargh et al. (2002) conducted two laboratory experiments in order to assess the degree to which the true self, as opposed to the person's actual self concept, was more accessible and activated while interacting on the Internet versus face-to-face. In line with the predictions: 1. Participants were faster to respond to content related to the actual self following a face-to-face interaction than following an Internet interaction. 2. Conversely, content related to the participants' true self was more accessible following an Internet interaction than following a face-to-face interaction.
007.2.6	Describe the Time Effects, the Priming Effects, and the threorethical implications of their dynamics related to the On-line Self Expression potential.	Time Effects Additional conditions showed that it did not matter for the obtained differential accessibility effects whether the interaction lasted for 5 minutes or for 15 minutes. Thus the effect was not an artefact of differences in the amount of information that can be conveyed in a face-to-face versus an Internet encounter (Walther, 1996). Priming Effects A second study showed that the true self did not become more accessible when participants merely anticipated but did not actually engage in an Internet versus a face-to-face interaction. This argues again for the naturalness or automaticity of true-self concept activation as a consequence of Internet communication conditions, because if its activation and use were part of a deliberate and conscious strategy on the part of the individual, the anticipation of Internet-level communication should have caused it to become active in preparation for the interaction. Finally, the previous experiments (i.e., Walther, 1996; Bargh et al., 2002) indicate that an individual's true self concept will become more accessible and ready to use in Internet interactions than in face-to-face interactions
007.2.7	What were the experimental results of the experiment of Bargh (2003), to find out if people are more successful at getting the true self across to others in online versus face-to-face interactions?	Participants successfully conveyed more true self than actual self features in Internet interactions. In contrast, in the face-to-face condition there were significantly more actual self than true self matches with the partner's spontaneous description of the person. Thus, on the Internet – as assessed by their partner's own candid and spontaneous descriptions of them – participants were better able to convey their true selves.
007.2.8	Is the On-Line True Self activation a result of a conscious (e.g., Self presentation) dynamics?	No, the Bargh et al. (2002) studies demonstrated that: that this greater activation does not appear to be the result of a conscious, self-presentational strategy,
007.2.9	Are people aware that they are disclosing their Real Self when On-Line?	McKenna et al.(2006) conducted a study replicating the Bargh et al. (Study 1) findings of greater activation of true self characteristics in online vs. face-to-face interactions. This study also included explicit measures assessing the degree to which participants were able to report having expressed actual and true self characteristics during their interactions.

		Results showed that online and face-to-face participants looked identical as to the degree to which they felt they had expressed these aspects of self. Thus it appears to be the case that, while people are indeed expressing more true self aspects in their online interactions, they are often unaware of doing so.
007.2.10	What's the Face-To-Face Identity Inertia Effects?	Face to Face Identity Inertia Effect In line with the findings of Andersen and Chen (2002), results from a recent survey and laboratory studies reveal that the average person generally continues to express the 'actual self' to those whom he or she initially met in person, whether the interaction takes place online or not (McKenna et al. 2005, 2006).
007.2.11	What's the definition of Unaware Self Activation Dynamics?	Unaware Self Activation Dynamics Recent research (e.g., Fitzsimmons and Bargh 2003; Shah 2003) suggests that when important mental representations of others become activated, so too do the self-goals and motivations that are associated with that relationship become activated. These goals then operate, outside of the individual's conscious awareness, to affect the individual's behaviour, even in quite unrelated situations
007.2.12	What's the result of the combination of thye Face-To_Face Identity Inertia effects, and the Unaware Self Activation Dynamics?	Results from a recent laboratory study (McKenna et al. 2006, Study 3), suggests that when one is interacting online with a friend or family member the mental associations that one has with that person are likely to be activated, and strongly so. Thus the same self-qualities that one generally presents when with the friend in person, along with the same goals and motivations, are also likely to be activated and expressed during the online interaction.
007.2.13	What's the Face-To-Face Strangers Bias?	Face-To-Face Strangers Bias Research by Tice et al. (1995) found that when two strangers meet (face-to-face) for the first time and the meeting takes place in the absence of any friends or acquaintances, they tend to behave with less modesty. That is, they tend to present more of their ideal self-qualities to strangers than they do to friends. The presence of a friend at the meeting provoked more modest self-presentation
007.2.14	What's the On-Line Self Modesty Effect?	In a replication and extension of this study, including two additional and comparable online conditions, McKenna and colleagues (2006, Study 3) found that individuals are indeed: (I) When a friend was a present (although passive) participant in the chat room, the participant presented a version of self in line with that of the stranger–friend face-to-face condition – more modestly than when two strangers interact alone face-to-face. (II) When two strangers interacted online and alone, however, the most modest version of self was elicited.
007.2.15	What are some conseuqneces of expressinf the true self on-line?	Participation to On-Line groups leads to stronger group identification, the individual should come to accept the marginalized identity as part of, rather than distinct from, their self-concept. Results indicated that active participation in the online groups did allow these

		individuals to reap the self-related benefits of joining a group of similar others. Moreover, because these groups dealt with stigmatized identities, for most participants this was the first time and the only way possible to find similarly minded others. Participation in the groups allowed these individuals to disclose, in a social context, a long-secret yet important part of their identity, and in return gain emotional and motivational support from their fellow group members (see Derlega et al. 1993; Jones et al. 1984). Finally, Participation in the online group resulted in increased feelings of self-acceptance of one's marginalized identity, and also caused the person to feel less isolated from society in general.

Module 007.3 – Online Self Disclosure		
Id	Pay Off	Explanation
007.3.1	What happens, beyond the aware of the subject, into a Computer Mediated Communicatin regarding to the Actual and Real Self Dynamics?	Real Self Disclosure is elicited by computer mediated communications (CMC) while the Actual Self Disclosure is reduced.
007.3.2	What's the definition of the psychological process of Impression Management?	Impression management Impression management is the process of controlling the impressions that other people form. Although it is possible to manage impressions of just about anything, from objects and events, to ideas and even other people, impression management typically refers to the process of influencing the impressions an audience forms about oneself. The term 'impression management' is therefore often used synonymously with 'self-presentation'.
007.3.3	What classification of 'psychological impression' is introduced by the Public Self Presentation Model by Leary (1995)?	Impression management is a concept with wide application, and many variables have been hypothesized to impact on it. Synthesizing these influences, Mark Leary (1995) conceptualized a model explaining how and why people manage their public presentations. According to this model, impression management involves at least two discrete but interrelated processes: (I) Impression motivation, and (II) Impression construction.
007.3.4	What's the definition of Self Disclosure provided by Jourard and Lasakow?	Self Disclosure Self-disclosure is the telling of the previously unknown so that it becomes shared knowledge, the 'process of making the self known to others' (Jourard and Lasakow 1958: 91). This shared knowledge might exist between pairs of people, within groups, or between an individual and an organization.
007.3.5	What's the impact of Self disclosure on Relationships trust, tie strenght, and mutual understanding?	For instance, within dyads, particularly romantic relationships, it serves to increase mutual understanding (Laurenceau et al. 1998), and builds trust by making the discloser increasingly vulnerable (emotionally or otherwise) to the other person (Rubin 1975). Since self-disclosure is often reciprocated it frequently serves to strengthen the ties that bind people in romantic or friendship-based relationships (Jourard 1971).

		Disclosure within groups can serve to enhance the bonds of trust between group members, It can also serve to legitimize group membership and strengthen group identity. For instance, the admission of a negative identity (e.g. 'I am an alcoholic') within a shared identity group serves both to increase trust by revealing a stigmatized identity and acts as a membership card for a particular group (Galegher et al. 1998).
007.3.6	Describe the results of the studies of Jourard (1971), Pennebaker et al. (1988), and Smyth (1998), regarding the effects of Self Disclosure psychological well being.	In a study reported by Pennebaker et al. (1988), participants assigned to a trauma-writing condition (where they wrote about a traumatic and upsetting experience for four days) showed immune system benefits, compared to a non-trauma writing group. Disclosure in this form has also been associated with reduced visits to medical centres and psychological benefits in the form of improved affective states (Smyth 1998). Personal growth may also be an outcome of honest self-disclosure (Jourard 1971).
007.3.7	Are there empirical evidences of a greater real self disclosure on the internet?	Wallace (1999) argues that 'The tendency to disclose more to a computer … is an important ingredient of what seems to be happening on the Internet' (151). Parks and Floyd (1996) studied the relationships formed by Internet users. They found that people report disclosing significantly more in their Internet relationships compared to their real life relationships. Similarly, in their study of 'coming out on the Internet', McKenna and Bargh (1998) argue that participation in online newsgroups gives people the benefit of 'disclosing a long secret part of one's self'.
007.3.8	What states the Uncertainty Reduction Hypothesys of Tidwell and Walther, on which theory it was based, and what were the empirical evidences of their experiments?	Further empirical confirmation of increased self-disclosure during CMC comes from the work of Tidwell and Walther (2002). Reducing Uncertainty Hypothesys They proposed that heightened self-disclosure during CMC may be due to people's motivation to reduce uncertainty. According to Uncertainty Reduction Theory (URT) (Berger and Calabrese 1975), people are motivated to reduce uncertainty in an interaction to increase predictability. Tidwell and Walther conclude that the limitations of CMC encourage people to adapt their uncertainty-reducing behaviours – they skip the usual asking of peripheral questions and minor disclosure, and instead opt for more direct, intimate questioning and self-disclosure.
007.3.9	Surveys and research administered via the Internet, rather than using paper methodologies, have also been associated with …	Reductions in socially desirable responding (Joinson 1999; Frick et al. 2001), Higher levels of self-disclosure (Weisband and Kiesler 1996) Increased willingness to answer sensitive questions (Tourangeau, 2004). In a similar vein, survey methodology techniques that tend to reduce human involvement in question administration also increase responses to sensitive personal questions. For instance, compared to other

		research methods, when data collection is conducted via computer-aided self-interviews (where participants type their answers on to a laptop) people report more: health-related problems (Epstein et al. 2001), more HIV risk behaviours (Des Jarlais et al. 1999), more drug use (Lessler et al. 2000), and men report less sexual partners, and women more (Tourangeau and Smith 1996).
007.3.10	What are the empirical evidences that support the use of Internet medical interview?	Medical patients tend to report more symptoms and undesirable behaviours when interviewed by computer rather than FtF (Greist et al. 1973). Clients at a STD clinic report more sexual partners, more previous visits and more symptoms to a computer than to a doctor (Robinson and West 1992). Ferriter (1993) found that pre-clinical psychiatric interviews conducted using CMC compared to FtF yielded more honest, candid answers. Similarly, automated or computerized telephone interviews, compared to other forms of telephone interviewing, lead to higher levels of reporting of sensitive information (see Lau et al. 2003; Tourangeau 2004).
007.3.11	Explanations for high levels of self-disclosure in person-to-person CMC have tended to focus on the psychological effects of anonymity, how is defined the Strangers on the Train Effect?	Strangers on the Train Effect Theoretically, it has been argued that anonymity in CMC works by replicating a 'strangers on the train' experience (Bargh et al. 2002), promoting private self-awareness and reducing accountability concerns (Joinson 2001a), creating a need for uncertainty reduction (Tidwell and Walther 2002) or a combination of the media and the process of interaction itself (Walther 1996).
007.3.12	What promoting factors for increased self-disclosure to online surveys and web forms have been discovered by Joinson, Tourangeau, and Moon?	Self Disclosure Promoting Factor • anonymity (Joinson 1999), • alongside the reduced social presence (and judgement) of the researcher (Tourangeau 2004), • reduced vulnerability (Moon 1998) • and increased privacy of the research environment (Tourangeau 2004). • Once privacy is reduced, or social presence increased, self-disclosure also tends to be reduced (Joinson et al. 2007).
007.3.13	What are the definition of Disinhibition and Toxic Disinhibition effects?	Disinhibition effect refers to the experience of a person whose behavior is no longer controlled by concerns about self-presentation or the judgments of others. People feel relaxed and express themselves much more openly, and their behavior is more uninhibited. (Wu, Lin, Shih, 2017). Suler (2004) called the negative results of this loss of inhibitions, this anti-normative behavior on the internet "toxic disinhibition."
007.3.14	Suler (2004) explored six factors that interact with each other and cause the online disinhibition effect. What?	• Dissociative anonymity • Asynchronicity • Dissociative imagination • Minimization of status and authority • Invisibility • Solipsistic introjection

007.3.15	What kind of social influence enhance Toxic Disinhibition?	Social influences are conceptualized as the pressure that people perceive from important others to perform, or not to perform, a behavior (Chang et al., 2014). • Subjective norm has a significantly positive effect on toxic disinhibition. • Descriptive norm has an insignificant influence on toxic behavior.
007.3.16	What's the essential assumption of the Containment Theory?	Containment theory is based on the assumption that the propensity to commit acts that deviate from the social norm is inherent in everyone. It shows that the society produces a series of pulls and pushes.
007.3.17	What are the relations between Inner containment, outer containment, and Toxic Disinhibition?	It has two reinforcing aspects: • Inner containment has a strong negative relationship with the reduced intention to exhibit toxic disinhibition, proving that through self-control and internal pressure, people can control their behavior online. • The impact of outer containment on toxic disinhibition is not significant.
007.3.18	What's the theorethical relation suggested by Tidwell and Walther, between the Disinhibition and the Uncertainty Reduction Theory?	Disinhibition and Uncertainty Reduction Tidwell and Walther (2002) argued that accelerated intimacy and disclosure in computer mediated communication, in contrast to face-to-face communication, was a direct result of and perhaps compensation for, the lack of non-verbal communication cues that make people feel closer to one another, as suggested by the Uncertainty Reduction Theory (Berger and Calabrese 1975).
007.3.19	What's the theorethical relation suggested by Tidwell and Walther, between the Disinhibition and the Selective Self Presentation?	Disinhibition and Selective Self Presentation Tidwell and Walther (2002), too, referred to online disinhibition by stating that 'the absence of nonverbal cues, as well as editing capabilities, identity cues and temporal characteristics may prompt CMC users to engage in selective self-presentation and partner idealization, enacting exchanges more intimate than those of FtF counterparts' (pp. 319–320).

Module 007.4 – Constructing the Self in a Digital World		
Id	Pay Off	Explanation
007.4.1	What states the Cyborg Model of Haraway?	The Cyborg Model of Haraway Accoording to the cyborg model: the nature of human activity and psychology fundamentally changes as we incorporate more and more digital technology into our physical surroundings, our daily activities, and even our very bodies through medical and wearable technology (Haraway, 1991)
007.4.2	What's the current approach to the study of the effects of technology on humans?	In recent years, research largely from an ethnographic tradition, has painted quite a different picture than a unidirectional model (Gajjala, 2004; Margolis & Fisher, 2002; Selfe & Hawisher, 2004) Human Technology Interaction Model The dichotomy that emerged get into account the complex relationships between Influence and Agency from one side, and Technology and Identity on the

		other.
007.4.3	What's the Situated Dynamical approach to the study of Digital Self Development?	Situated Dynamical approach to the Study of Digital Self Development As researchers studyng identity we must examine not only individuals and their learning but also the social and cultural contexts, practices, and technologies, digital or otherwise, that shape and are shaped by the development of selves (Goffman, 1959; Hollande, Lachiotte, Skinner & Cain, 2001).
007.4.4	What's the traditional definition of Healthy Adult Identity?	Healthy adult identity A traditional psychological model depicts a healthy adult identity as a coherent set of traits, dispositions, values and beliefs about the self that can remain relatively unchanged across a wide variety of situations and contexts (Harter, 1997; Marsh & Hattie, 1996)
007.4.5	What's the definition of Identity provided by the Sociocultural identity models?	Sociocultural identity models A sociocultural and anthropological model, however, looks very different. Identities are often described as flexible enactments, which only become visible via individual or joint practices displayng and realigning varyng aspects of our selves (Goffman, 1959, Wenger, 1998).
007.4.6	What's the Identity Dynamical Repositioning?	Identity Dynamical Repositioning Identities are not viewed as static clusters of traits, but rather they constantly shift and are repositioned in conjunction with social influences: a mutual refiguring of the individual and his or her cultural world (Holland et. al., 2001; Lave & Wenger, 1991)
007.4.7	Why the Identity is frequently compared to a sort of Flux by researchers?	Identity as a "Flux" Some researchers argue that the very nature of the self is inherently in flux, such that identities are narratively constructed, deconstructed, and reconstructed throughout the entire lifespan in the ogoing and everyday process of telling and retelling stories about ourselves to different audiences (Connelly & Clandinin, 1990; Ochs & Capps, 1996)
007.4.8	What's the Dual Nature of Identity?	The Dual Nature of Identity Identity can be figured as both a developmental construct and a fluid ongoing process.
007.4.9	What's the relation between Self Narratives and Self?	The Self Narratives as Identity itself For most researchers the Self Narratives, the story we tell about ourselves, are not merely reflective of identity, but rather they are identity
007.4.10	What's the role of narratives for the Self Development dynamics?	Situated Self Development A sociocultural perspective asserts that identity development is the process of learning to be "a certain kind of person" within particular local cultures (Gee, 2001), And involves a continuous negotiation between evolving conceptions of the self and the various communities and contexts one inhabits (Lave, 1996; Lave & Wenger, 1991). Narrative Contingency Narrative interpretations of our pasts are contingent on the perspectives of our present (Ellis & Bochner, 2003). Narrative Co-Construnction And the narratives about the self, that are the most

		powerful, find validation in an audience and can even be constructed with or by others (Sfard & Prusak, 2005). Narrative, organizing hermeneutic conversations among events and actors in complex relation to one another, is a critical tool in constructing and molding this complicated process as it evolves (Bruner, 1991).
007.4.11	What states the "Learning as Identity and Narrative as a glue" theory?	Learning as Identity and Narratives as glue theory Whereas other scholars have described identity as a tool for understanding learning (Gee, 2001), or have described learning as a crucial shaper of identity (Tobin & Roth, 2007), Sfard and Prusak's articulation of the function of identity stories makes it clear: Learning is Identity, and narrative is the glue that holds it all together.
007.4.12	Why the Digital Storytelling is said to present very brand new possibilities for identity formation?	The digital storytelling is one of the modern multimedia self-expression that present very brand new possibilities for identity formation. Internet as a Shared Experience Arena Screen media have become ingrained in the figured worlds of youth as an arena of shared experience (Alvermann & Hagood, 2000; Jenkins, 2006; Kitwana, 2002) Internet Impact on Opinion Formation Messages communicated through screen media have a strong impact in shaping youth's opinions about fashion, sexuality, and status and provide a rich source of narrative motifs that young people take up in their own storytelling to address issues in their pwn lives (Diamondstone, 2004, Dyson, 1997). Moreover, nowadays, a primary use of storytelling is devoted to support agency and the potential for transformative experience (Bruner, 1990; Holland, Lachicotte, Skinner & Cain , 1998) Finally, in terms of need satisfaction, the possibilities of multidimensional meanings within digital media become a vehicle through which youth can "amplify and widely disseminate their social consciousness" (Sandoval & Latorre, 2008).
007.4.13	What's the three predictable stages of expertise characterizing the novices progress, following The transformative potential of community-based organizations theory?	The transformative potential of community-based organizations as sites for youth development has been well documented (Cole, 1996; Heath & Mc Laughlin, 1993; Hull & Greeno, 2006; Hull & Katz, 2006; Larson, Walker & Pearce, 2005; McLaughlin, 1999; Mahoney, Eccles, & Larson, 2005; Sefton-Green, 2006) Novices progress through three predictable stages of expertise: (1) acclimation, (2) competence, and (3) proficiency (Alexander, 2003; Hatano & Oura, 2003; Sternberg, 2003).
007.4.14	Define accurately the three stages of The transformative potential of community-based organizations (CBO) theory.	Acclimation Acclimation, where learners have limited and fragmented knowledge, in the phase where subjects attend to surface-level features of the domain (Alexander, 2003) Competence Competence, where subjects have a basic working knowledge and are able to begin to think more deeply

		about their tasks. This deeping knowledge is indicated by the increase of learner interests (Alexander, 2003) Proficiency Proficiency is marked by an ability to see patterns, high engagement, and a desire to ask searching questions (Bransford, Brown, and Cocking, 1999)
007.4.15	A key design challenge in creating conditions for expertise development is finding ways to break down the often-static roles of "teacher" and "learner" (expert and novice) within educational learning environments. What are four attributes the Virtual Environments should have?	Involving These opportunities must involve active collaboration and dialogue through which participants negotiate and construct shared meaning across diverse experiences (Bhaba, 1994). Asymmetric The contribution of diverse bodies of knowledge, role types, and practices creates a space of asymmetrical relationships in which young people are given opportunities to construct identities as experts that integrate their individual experiences and values (Gutiérrez, Baquedano-Lòpez & Turner, 1997). Bridging The internet based environments provide opportunities for creating bridges between youth and adult knowledge and practices, as well as to create a space for learners to intentionally challenge and renegotiate the practices that are valued in school (Gutiérrez et. al., 1997, 1999; Gutiérez, Rymes & Larson, 1995; Moje et. al., 2004; Soja, 1996). Destabilizing Bhabha and others (Moje et al. 2004) have focused on the potential for internet encounters to destabilize dominant norms and assumptions by bringing togheter different interpretations and experiences.
007.4.16	What dimensions the literature stresses as risk factors for negative use of new technologies?	(1) Poor home environment, (2) Lack of parental oversight, (3) Depression, (4) Hystory of abuse, (5) Substance use (Schrock & Boyd, 2008).
007.4.17	What's the definition of Computer Literacy and Technological Fluency? And what their difference?	Since the early 1960s, the growing field of educational technology has developed assessment instruments to examine how learning with and about computers happens based on the construct of Computer Literacy and Technological Fluency. From an outsider's perspective, both constructs are similar and both address the questions of what it means to successfully use technology for teaching and learning (National Research Council Committee on Information Technology Literacy, 1999). Computer Literacy Computer Literacy is about developing instrumental skills to improve learning, productivity, and performance by mastering specific software applications for well defined tasks, and knowing the basic principles of how a computer works (Luehrmann, 1981, 2002; Hoffman & Blake, 2003; Livingstone, 2004) Technological Fluency Technological Fluency includes instrumental skills but focuses on enabling individuals to express themselves creatively with technology (Papert, 1980). It is described even as the ability to use and apply

		technology as effortlessly and smoothly as people use language
007.4.18	The ability to use technology meaningfully in the context of learning no longer rests only on skills but also on a variety of psychosocial and emotional factors. Recent research by Lerner et. al (2005) frames the various developmental assets into the six C's of positive youth development. Describe them.	The six C's of positive youth development Competence - An ability to use technology, to create or design projects using the computer in order to accomplish a goal, and to debug projects and problem solve. Confidence - A sense of oneself as someone which can act and learn to act successfully in a technology-rich environment and find help when necessary and have perseverance over technical difficulty. Caring - A sense of compassion and willingness to respond to needs and concerns of other individuals, to assist others with technical difficulties, and to use technology as means to help others. Connection - Positive bonds and relationships established and maintained by the use of technology Character - Awareness and respect of personal integrity and moral and social values while using technologies in responsible ways and an ability to express oneself using technology Contribution - An orientation to contribute to society by using and proposing technologies to solve community/social problems.
007.4.19	How the Digital Self is defined by Gee (2003)?	The creation of the Digital Self is described by Gee (2003) as a "projective identity" in which a person must "project one's values and desires onto the virtual character".
007.4.20	What's the definition of Griefer?	*Griefers* is a new term to describe online *players who cause intentional harm to random player*s (Dibble, 2008).

Module 007.5 – The Digital Self Hypothesys		
Id	Pay Off	Explanation
007.5.1	Why the Digital Self and Identity can be considered as Socially Oriented, Detemined, Enabling and Explorable?	(1) Socially Oriented Online behaviour is frequently regulated by the desire to build and mantain reputation and relationships: to increase social capital (Resnick, 2001). (2) Socially Determined Online reputations are developed through personal interactions in much the same way is offline (Steinkuehler, 2005). (3) Socially Enabling Each Identity allows to participate in the community in a different way and explore what the identity is like (Bruckman, 1996). (3) Socially Explorable Lenhart, Rainie, and Lewis (2001) reported that in their survey, almost a quarter of adolescents who used instant messaging indicated that they had pretended to be someone else.
007.5.2	What's the definition of Identity provided by Vybíral (2004)?	Identity (2) In psychology, identity is understood as a continual experience of the individual self; of that person's uniqueness and authenticity, as well as the identification with life roles and the experience of belonging to bigger or smaller social groups (Vybíral,

		2004).
007.5.3	What are the main author's studies about virtual identity, and what their main results?	Abelson (1998) Link Real-Virtual: Control of identity consequently facilitates apparent anonymity, full disclosure, and selective revelation of identity. At one extreme is apparent anonymity, at the other extreme is complete identification. These extremes mark the endpoints of a spectrum: we can have a strong link, weak link, or no link at all between our cyberspace and our real world identities. McKenna (2000) Identity and Role Construction: The Internet provides the opportunity for individuals to engage in greater identity and role construction than is possible in the non-Internet world. Yee (2007) Proteus Effect. Back (2010) Extended Real Life Hypothesis. MCCreery (2012) Virtual self as a projection of psychological characteristics.
007.5.4	What were the two hypotheses that moved the Back's studies (2010), and what were the results?	Idealized virtual-identity hypothesis: profile owners display idealized characteristics that do not reflect their actual personalities Extended real-life hypothesis: OSNs may constitute an extended social context in which to express one's actual personality characteristics. His results were consistent with the extended real-life hypothesis and contrary to the idealized virtual-identity hypothesis. These results suggest that people are not using their OSN profiles to promote an idealized virtual identity. Instead, OSNs might be an efficient medium for expressing and communicating real personality.
007.5.5	Describe the main result of the studies of McCreery.	Virtual Self as a Projection Findings suggest that although the existence of a virtual self appears likely, it does not appear to be an equivalent persona, but rather a projection of psychological characteristics (e.g., personality traits) that are necessary to work in conjunction with the content, purpose, constraints, and affordances of the environment in which the avatar exists.
007.5.6	What's the definition of Avatar provided by Yee (2009)?	AVATAR: "a perceptible digital representation whose behaviors reflect those executed, typically in real time, by a specific human being" (Yee, 2009)
007.5.7	What's the relation between Identitiy development and MMORPG, emerging from the studies of Ganesh abou	Digital Self and Avatar in MMORPG (I) Long-term players of online role-playing games incorporate the avatar into their self-concept. (II) Some gamers seem to identify even more strongly with their avatar than with their real self. (III) Sense of agency and control over the avatar as well as the intense emotional involvement of gamers during online role-playing may facilitate this kind of self-identification. (Ganesh, 2012)
007.5.8	What's the Proteus Effect?	Proteus Effect "The Proteus Effect builds on existing studies in self-perception theory, which showed that people infer their own attitudes and expected behaviors by observing

		themselves as if from a third party".
007.5.9	Describe the classical experiment by Frank and Gilovich demonstering the Proteus effect.	Frank and Gilovich Study on Proteus Effect (I) In their study, participants were asked to wear either black or white uniforms. (II) Participants were asked to select 5 games (from a list of 20 games) in which they would like to compete. The list of games had been previously rated in terms of aggressiveness. (III) It was found that participants in black uniforms selected games rated as being significantly more aggressive than participants in white uniforms.
007.5.10	What's the Proteus Effect Theorethical Interpretation by Lee?	In line with self-perception theory, it is argued that participants in black uniforms observed themselves as if from a third party to infer their expected attitudes and behavior. In this case, people in black uniforms are perceived to be aggressive. Participants in black uniforms thus inferred that they are aggressive and behaved accordingly. When presented with the choice of games, they selected the games that were more aggressive. This effect has also been replicated in a digital game-like setting, where users who were given avatars in a black robe expresses a higher desire to commit antisocial behaviors than users given avatars in a white robe (Yee, 2009)

Module 008.1 – From the Psychological construct of Privacy to the Digital Privacy		
Id	Pay Off	Explanation
008.1.1	Describe the multidimensional nature of the concept of Privacy.	Privacy There have been many attempts at definitions of privacy. • In a legal context, privacy is largely synonymous with a 'right to be let alone' (Warren and Brandeis 1890). • Others have argued that privacy is only the right to prevent the disclosure of personal information. • Many researchers have referred to the difficulties involved in trying to produce a definition (e.g. Burgoon et al. 1989) and despite various attempts to create a synthesis of existing literature (e.g. Parent 1983; Schoeman 1984) a unified and simple account of privacy has yet to emerge.
008.1.2	What's the dichotomy proposed by Westlin composed by Privacy as Secrecy, and Privacy as Cognitive Need?	Privacy as Secrecy Westin provides a link between secrecy and privacy and defines privacy as 'the claim of individuals, groups, or institutions to determine for themselves when, how and to what extent information about them is communicated to others' (1967). Privacy as Cognition At the psychological level, Westin states that privacy provides opportunities for self-assessment and

		experimentation and therefore the development of individuality. Specifically, Westin (1967) proposes four main functions of privacy.
008.1.3	Westin (1967) proposes four main functions of privacy, what?	Personal autonomy applies to the need for the development of individuality and the avoidance of manipulation by others; Emotional release refers to the need for opportunities to relax and escape from the tensions of everyday life in order to support healthy functioning; Self-evaluation is the application of individuality onto events and the integration of experience into meaningful patterns, Limited and protected communication refers to both the sharing of personal information with trusted others and the setting of interpersonal boundaries.
008.1.4	What's the definition of Privacy provided by Altman (1975)?	He defines privacy as … 'the selective control of access to the self' and believes privacy is achieved through the regulation of social interaction, which can in turn provide us with feedback on our ability to deal with the world, and ultimately affect our definition of self.
008.1.5	Burgoon et al. (1989) distinguish four dimensions of privacy, what?	Burgoon et al. (1989) distinguish four dimensions of privacy and define it using these dimensions as 'the ability to control and limit physical, interactional, psychological and informational access to the self or one's group' (Burgoon et al. 1989: 132). (1) The physical dimension, (2) The interactional dimension, (3) The psychological dimension, (4) The informational dimension
008.1.6	What's the Burgoon's definition of Physical Privacy?	The physical dimension Physical privacy is the degree to which a person is physically accessible to others. This dimension is grounded within the human biological need for personal space. Examples of violations to physical privacy include: surveillance, entry into personal space and physical contact.
008.1.7	What's the Burgoon's definition of Interactional Privacy?	The interactional dimension Interactional (or social/communicational) privacy is an individual's ability and effort to control social contacts (Altman 1975). Burgoon et al. (1989) summarize the elements of this dimension as control of the participants of, the frequency of, the length of and the content of an interaction. Non-verbal examples of violations to social privacy include close conversational distance and public displays of affection. Verbal examples include violations of conversational norms (e.g. commenting on mood or appearance) and initiating unwanted conversation.
008.1.8	What's the Burgoon's definition of Psychological Privacy?	The psychological dimension Psychological privacy concerns the ability of human beings to control cognitive and affective inputs and outputs, to form values, and the right to determine with whom and under what circumstances thoughts will be shared or intimate information revealed. As such, psychological privacy can either develop or limit human growth. Examples of violations to psychological privacy

		include psychological assaults through name-calling and persuasion.
008.1.9	What's the Burgoon's definition of Informational Privacy?	The informational dimension Informational privacy relates to an individual's right to determine how, when, and to what extent information about the self will be released to another person (Westin 1967) or to an organization. According to Burgoon et al. (1989), this dimension is closely related to psychological privacy: however, the control differs from the individual self-disclosure associated with psychological privacy because it is partly governed by law/custom and as it often extends beyond personal control. Examples of violations to informational privacy include going through another person's mail and sharing personal information with others.
008.1.10	DeCew (1997) also reflects the multidimensional nature of privacy in her definition: however, she distinguishes only three dimensions, what?	The informational dimension Informational privacy covers personal information such as finances, medical details and so on that an individual can decide who has access to and for what purposes. If disclosed, this information should be protected by any recipients of it. By protecting informational privacy individuals avoid invasions (or potential invasions) to their privacy. The accessibility dimension Accessibility privacy refers to physical or sensory access to a person. It 'allows individuals to control decisions about who has physical access to their persons through sense perception, observation, or bodily contact' (DeCew 1997: 76–7). The expressive dimension Expressive privacy 'protects a realm for expressing one's self-identity or personhood through speech or activity. It protects the ability to decide to continue or to modify ones behaviour when the activity in question helps define one-self as a person, shielded from interference, pressure and coercion from government or from other individuals' (DeCew 1997: 77). As such, internal control over self-expression and the ability to build interpersonal relationships improves, while external social control over lifestyle choices and so on are restricted (Schoeman 1992).
008.1.11	Sparck-Jones (2003) labels a number of specific properties of the information collected which have consequences for privacy, what?	(1) Permanence - Once recorded, information rarely disappears. As such, fine-grained, searchable, persistent data exists on individuals and there are sophisticated, cheap, data-mining devices can also be used to analyse this information; (2) Volume - The ease with which information is now recorded using technology results in huge data sets. Furthermore, storage is cheap, therefore large volumes of information sets can exist indefinitely; (3) Invisibility - All information collected seems to exist within an opaque system and so any information collected may not be 'visible' to whom it relates. Even if information collected is available to a person they may not be able to interpret it due to the use of incomprehensible coding; (4) Neutrality - The ease with which information can be collected means that any

		qualifying information may be lost. So information may be absorbed regardless of its metadata. i.e. there are no distinctions between intimate, sensitive information and non-sensitive information; (5) Accessibility - There are a number of tools for accessing information meaning that any information collected can possibly be read by any number of people. The ease with which information can be copied, transferred, integrated and multiplied electronically further increases this accessibility; (6) Assembly - There are many effective tools for searching for and assembling and reorganizing information from many quite separate sources; (7) Remoteness - Information collected is usually both physically and logically away from the users to whom it refers. However, this information can be accessed and used by people who the user does not know
008.1.12	What states the Privacy Paradox?	The Privacy Paradox Privacy is a prerequisite for disclosure, and yet, the process of disclosure serves to reduce privacy.
008.1.13	What states the Digital Privacy Paradox?	The Internet may, in some instances, serve to solve this paradox – disclosure and intimacy can be achieved without concurrent increases in vulnerability or losses of privacy (see Ben-Ze'ev 2003). The Digital Privacy Paradox But this introduces a further paradox – the Internet, and new media in general, have tended to erode privacy through, amongst others, the processes we outline above (e.g., Real Self Disclosure).

Module 009.1 – Netified: Social Cognition in Crowds and Clouds		
Id	Pay Off	Explanation
009.1.1	Why the ICTs is considered a New Social Layer?	ICTs as a New Social Layer Technological systems can be defined as a new Social Layer (A new social operating system), characterized by complex structure, evolution, and deep interaction with societal and social consequences (Bauer, Patrick, 2004).
009.1.2	What's the Netification process?	Netification Online social platforms catalyzed the process of netification in which thoughts, conversations, creativity, and relationships materialize on network applications where they persist, as well as await research
009.1.3	What are the definitions of Crowd and Cloud?	Crowd On the web, a crowd is a networked social cognition, bringing together the minds and creativity of many people. Cloud The cloude describes large amounts of information which can now be aggregated and always made accessible.
009.1.4	Provide a general definition of Social Cognition.	Social Cognition SC describes the mutual influences between cognition and social life. Cognition is influenced fundamentally by social environment. Social facilitation (Guerin, 2009), social loafing (Forsyth, 2010), social roles, and

		mental representations has showns distinct social influences on cognitive ability and task performance (Kunda, 1999). Social Cognition is also about the cognitive underpinnings of social behavior (Devine, Hamilton, & Ostrom, 1994). In short, social cognition research explores the influence of the social environment on cognition, and of cognition on social behaviour.
009.1.5	What's the Filter Bubble Effect?	Filter Bubble Effect "The Filter Bubble" is a phenomenon which defines the effect produced by the personalization by search algorithms, that confines our cognition to the limits envisioned by search software developers (Parisers, 2011)
009.1.6	What's the Glocalization?	Glocalization Communities have shifted to a "Glocalized" state, where both local and global connections are important (Wellman, 2002).
009.1.7	Why the Information Dynamics is so important for human beings?	The Importance of Information Dynamics On-line Information bonds people online (Seely Brown & Duguid, 2000) Engagement with information is a form of social activity, it serves as cultural glue, be it via reading, listening, speaking, or reviewing. In itsel just an evolutionary stable trait of human beings.
009.1.8	What's the On-ne Narcisistic Potential?	On-Line Narcisistic Potential The construction of a personal home page, the introduction one is required to make when entering an online forum, the short descriptions many provide as a rite of inclusion into various social software arenas, the constant updates one posts to social networking sites (SNSs), and the profiles one accumulates for oneself willingly or not on a variety of online systems, all have a narcisisstic potential (Mehdizadeh, 2009; Ong et al., 2011; Ryan & Xenos, 2011)
009.1.9	Why the On-line impression formation has been considered faulty?	Faultiness of On-line Impressione Formation Pioneristic works concluded that online impression formation is faulty and wrought with stereotypical and prejudiced assumptions used to "fill in the blanks" (Albright, 2001) of the reduced social cues, and terms such as "fluid identities" (Turkle, 1995).
009.1.10	What's the most important relation between On-line Self Presentation and Identity?	Self-Presentation and Self Identity More recent reasearch approached these questions in a more nuanced manner, and showed that online self-portrayals are important, that these acts of online self-presentation actually influence the construction of self identity, and that gaps between these portrayals and what others perceive as the truth have significant negative consequences (Boucher, Hancock, & Dunham, 2008; DeAndrea & Walther, 2011)
009.1.11	Why the On-line Self-Presentation is said to can be Strategic and Continuous?	On-line Self-Presentation as a Strategic Process Research shows that senders sometimes try to optimize their self-presentation by mentioning information they perceive as impressive, while holding back information which is less so (Walther & Burgoon, 1992). On-line Self Presentation as Continuous Process

		Impression formation is a continuous process, often based on the combination of information attained over time from a variety of online and offline sources (DeAndrea & Walther, 2011)
009.1.12	Why the On-line Impression Formation is said to be Multifactorial?	Multifactorial Nature of On-line Impression Formation Online impression formation of members of SNS could be influenced not only by what they post about themselves, but also by what people they are linked with ("friends") say about them, and by the physical appearence of these friends (Walther, Van Der Heide, Kim, Westerman, & Tong, 2008), or by the number of friends they are linked to (Tong, Van Der Heide, Langwell, & Walther, 2008).
009.1.13	What's the Social Information Processing Theory (SIP) contribution to the understanding of On-line communication dynamics?	SIP and On-line Communication Dynamics The Social Information Processing (SIP) theory posits that communicators exchange social information even through the content (e.g., emoticons), style, and timing of messages (on-line)" , expecially when the virtual setting affects (e.g., impaired, amplify) the communication ecology (Walther & Parks, 2002)
Module 009.2 – On-line Groups: an introduction		
Id	Pay Off	Explanation
009.2.1	Wath was the classical classification of On-line groups at the beginning of the 21th century?	On-Line Group "Classical" Classification All social cognitive aspects of interacting with others as well as self-perception are repeated and compounded in online groups. Virtual communities (Rheingold, 1993) Virtual teams (Lipnack & Stamps, 2000) Virtual groups (Wallace, 2001)
009.2.2	What was the classical definition of Virtual Community proposed by Rheingold (1993)?	Virtual Community "Classical Definition" A virtual community is a social network of individuals who interact through specific social media, potentially crossing geographical and political boundaries in order to pursue mutual interests or goals. Some of the most pervasive virtual communities are online communities operating under social networking. Virtual communities all encourage interaction, sometimes focusing around a particular interest or just to communicate. Some virtual communities do both. Community members are allowed to interact over a shared passion through various means: message boards, chat rooms, social networking sites, or virtual worlds (Rheingold, 1993).
009.2.3	What was the definition of Virtual Team?	Virtual Team"Classical Definition" A virtual team refers to a group of individuals who work together and rely on ICTs communication in order to collaborate. Powell, Piccoli and Ives (2004) define virtual teams as "groups of geographically, organizationally and/or time dispersed workers brought together by information and telecommunication technologies to accomplish one or more organizational tasks." According to Ale Ebrahim et. al. (2009), virtual teams can also be defined as "small temporary groups of geographically, organizationally and/or time dispersed knowledge workers who coordinate their work predominantly with electronic information and

		communication technologies in order to accomplish one or more organization tasks."
009.2.4	What was the definition of Virtual Group?	Virtual Group "Classical Definition" A virtual group refers to a group of individuals who socialize and interact adopting ICTs media. It requires, as the psychological groups in real life, the existence of social norms, roles, status, common goals, interdependency, and a feeling to belong to an entity characterized by a Social Identity.
009.2.5	Does the Social Norms Dynamics differ between Real and Virtual groups?	Norms and Interdependency Like any group, online group too are social units in which the participants are interdependent, and behave accordingly to explicit and implicit social norms *(Spears, Postmes, Lea & Wolbert, 2002)*.
009.2.6	Can Social loafing and social compensation dynamics affect even virtual groups?	Social Compensation, and Social Loafing Online groups show, just like other groups, both examples of social compensation as well as social loafing, and even effects such as crowding and deindividuation have been documented (Spears, Postmes, Lea & Wolbert, 2002)
009.2.7	What's the definition and diffusion of Lurking On-line?	Virtual Social Loafing as Lurking Lurking is a phenomenon quite recently revealed and defined as the behaviour of spending more or all time observing the group's goings on, without contributing. The reported proportion of lurkers varied from around the 90% to around the 50% (Katz, 1998; Mason, 1999; Nonnecke & Preece, 2000; Soroka, Jacovi, & Ur, 2003).
009.2.8	What's the knowledge economy?	Knowledge Economy Human work is increasingly focused on producing knowledge goods (Amichai_Hamburger, 2013)
009.2.9	What are the Information and Virtual Cohnitive Overload?	Information Overload Another consequence of the increasing ability for instant communication is the challenge of "information overload" (Eppler & Mengis, 2004), as well as of "Social information overload" (Lincoln, 2011) Virtual Cognitive Overload Effects of exceeding "cognitive processing load" limits are reported in large scale empirical measures of online behaviour (Jones & Rafaeli, 1999, 2000a, 2000b; Jones, Ravid, & Rafaeli, 2001a, 2001b; Sudweeks et al., 1998).
009.2.10	What's the definition of, and what factors determine, the "Virtuality" of a Group within the framework of Bell and Kozlowski?	Spatial configuration and communication media differentiate conventional teams (proximal, face-to-face communication) from virtual teams (distributed, technology-mediated communication). The framework further distinguishes degrees of virtuality based on: • member roles (multiple vs. singular), • lifecycle (discrete vs. continuous), • boundaries (multiple vs. singular) and • temporal distribution (distributed vs. real time).
009.2.11	What factors determine, the "Virtuality" of a Group within the framework of Griffith et al., and what kind of groups such a framework	Griffith et al describe teams as more or less virtual based on three dimensions: • level of technology support (low to high), • percentage of time apart on task

	describes?	• physical distance (close to far). From these dimensions, three types of teams emerge: 1. traditional (i.e. face-to-face), 2. virtual (all time on task spent apart) 3. hybrid, which mixes traits of the two other types of teams.
009.2.12	What are the Collective Intelligence Factor and the Mutiple Perspective Potential of Virtual Groups?	The social and psychological dynamics of group collaboration have lead to the development and refinement of most theories of CMC. Research in wide ranging domains, from knowledge-sharing to online personal relationships, have their roots in the dynamics of group interaction in online settings. Collective Intelligence Factor A common rationale for the use of groups for decision-making and problem-solving via the internet, is that groups make better decisions than individual when facing complicated problems (Schweiger & Sandberg, 1989) Multiple Perspective Potential of Virtual Groups High-quality decisions by group facing complex, ambiguous situations often require multiple perspectives (Hoffman & Maier, 1961; Triandis, Hall & Ewen, 1965). the expression of contrary viewpoints (Nemeth, 1986), and the evaluation of multiple alternatives (Schweiger, Sandberg & Ragan, 1986)
009.2.13	What's the first-attraction magnification effect?	First-Attraction Magnification Effect The absence of nonverbal cues about one another's physical characteristics actually has the potential to magnify the attraction members experience toward one another
009.2.14	What are the bad and the good aspects of absence of non-verbal cue, during the virtual group formation?	Bad Side From one side, the absence of nonverbal cues in online groups should interfere with impression formations, and such groups would be impersonal and sterile (Kieasler, Siegel & Macguire 1984) Good Side From another side, group members experiencing depersonalization but aware of some common characteristics they all share or they know (e.g., they are all psychology students), are subjected to an overarching social identity leading them to experience a common link.
009.2.15	What's the Internet Supergroup Identity Potential?	Internet Supergroup Identity Potential The combination of not sensing interindividual differences, and sensing and overarching similarity to one another by virtue of belonging to a supergroup identity, may lead online group members to form exceptionally strong attraction to the group.
009.2.16	In Virtual Grup formation, what's the relation between Anonimity, Participation and Stereotypes with Attraction dynamics?	Anonimity and Attraction Such research has produced predicted interaction effects of visual anonimity/identifiability by group/personal identity, with conditions involving both visual anonimity and group identity providing the greatest scores on attraction (Lea, Spears & De Groot, 2001) Participation and Attraction In CMC groups, the more frequently a group member

		participated the more the others liked the member (Weisband & Atwater, 1999) Stereotypes and Attraction In FTF interactions there was no significant relationship between participation frequency and liking, and it appears that liking may be based on idiosyncratic characteristics. At the contrary in CMC groups the more protypical a member is the more well liked that person is.
009.2.17	Describe how The social information processing (SIP) theory describes how people get to know one another individually online despite the absence of nonverbal cues?	The SIP theory proposes that when nonverbal cues are unavailable, communicators adapt their interpersonal (as well as instrumental) communication to whatever cues remain available through the channel that they are using, such as emoticons (Derks, Bos & Von Grumbkow, 2007), and language content and styke characteristics.
009.2.18	Define the Task-Oriented and the Socioemotional Communication within a (small) psychological group.	Task-Oriented Communication The first, task-oriented communication, includes messages by which group members advance the exchange of information they need, to define the problem and its requirements, to articulate potential solutions, and to deliberate over the relative merits of alternatives. Socioemotional Communication The second type of communication, socioemotional communication, focuses on the emotional and social processes in groups, such as expressing agreement or disagreement, adding levity, and negative exchanges such as blming or insults. (or: instrumental versus maintenance messages, for McGrath, 1984).
009.2.19	What's the relation between Socioemotional communication and quality of decision making within small virtual groups?	Socioemotional communication and quality of Decision Making Most studies found that the lack of socioemotional responses in short-term in online groups was associated with reduced frequency and/or quality of decision.making (Walther, 1996)
009.2.20	What's the relation between Time Pressure and Socioemotional Communications in Virtual Groups?	Time Pressure reduces Socioemotional Communication (even) On-line When online groups meet using real-time, text based discussion systems, and they are provided little time to reach a group decision, members exhibit less socioemotional communication, and generate task-oriented messages almost exclusively. The amount of time pressure that online groups experience is directly related to the proportion of socioemotional communication their members exchange: when online groups perceive they have little time time reach a decision, they exchange less socioemotional messages (Reid, Ball, Morley & Evans, 1997).
009.2.21	Describe the Walther and Bunz Model of Digital Trust.	Walther and Bunz Model of Digital Trust The first rule of Virtual Groups is Start Immediately : because information exchange in CMC operates at a slower rate than FtF communication. The second is Communicate frequently : to compesate the relatively slow information exchange in CMC, by

		communicating a great deal. Rule three is to Multitasking getting organized and generating substantive contributions The fourth rule is Overtly acknowledge having read one another'smessages The fifth rule is be explicit about what you are thinking and doing Rule six suggests Make interim deadlines and stick to them

Module 010.1 – Virtual community participation and motivation		
Id	Pay Off	Explanation
010.1.1	Describe the Virtual Communities Public Dilemma of Kollock and Smith.	Virtual Communities Public Dilemma of Kollock and Smith Kollock and Smith (1996) have noted that online communities are subjected to a public good dilemma meaning that an individual using a public good (e.g., knowledge contribution) does not undermine the ability of others to use the same resource.
010.1.2	Why the Online participation can be considered Risky but Fruitful?	*Risky* *Because participation in online communities is often open and voluntary, there is no assurance for contributors that those they are helping will ever contribute anything in return (Rheingold, 1993) Fruitful Members' willingness to contribute their time, energy, knowledge and emotional encouragement, is sustained only when the perceived or imagined benefits of participating have a greater value than the perceived costs (Tiwana and Bush, 2005; Butler et al., 2007; Wang, 2007)*
010.1.3	What's the definition of Free Riders?	Free Riders Within this scenario, Free Riders is a lable indicating those individuals that have the privilege of benefiting from others' contributions, and at the same time avoiding the costs associated with active participation.
010.1.4	A large body of literature have investigated what motivates people to contribute with their effort, time and knowledge (Butler, 2001). Describe the factors introduced by the Butler's review.	Factor Motivating People On-line Contribution • Individual-related motivations such as personal benefits, needs, attitudes, etc • Community-related factors focusing on aspects such as shared norms, shared purposes, share identity, trust and social capital • Structural characteristics of these communities such as community size, membership, roles • Technology related issues • Context related factors including those aspects such as competition between online communities, cultural differences and the environmental and organizational issues affecting member's online community particpation.
010.1.5	What are the Individual Related Motivations usually seeding the virtual participation dynamics?	Individual-related motivations • Self Interests and unless tangible or intangible returns are in place, people will not be willing to participate (Wasko & Faraj, 2000)

		• Members are more likely to participate when tey receive extrinsic rewards such as personal Information benefits (Wasko & Faraj, 2000; Ardichcili et al., 2003) • Economic Incentives (Lerner & Tirole, 2002; Kankanhalli et al., 2005; Bjorkeing et al., 2009)
010.1.6	Describe some community related motivations enhancing Virtual Group Participation dynamics.	Previous studies suggested that when knowledge is seen as a public good owned and maintained by the community members, participation in online communities will not be motivated by self-interest but by community interests, e.g., altruism, reciprocity, sense of community, identify and norms, and moral obligation. (Wasko & Faraj, 2000; Bruce et al., 2005; Zhou, 2011)
010.1.7	When an On-line group transforms into an On-line community?	From On-line Group to On-line Community An online group become an "online community" when the interaction and togetherness between group members lasts long enough to form a set of habits and conventions (Lee & Lee, 2010).
010.1.8	What are the three dimensions proposed by the Social Capital Theory, characterizing the Social Capital Factors?	Social Capital Theory and On-line participation From the Social Capital Theory perspective, there are three dimensions of social capital factors : (1) Structural, (2) Relational, (3) Cognitive (Nahapiet & Ghoshal, 1998).
010.1.9	What are the Structural Dimensions of the Social Capital Theory?	Social Capital Theory: Structural Dimensions The Structural dimension of SC refers to the overall pattern of connections between actors. The most salient manifestations of this dimensions are: (1) Network ties, such as strong and weak ties; (2) Network morphology, of configuration, describing the pattern of linkages in terms of such measures as density, connectivity, and hierarchy.
010.1.10	What are the Relational Dimensions of the Social Capital Theory?	Social Capital Theory: Relational Dimensions The relational dimension of social capital refers to the assets created and leveraged through relationships such as respect and friendship, which bond the actors together and influence their behaviour. The most important facets of this dimension are: (1) Trust and Trustworthiness, (2) Norms and Sanctions, (3) Identity and Identification
010.1.11	What are the Cognitive Dimensions of the Social Capital Theory?	Social Capital Theory: Cognitive Dimensions The cognitive dimension of social capital refers to those resources that provide shared representative actions, interpretations, and systems of meaning among parties. The most representative facets include: (1) Shared language and codes, (2) Shared narratives.
010.1.12	Why SNS appear as to support the Social Capital issues of their users?	SNS and Social Capital SNS websistes are web-based services that allow individuals to (Boyd & Ellison, 2008): • Construct a public or semi-public profile within a bounded system • Articulate a list of other users with whom they share a connection • View and traverse their list of connections and those made by others within the system
010.1.13	What's the definition of Social	Social Presence

	Presence?	The term Social Presence is defined as the degree to which a medium facilitates awareness of the other person and interpersonal relationships during the interaction (Fulk, Schmitz, & Steinfield, 1990). The social presence theory postulates that:
010.1.14	What's the effect of Social Presence on participation in virtual environments?	Participation, Communication and Social Presence The inability of mediums to transmit nonverbal cues has a negative effect on interpersonal communication, and participation (Short, Williams & Christie, 1976) Offline interaction support Offline interaction helps virtual community members understand, trust, and identify with one another providing a stronger base for online community (Koh, et al., 2007)
010.1.15	What's the relation between Media Richness and participation?	Media Richness Theory The Media Richness Theory (MRT) posits that rich communication channels can bridge different frames of reference and make issues less ambiguous, supporting higly affective interpersonal interactions (Daft & Lengel, 1986; Roberts, Lowry & Sweeney, 2006)
010.1.16	What's the impact of ICTs on Social Connectivity?	Social Connectivity Computer mediated communication networks can create communities based on interest "rather than by geography, social position, and prior acquanintance", thus creating a significant impact on online social group connectivity (Culnana, Markus, 1987; Haythornthwaite, 2005).
010.1.17	What's the Latent Tie Facilitation Effect?	Latent Tie Facilitation Effect Social connectivity through OSN sites facilitates the latent tie connectivity on which weak and later strong ties may grow (Haythornthwaite, 2005)
010.1.18	What's the relation between Effectiveness of Communication and Social Connectivity factor?	Effectiveness of Communication Improvement The social connectivity through OSN sites facilitates the effectiveness of communication. For instance, a network generalized exchange (e.g., blogging site) is a more effective structure than group-generalized exchange (e.g., mailing list) (Sohn et al., 2007)
010.1.19	What's the definition of Latent Tie?	*Latent Tie* *In the Latent Tie Theory latent ties refer to social ties that are technically possible but not yet activated socially (Haythornthwaite, 2002)*
010.1.20	Introduce the Transactional Distance Theory.	Transactional Distance Theory Transactional distance theory states that when an instructional designer makes decisions, these decisions will result in a certain amount of structure, dialog and autonomy. These amounts can be either unwitting consequences of the instructional design process, or the result of conscious instructional design decisions. These variables all interact to create transactional distance, that can be defined as "a psychological and communication space to be crossed, a space of potential misunderstanding between the inputs of instructor and those of the learner." Thus, the utility of the theory is that it provides guidance to instructional designers as to how to design the course: e.g. how much structure, dialog, and autonomy to build into the course, so as to

		minimize transactional distances and thereby maximize learning outcomes (Moore, 1970)
010.1.21	What's the effect of Communication on Transactional Distance?	Effects of Communication on Transactional Distance Theory posits that when the communication between instructor and learner increases, their transactional distance decreases (Moore & Kearsley, 1996)
010.1.22	What's the first way to increase the Structural Social Capital Development On-line?	Structural Social Capital Development Structural social capital development relates to the formation and strengthening of network ties and configuration.
010.1.23	What are the ICTs features that demonstered to support Structural Social Capital Development?	New Media Potential for Social Change New media features for structural social interaction induce social change by enabling new forms of communication and cultivating distinctive skills and sensibilities (DiMaggio et al. 2001) Social Ties Maintenance Example, the social browsing and social search features make the maintaining of social ties cheap and easy, by means of "remove barriers to interaction" or "expanding interaction networks" (Resnick, 2002) ICTs adaptivity potential Social recommending feature based on user data analysis suggests opportunities for establishing social ties. ICT Awareness Features The awareness feature on SNS automatically reminds individuals if their friends are in the same virtual place, thus creating a virtual co-presence among individuals who have already built up a social tie. Social Space Features The member-centered or topic-centered spaces allows individuals to become "boundary spanners", "roamers", or "out-posts" who take care of various facets of social network configurations (Wenger, 1998)
010.1.24	What's the definition of Boundary Spanners?	Boundary spanners In social sciences research, boundary spanning is a term to describe individuals within a system who have, or adopt, the role of linking the community's internal networks with external sources of information. While the term was coined by Tushman, (1977), the concept was being developed by social scientists from the late 1950s onwards.
010.1.25	What's the definition of Roamers?	Roamers In social sciences research, Roamers is a term to describe individuals within a system who have, or adopt, the role of go from place to place , creating or reinforcing an informal web of connections. Mainly the roamers play a fundamental role in the community's internal networks , but they can even interact with subjects outside its community.
010.1.26	What's the definition of Out-Posts network members?	Out-Posts In social sciences research, Out-Posts is a term to describe individuals within a system who have, or adopt, the role of bring back news from the front and explore new territories, creating or reinforcing connections mainly toward the external networks.

010.1.27	What are the ICTs features Supporting Relational Social Capital Development?	Althought there are several sub-dimensions of relational social capital, their developments are not directly supported by SNS features. However, SNS may take part in the control or manipulating of the process. ICTs' Productive Risk Taking Certain SNS features are related to the control or communication of identity. Interactions where people are not informed about each other's identity can sometimes allow people to transcend their stereotypes or take productive risks (Turoff, 2001) ICTs' Emotional Control Potential The suppression of certain sensory information (e.g., smell, tone of voice, facial expression) can, in some circumstances, allow people to transcend emotional reactions that would interfere with collaborating with each other (Resnick, 2002) ICTs' Access controls Access controls are another example of restricting information flows (Resnick, 2002): 1. It can create a sense of boundaries reducing the risks of particpation and fostering a group identity among those who do no have access 2. According people different access privileges can reify roles ICTs' Dependency Management Reciprocity can be facilitated by dependency management, such as the notification feature. For example calendar programs remind people of appointments
010.1.28	What are the two fundamental benefits of ICTs' potential of Access Control?	ICTs' Access controls Access controls are another example of restricting information flows (Resnick, 2002): 1. It can create a sense of boundaries reducing the risks of particpation and fostering a group identity among those who do no have access 2. According people different access privileges can reify roles
010.1.29	How can be defined the On-line Cognitive Social Capital Development?	Cognitive Social Capital Development Cognitive social capital development relates to the enhancement of shared language, codes, and narratives
010.1.30	Make an example of ICTs feature Supporting Cognitive Social Capital Development?	Explicit Feedback Potential On of the SNS features is the "Explicit Feedback" where individuals comment on the quality of each others' posts in an explicit way (e.g., tagging, share amd like buttons on facebook). Such activities can promote the publicity and diffusion of the posts, and this direct other members to view the same narratives
010.1.31	How the ICTs' features can support the Multi-Dimensional Social Capital Development?	Multi-Dimensional Social Capital Development ICTs' features can support Multi_Dimensional Social Capital Development in several ways, including: 1. Presenting a cognitive map to new members 2. Contributing to the development of roles and a sense of collective identity (people can reflect on past patterns of interactions) 3. Contributing to the development of trust (the visibility of interaction logs and explicit

		feedback can create accountability)
010.1.32	What are the Self-related motivational antecedents of Online Participation related with the Social Network usage?	The self related motivations derive from a core set of individual needs tath the user wants to fulfill. Applied to the use of Online Social Networks these needs include: Self-related motivational antecedents The Information need The Instrumental need The Self-discovery need The entertainment need
010.1.33	Describe the Self Related Motivational antecedents of Online Participation labeled Information Need.	Information Need The information need are derived from getting and sharing information in the virtual community, such as the needs of information retrieval, information giving, and conversation capabilities (Flanagin & Metzger, 2001)
010.1.34	Describe the Self Related Motivational antecedents of Online Participation labeled Instrumental Need.	Instrumental Need The instrumental need is derived from accomplishing specific tasks, such as solving a problem, generating an idea, influencing others regarding an issue or product, validating a decision already reached or buying a product through online social interactions (Dholakia, et al., 2004)
010.1.35	Describe the Self Related Motivational antecedents of Online Participation labeled Self-Disclosure Need.	Self Disclosure Need The self disclosure need derives from self realization values that can be traced back to the work of the eudaemonists, existentialists, and other related work in studying the philosophy of personal identity (Waterman, 2004). It is a type of individual intrinsic motivation that the individual needs to form a personal identity.
010.1.36	Describe the Self Related Motivational antecedents of Online Participation labeled Entertainment Need.	Entertainment Need The entertainment need is derived from the value of having fun and relaxation through playing or otherwise interacting with others. Studies have shown that many participants do this for entertainment through exploring different fictional identities, as well as encountering and solving virtual challenges (McKenna & Bargh, 1999)
010.1.37	What are the Socially-related motivational antecedents of Social Network usage?	The socially-related motivations are based on a set of social needs derived from the value of viewing oneself in relation to other group members (Dholakia, et. al., 2004) Socially-related motivational antecedents The Need of maintaining Connectivity and Social Status The Need of Exerting Social Influences The Need of Fulfilling Social Cognitions
010.1.38	How the Social Integration Perspectives explains the Socially Motivational Antecedents of Online Participation?	Social Integration Perspective In a broader view, social integration is a dynamic and structured process in which all members participate in dialogue to achieve and maintain peaceful social relations. Social integration does not mean forced assimilationSocial Integration perspective includes the view that individuals need social support, social influence, and social engagement so that their beliefs can be reinforced for their well-being. Maintaining interpersonal connectivity can benefit individuals with social support, friendship and intimacy. Empirical studies have found that engaging in virtual

		communities can help members stay connected, and provide greater benefits for users experiencing low self-esteem and low life satisfaction (Ellison, Steinfiels & Lampe, 2007).
010.1.39	How the Social Exchange Perspectives explains the Socially Motivational Antecedents of Online Participation?	Social Exchange Perspective Social exchange theory (SET) is a social psychological and sociological perspective that explains social change and stability as a process of negotiated exchanges between parties. SET posits that human relationships are formed by the use of a subjective cost-benefit analysis and the comparison of alternatives. SET claims that: The anticipation of social rewards and punishments forms the incentive for individuals to exchange favours or act in a collective way (Gachter & Fehr, 1999). The value of enahncing social status is derived from contributing to the community so as to gain acceptance and reciprocity of other members, and as a result, enhance one's social status within the community (Baumeister, 1998)
010.1.40	What's the relation between On-line participation and the need of exerting social influence?	The Need of Exerting Social Influences The socially-related motivations can also derive from social influences, which Bagozzi and Dholakia (2002) summarize into: • Compliance (i.e., normative influence of others' expectations) • Internalization (i.e., congruence of one's goals with those of group members) • Identification (i.e., conception of one's self in terms of the group's defining features)
010.1.41	How Social Identity and Social norms can play the role of Socially Motivational Antecedentes of Online participation?	The constructs frequently used to study social influences in virtual communities are Social Identity and Social Norms. Social Identity Social Identity captures the main aspects of an individual's identification with the group in the sense that the person comes to view himself or herself as a member of the community , as belonging to it (Dholakia, et al., 2004) Social Norms The Social Norms can be in the form of the community norm or the group norm which is defined as "the understanding of, and a commitment by, the individual member to a set of goals, values, beliefs, and conventions shared with other group members" (Dholakia, et al., 2004)
010.1.42	Two types of expectation and belief have been identified as the major cognitive forces guiding the Online participation in order to satisfy the need of fulfilling social cognitions. What?	According to the Social Cognitive Theory, a person's behaviour is partially shaped and controlled by the influences of social network and the person's cognition, such as expectations and beliefs (Bandura, 1989) Two types of expectation and belief have been identified as the major cognitive forces guiding behaviour: (1) Outcome expectations, (2) Self-Efficacy
010.1.43	What can be summarized the Self and Socially-related motivational antecedents of On-line participation?	Self and Socially-related motivational antecedents • The Individuals' expectations and beliefs are closely related to the individuals' intrinsic needs and personal characteristics

		• The assets embedded within the interpersonal linkages, such as trust, group norms and group identification (Chiu, et al., 2006) are both shaped by social influences. • Multi-dimensional trust for environmental influences, as well as self-efficacy and outcome expectations for personal influences, show significant effect on knowledge sharing (i.e., participation) in professional virtual communities (Hsu, et al., 2007)
010.1.44	Describe how the Psychological constructs belonging to the Social Capital Structural Dimensions promote On-line participation (i.e., Knowledge sharing facilitation).	Centrality - High levels of network centrality enable individuals to contribute more helpful responses Social Interaction Ties - A cost effective way of assessing a wider range of knowledge sources Social Interactivity - Opportunity to interact and network with knowledgeable members
010.1.45	Describe how the Psychological constructs belonging to the Social Capital Relational Dimensions promote On-line participation (i.e., Knowledge sharing facilitation).	Trust - Trust creates intrinsic motivation to share Norms of Reciprocity - Participants expect mutual reciprocity which can justify their effort in KS activities Reciprocity - When there is a trong norm of reciprocity in the collective, individuals trust their contribution effort will be reciprocated, thereby rewarding and ensuring ongoing contribution Identification - Sense of belong and positive feeling toward community Perceived Identity Verified - Similar identity helps to build relationships with each other Committment - Committment to a collective conveys a sense of responsibility to help others.
010.1.46	Describe how the Psychological constructs belonging to the Social Capital Cognitive Dimensions promote On-line participation (i.e., Knowledge sharing facilitation).	Knowledge tracking fulfillment - System supported ability to track knowledge activities. Shared Language - Facilitating common understanding of collective ways of acting in virtual community. Shared vision - Common goals, interests and visions that members of a virtual community share will help them to see the meaning of knowledge Self- related expertise - Higher levels of expertise enable individuals to provide more useful advice Tenure in the field - Longer tenure in the shared practice are likely to enable individuals to better understand the practice and share relavant knowledge
010.1.47	Describe the Trust Framework of Ardchvili to study the Intrinsic motivations to the Virtual Communities Participation.	Trust relates to how an individual expects members in a virtual community to follow an instrinsic set of rules, norms and principles (Chiu, 2006) Trust Framework of Ardchvili Ardchvili (2008) defines a framework dedicated to this: • Emotional benefits: sense of usefulness and by being able to contribute • Intellectual benefits: developing expertise and expanding perspective • Establishing ties with others: building the sense of community
010.1.48	Describe the Rheingold Conjecture of ICTs Social Goods.	Rheingold believes that the technology that underlies the computer mediated communication enables and stimulates new activities between people Rheingold Conjecture of ICTs Social Goods

		Looking for a group's collective goods is a way of looking for the elements that bind isolated individuals into a community (Rheingold, 2000). The three types of goods are: (1) Social network capital, (2) Knowledge capital, (3) Communion. A good example of knowledge capital is Wikipedia, a worldwide virtual community of contributed and interactive knowledge.

Module 010.2 – The Virtual Community		
Id	Pay Off	Explanation
010.2.1	What's the definition of Virtual Community?	Virtual Community In the popular domain, Virtual Community, is a term that can be used loosely to describe a variety of social group interacting on the internet, ranging from massively multiplayer online game (MMOG), online discussion forums, blogs, to a wide variety of social media sites or social networking sites. Nevertheless, despite its growing popularity in theory and in practice, there is no consensus regarding the appropriate definition or types of virtual communities (Porter, 2004).
010.2.2	What's the fundamental assumptions of Technological Determinism perspective about Virtual Communities?	Technological Determinism Technological innovations are the fundamental sources of change in human society. New technology Transform human behaviour and organization at every level: from day to day personali interactions to family lives and from social organizations to the formation of culture (Howard, Jones, 2004)
010.2.3	What's the fundamental assumptions of Social Constructivism perspective about Virtual Communities?	Social Constructivism SC empasizes the role of human agency and social context in the development and impact of technology. Within this framework, technologies " do not suddenly leap into existence as the result of a momentous act by a heroic inventor" and do not determine human beviour or social organization. Rather, new technological artifacts are "gradually constructed or deconstructed in the social interactions of relevant social groups" (Bijker, 1993).
010.2.4	Why Internet is considered as creating a Brand New Culture?	Internet as a Culture The view of the Internet as a "culture" is closely aligned with the ritual view of communication proposed by Carey (1988), in which rituals and cultural symbols are created and maintained through a process of communication.
010.2.5	What's the definition of Cyberspace adopting a sociocultural perspsective?	Cyberspace Beyond the technology represented by the hardware infrastructure of the Internet, there is that "something more" represented by Web Sites, Discussion Forums, Online Games, and Blogs, that represent a "place" thet people can "log on" and "log off" as part of their daily lives. In this sense the internet represents a conceptual place, often referred to as Cyberspace, where cultures are formed and reformed (Hine, 2000)
010.2.6	According to Bell (1973), what's the	*Information Society*

	definition of Information Society?	*According to Bell (1973) the information society is represented by a "shift from manufacturing to services, the domination of science and technology-based industries, and the advent of new social stratification through the rise of new technical elite (Day & Schuler, 2004)*
010.2.7	What are the Webster's Analytical Paradigms for a Sociological Perspective of ICTs ?	Webster's Analytical Paradigms for a Sociological Perspective of ICTs • Technological: As technology progresses, innovations in information processing, storage and transmission reduce cost and increase the availability of information across all segments of society. • Economical: economic interpretation of the information society places an emphsis on "economics of information", where the production and distribution of "knowledge" becomes another form of goods and services to be bought and sold, as well as a new kind of labor force required. • Occupational: This perspective stresses the possibility of occupational changes; that is, an information society is achieved when information work is predominant in occupations, and this is often combined with economic measures. • Spatial: The spatial conception emphasizes the information networks, which connect locations and consequently have substantial effects on the organization of time and space • Cultural: Suc a conception focuses on the pattern of everyday lives, which now includes a sharp increase in the information in social circulation.
010.2.8	What's the definition of Community by Gusfiled (1975)?	Gusfield's Community Definition Gusfield (1975) identified two dimensions of community as territorial and relational. While communities may obviously be defined by their physical boundaries, such as cities and neighborhoods, proximity to or occupation of certain territory does not necessarily constitute a community. From a psychological perspective, community exists in human emotion or perception and, consequently, influences the nature and the quality of relationships among members, as well as cognitions and behaviours.
010.2.9	What's the definition of Community by Dewey (1972)?	Dewey's Community Definition Dewey (1972) oserved, "to learn to be human is to develop through the give-and-take of communication an effective sense of being an individually distinctive member of a community", in other worlds, we can only realize and appreciate our sense of humanity by communicating with others through language and participating in shared experiences.
010.2.10	What's the definition of Community by Barney (2004)?	Barney's Community Definition Barney (2004) pointed out the idea of communication and shared interests, as two defining elements of the

		fondation of a community. The types of shared interests that community members embrace can be broadly understood in cultural terms: values, symbols, languages, traditions, and rituals that make each community unique. On the other hand, the function of communication is not only to facilitate the sharing of experience, but, echoing Carey's ritualistic view, to maintain shared meaning across time and space.
010.2.11	What's the definition of Imagined Community by Anderson (1991)?	Imagined Community This characterization is similar to Benedict Anderson's (1991) notion of an imagined communituy. "In the minds of each member lives the image of their communion"; community is given meaning by its participants.
010.2.12	What's the definition of Sense of Community by Sarason (1974)?	Sense of Community The Sense of Community was originally proposed by Sarason (1974), who defined it as ""the perception of similarity to others, an ackowledged interdependance with others, a willingness to maintain this interdependance by giving to or doing for others what one expects from them and the feeling that one is part of a larger dependable and stable structure"
010.2.13	McMillan and Chavis (1986) proposed a framework to study sense of community that includes four fundamental elements, what?	McMillan and Chavis Model of Sense of Community Membership: the sense of belonging and emotional safety resulting from neing part of a group community Influence: community cohesiveness and attractiveness depends on the community's influence on its members and the mebers' feelings of control and influence on the community Integration and fulfillment of needs: common needs, goals, beliefs, and values as the cohesive force that fulfills individual desires and binds the community together Shared emotional connection: the bonds developed over time through positive interaction and shared history with other community members.
010.2.14	What's the relation between Extroversion and Virtual Communities Participation?	Personality Effects In term of Personality prior research has indicated that, when using the internet, the Extroverted are more likely to seek out online interactions with others, become more involved in online communities, and derive more emotional benefits from participating in online social groups than introverted individuals (Kraut, Kesler, Boneva, Cummings, Helgeson, & Crwaford, 2002)
010.2.15	What's the Togetherness Potential of Virtual Communities?	Togetherness Potential of VC Schwier and Balbar (2002) observed that although asynchronous platforms, such as discussion forums, offer similar levels of convenience and enrichment as Internet chat sessions, real-time Internet chat gives users a sense of urgency and immediacy that ultimately creates a more dynamic environment and the added experience of togetherness.
010.2.16	What's the Salience of Subjectivity Potential of Virtual Communities?	Salience of Subjectivity Potential of Virtual Communities? While Social Identity and Group Identification can be attributed to one's fixed demographic attributes, such as

		race and gender (Yzerbyt, Rocher, & Schadron, 1997), the more fluid, subjective interpretation of values and beliefs (Hamilton, Sherman & Lickel, 1998), may become salient in the decentralized and mobile network environment, and virtual community
010.2.17	What's the definition of On-Line Sense of Place?	On-Line Sense of Place On line social aggregations are mostly characterised by the specificity of their environments where, despite the absence of a physical space, the sense of place is perceived quite strongly and is very present. Electronic media have altered the significance of time and space for social interaction (Meyrowits, 1986).
010.2.18	What was the first definition of Virtual Community by Rheingold (1994)?	Virtual Community (The first definition) The first definition of virtual community found in literature was proposed by Rheingold in 1994, and it has remained a valid starting point for many: Virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussion long enough, which sufficient human feeling, to form webs of personal relationships in cyberspace.
010.2.19	What's the Community Classification proposed by Armstrong & Hagel?	Armstrong & Hagel Communities Classification • Communities of Transaction: developed to facilitate the buying and selling process of produccts and services and to give information about these transactions (Ozuem, et al., 2008) • Communities of Interest: developed to connect persons with common interests in ore or more subjects. It is not a social community per se (Cortes, et al. 2002) • Communities of Fantasy: developed to enable the participants to create, in a collective way, their own fantasies, environments, charactes and/or stories (Brent, 2004) • Communities of Relationship: developed to enable the participants to exchange personal experiences usually of great impact in their personal lives, leading to strong personal ties (Hsu et. al, 2007)

Module 010.3 – Social Networks and On-line Communities		
Id	Pay Off	Explanation
010.3.1	When a Community emerges?	Complex Community Emergence Dynamics Community emerges where the cumulative impact of interactions among individuals adds value above the level of pairwise interactions. Interactions such as exchange of information and advice, social support, mutual help and provision and receipt of services can have the cumulative impact of creating trust among network members, shared history and language and known expectations about behaviours that support the community in its common goals.
010.3.2	What's the On-line Community Emotional Bond?	On-line Community Emotional Bond? Nowadays we find online community members reporting the kinds of strong emotional and social bonds

		associated with local community, sharing the resources of stories and information, enjoying their time together online and working toward common goals (Rheingold 1993; Baym 2000; Haythornthwaite et al. 2000; Kendall 2002).
010.3.3	The Psychological concept of Community, can be used in the study of Human Virtual Dynamics, and in particular to calssify at least three different kind of on-line communities, what?	We do find community both useful and applicable in describing: • Open source computing communities (Moon and Sproull 2002), • Communities of practice that manage knowledge sharing at a distance and through computer technologies (Wenger 1998) • Epistemic or associational communities connected by co-citation or reciprocal web linking (Thelwall and Vaughn 2004).
010.3.4	Summarize some "dystopic" views of the Digital Social Networking.	Internet Involvement as Resources Demanding Involvement in online communities is seen as taking resources and attention away from local communities, reducing our civic engagement and thereby impoverishing overall quality of life (Putman 2000; Nie 2001). Internet as Declining attitude toward friends Children are spending time online chatting with peers instead of family and playing video games instead of engaging in more appropriate physical or social activity, with even so-called 'social' video games leading to declines in attitudes toward and connections with friends (Williams 2006). Internet as Encouraging illegal activities Online activity brings us and our children in contact with undesirable and criminal elements, pushing pornography and get rich quick schemes and encouraging illegal activities such as computer hacking.
010.3.5	Summarize some "dutopic" views of the Digital Social Networking.	Internet freeing us Online communication is the way to make connections with people of similar interest, freeing us from the constraints of geography (Sproull and Kiesler 1991); Internet increases our connectedness It increases our connectedness to others, including family (Jones 1995; Kazmer and Haythornthwaite 2001; Howard et al. 2002; Quan-Haase and Wellman 2002); Internet compensates for dislocations It compensates for dislocations associated with moving to a new home or going to college (Hampton and Wellman 2002; LaRose et al. 2001). Internet as Meeting Spaces Often the Online Communities are spaces where individuals who would not otherwise know or commune with one other come together to discuss a common interest or work together for a common purpose (Mickelson 1997; Baym 2000; Kendall 2002; Moon and Sproull 2002). Internet as Great Good Places These online spaces resemble the 'great good places' described by Oldenburg (1989), where people gather in non-work, non-home settings (see also Kling 1996).

010.3.6	Describe how the language analysis can be adopted to study the Social Network Dynamics?	Because online communities depend so much on written text, language plays a particularly significant role in determining the actions and responses of members. Social Networks emerge by and reinforces Language Not only does community emerge through the language used, but it is also reinforces the way language continues to be used (Sproull and Kiesler, 1991). Online Communities as Speech, Retorical, and Discourse Communities As Cherny (1999) describes in depth, online communities are 'speech communities', defined and emergent from 'shared rules of speaking and interpretations of speech performance' (Cherny 1999: 23). 'Rhetorical' and 'discourse' communities are developed, Clark (1996) and Miller (1984, 1994): for discussion of the way text and conversation merge in the notion of 'persistent conversation', see Erickson (1999). Language as Community Sentinel Language plays 'a significant role in marking the community's boundary' (Cherny 1999: 23). Newbies Language Initiation Newbies need to learn how to use language appropriately and not knowing how to 'talk' online can be a barrier to entry (Bregman and Haythornthwaite, 2003).
010.3.7	What's the Digital Folklore?	The Digital Folklore A separate study showed that members of Digital Communities build a communal history, grounded in an emergent folklore of the community as they share common experiences and stories (Hearne and Nielsen, 2004; see also Kendall, 2002, for the role of stories in an online community).
010.3.8	What are the fundamental psychosocial similarities between real and virtual communitities?	Real and Cyber Community DNA Overall, we find that members of online environments who stay together for interest, work or learning, display the same kinds of characteristics of community found offline, such as common language, rules of behaviour and their enforcement, support during crises and communal history. By these means, work, learning, social and recreational groups accomplish their tasks just as in offline settings (Haythornthwaite 2001; Kendall 2002; Moon and Sproull 2002). .
010.3.9	What are the fundamental attributes of a community for Etzioni & Etzioni?	Etzioni and Etzioni (1999) define community as " ...comprised of two attributes: 1. First, it is a web of affect-laden relationships that encompasses a group of individuals – relationships that crisscross and reinforce one another, rather than simply a chain of one-on-one relationships. To save breath, this attribute will be referred to as bonding. 2. Second, a community requires a measure of commitment to a set of shared values, mores, meanings and a shared historical identity – in short, a culture." (Etzioni and Etzioni 1999: 241)

010.3.10	What are the fundamental attributes of a Community of Practice by Wenger?	Wenger (1998) describes a similar list of three dimensions that form the basis of a community of practice: mutual engagement, a joint enterprise and a shared repertoire (i.e., shared routines, vocabulary and concepts).
010.3.11	What's the potential of Strong Ties within a social network?	Strong Ties Potential • Strong tie behaviours of reciprocal interaction, shared understanding and mutual influence provide the basis on which work can get done, friendships deepen and persist and networks become stable. • Because strong ties are associated with frequent communication and a higher motivation to share information, actors in networks with many strong ties are likely to have access to the same information at the same time. • They are also aware of actions within the network and more able to monitor and manage the behaviour of other network members. • These outcomes are possible only when sufficient network members are strongly tied.
010.3.12	WHat's the potential of weak ties within a social network?	Weak Ties Potential Community also depends on bridging ties that connect subgroups and aid in the search for new resources, information and opportunities. Communities need the input of new ideas associated with transient, weak tie connections (Granovetter 1973; Putnam 2000).
010.3.13	What's the definition of Social Capital?	The Social Capital is a social resource embedded in and constituted by social network ties (Burt 2000; Putman 2000; Lin 2001, forthcoming). It is an attribute of stable networks which makes it possible for individuals to gain access to resources through their connections with others. In terms of community, social capital makes the difference between individual connectivity and community connectivity. Social capital benefits include the ability to trust network members, to have a common language and to depend on network-based mechanisms to manage behaviours.
010.3.14	What's the Synergic effects (i.e., the combined used) of CMC and FtF experiences?	Synergic effects of CMC and FtF experiences 'Communities that combine both f2f and CMC systems would be able to bond better and share values more effectively than communities that rely upon only one or the other mode of communication' (Etzioni and Etzioni 1999).

Module 010.4 – On-line Social Support		
Id	Pay Off	Explanation
010.4.1	What's the classical relation between Social Support and well being?	Social Support and Well Being In the last thirty years, numerous studies have shown that social support plays a vital role in everyday life and contributes to the mental as well as physical well-being of people (Burleson et al. 1994; Heany and Israel 1995; Uchino et al. 1996; Albrecht and Goldsmith 2003).

010.4.2	What's the definition of Social Support?	Social Support Social support consists of a whole range of ways in which people can tacitly or explicitly help one another to improve the quality of their lives (House and Kahn 1985; Thoits 1995; Colvin et al. 2004), and is found to be beneficial for reducing stress, decreasing feelings of loneliness and isolation, getting hold of knowledge and information and learning strategies to cope with the situation people are facing (Albrecht and Adelman 1987; Cohen and Wills 1985; Buunk and Hoorens 1992; Thoits 1995).
010.4.3	What's the definition of Informational Social Support?	Informational Support Informational support is the provision of advice, guidance, suggestions, or useful information to someone. This type of information has the potential to help others problem-solve. Informational support concerns the exchange of practical information such as tips on new types of medication, relevant addresses of institutes, knowledge about medical or psychological treatments, legal issues, but also stories of firsthand or second-hand experiences by members.
010.4.4	What's the definition of Emotional Social Support?	Emotional Support Emotional support is the offering of empathy, concern, affection, love, trust, acceptance, intimacy, encouragement, or caring. It is the warmth and nurturance provided by sources of social support. Providing emotional support can let the individual know that he or she is valued. It is also referred to as "esteem support" or "appraisal support." Emotional support, on the other hand, refers to the display of understanding what the other person goes through and involves showing compassion and commitment (Albrecht and Adelman 1987; Albrecht and Goldsmith 2003).
010.4.5	What's the main functions (i.e., consequences) of Informational Social Support?	Main Informational Support Functions The primary function of this type of support is to expand one's knowledge-base (Reeves 2000). This type of support is important because it gives people more control over the situation and can reduce uncertainty about the self in such a way that better decisions can be made (Albrecht and Adelman 1987; Wright 2002).
010.4.6	What's the essential definition of Empathy required to understand the dynamics of Emotional Social Support?	Empathy in Emotional Social Support Thus, in emotional support, empathy plays a vital role: the ability of knowing what the other feels, feeling what the other feels, and responding to these feelings in an appropriate manner is what makes emotional support possible (Levenson and Ruef , 1992).
010.4.7	What's the main functions (i.e., consequences) of Emotional Social Support?	Main Emotional Support Functions: (I) This more affective form of support is characterized by comforting and encouraging interactions and can be highly important for the self-esteem of people (Reeves 2000). (II) Emotional support is found to be especially relevant in situations where people feel they cannot change the situation they are in, but have to adapt to it (Albrecht and Adelman 1987; Wright 2000a). (III) Providing emotional support can also imply giving people the

		opportunity to tell their story. Talking about painful or traumatic experiences, or disclosing personal information can have a therapeutic effect (Pennebaker 1997), and therefore to simply offer to listen to someone's story is a form of social support. (IV) In particular in times of stress or distress, it can be comforting to be accompanied by others who are in the same or a similar situation (Davison et al. 2000), because part of the social and emotional problems that people endure stem from feelings of being misunderstood or cut off from society.
010.4.8	What are the main General Social Support Functions?	General Social Support Functions • Social support is important for people who find themselves confronted with distress, (inter)personal problems or unwanted life situations (Wills 1985; Taylor et al. 1986; House et al. 1988; Pennebaker and Harber 1993; Thoits 1995; Wright and Bell 2003). • Research has shown that social support can reduce stress (e.g., Dean and Lin 1977; Cohen and Wills 1985; Buunk and Hoorens 1992; Thoits 1995), • Decrease depression (Cohen and Wills 1985), • Increase self-esteem (Metts and Manns 1996), • Increase internal control (Sullivan and Reardon 1985), and help people to more effectively cope with the situation (Sullivan and Reardon 1985; Kohn 1996). • People who receive social support take better care of themselves than people who are socially isolated, • and social support is positively correlated to an improved immune system, a reduced risk of particular illnesses (Cohen 1988), and longer life expectations (Cohen 1988; House et al. 1988).
010.4.9	Describe the Social Support Direct Effect Hypothesys	Social Support Direct Effect Hypothesys The first one posits that social support has a direct effect on well-being. This means that • Interpersonal contacts and being part of a larger social network have a straightforward effect on the welfare of others because it gives individuals the perception that they are appreciated by the community. • Supportive interactions can contribute to general well-being because they clarify one's role in the community and provide a sense of predictability and stability in one's life situation (Cohen and Wills 1985; Thoits 1995; Wright 2000a).
010.4.10	Describe the Social Support Indirect Effect Hyphothesys	Social Support Indirect Effect Hypothesys The second hypothesis posits that social support does not necessarily have a direct effect on well-being, but can mitigate the effect of stressful situations. In other words, social support can buffer the negative effects of stress and uncertainty that may arise from a

		multitude of causes, thereby reducing their impact on the physical and mental well-being of individuals (Dean and Lin 1977; Cohen and Wills 1985; House and Kahn 1985; Thoits 1995).
010.4.11	What's the definition of On-line Social Support?	On-line Social Support Social support is a very broad concept that that comprises many qualitatively different kinds of support such as instrumental, informational or emotional assistance (House and Kahn, 1985). Online social support can be defined as the 'communication between recipients and providers that reduces uncertainty about the situation, the self, the other or the relationship and functions to enhance a perception of personal control in one's life experience' (Albrecht and Adelman, 1987).
010.4.12	Why Anonymity, under certain conditions, can be considered a promoting factor for On-line Social Support?	From Anonymity to Deindividuation and Self Disclosure Not only do people not have to disclose their names, but the absence of cues that reveal information about one's identity (such as gender, age, appearance) is believed to enhance feelings of anonymity (Sproull and Kiesler 1986; Wallace 1999). As stated by McKenna and Bargh (2000) when an individual posts an article in a newsgroup or enters a chat room full of strangers, he or she may well feel that his or her actions will be submerged in the hundreds (or thousands) of other actions taking place there. (2000) The reduction of these cues can cause de-individuation (Sproull and Kiesler 1986), which is a state in which people lose their individuality because 'group members do not feel they stand out as individuals' and individuals act as if they are 'submerged in the group' (Postmes et al., 1998) Anonymity and Self Expression This perception of anonymity can have some consequences for the way people express themselves, and could partly be the explanation why online groups are characterized by high levels of self-disclosure (Rheingold 1993; Parks and Floyd 1996; Wallace 1999; Wright 2000b; Joinson 2001; Swickert et al. 2002). Anonymity and Reduction of Accountability and Public Awareness 'Under the protective cloak of anonymity users can express the way they truly feel and think' (McKenna and Bargh 2000). Joinson (2001) found that people disclose more information about themselves in CMC compared to FtF interactions. A possible explanation for this is that the anonymity causes a reduction of public self-awareness and lowered feelings of accountability (Joinson 2001). Anonymity and Privacy Affordance The anonymity can provide the freedom to express oneself with less shame and without the feeling that one's privacy is violated, and affords people the means and power to ask intimate or potentially embarrassing questions they would not as easily ask in an offline

		context (Braithwaite et al. 1999; Wallace 1999).
010.4.13	How the Similarity Perception with the group can be a promoting factor of On-line Social Support?	Similarity Perception as On-line Social Support Promoting Factor • On-line perceived similarity, in combination with the ease of access to a large number of individuals that online communication affords, can provide a sense of universality and communality in online support communities that is not likely to be found offline (Madara 1997; Braithwaite et al. 1999; Wright 2000b; Preece and Ghozati 2001; Wright and Bell 2003). • People who find themselves in a similar situation tend to be more empathic and show more understanding: 'the more similar we are the less we have to go outside of ourselves to gather cues and the more we can respond as we ourselves would naturally to the circumstances' (Hodger and Wegner 1997 in Preece and Ghozati 2001) • Research shows that in online support groups there is relatively little suspicion, and interactions are characterized by containing a low level of negative emotional remarks and a high level of emphatic communication (Finn 1999; Wallace 1999; Preece and Ghozati 2001). • Finding similar others can be an important motivation for joining an online community because perceived similarity, and the feeling that one is part of a larger group, is part of the basic need to belong, which can be especially relevant for people who are lonely or isolated in their offline environment because they feel unique (Brewer 1991; Deaux 1993; McKenna and Bargh 1998).
010.4.14	What's the Anonymity Potential for On-line Similarity Perception?	Anonimity potential for Similarity Perception The absence of cues that give away information about the personal identity of the individuals who partake in the group can increase the attention to what binds the group together (i.e., a common interest or goal) and thereby engender strong feelings of 'groupiness' or cohesion (Postmes et al. 1998; Lea et al. 2001; Postmes et al. 2001; Tanis and Postmes, 2007). Deindividuation and Similarity Perception Based on the Social Identity model of Deindividuation Effects, or SIDE model (Spears and Lea 1992; Reicher et al. 1995) it can be argued that in online support communities where people recognize themselves and the others as sharing similarities on the basis of the situation they are facing, the absence of cues that might draw the attention to potential differences (such as age, gender, appearance, etc.) may even increase perceptions of similarity. The Less is More Social Effect So, the less one knows about idiosyncratic characteristics of others in the group (i.e. the more

		anonymous the individual group members are), the less attention can be drawn to the (possible) interpersonal differences, and the more to the similarity based on the shared group membership (cf. Sassenberg and Postmes 2002). Anonymity and Similarity Potential As a consequence, for online support groups that focus on a specific topic of concern, the inability to individuate its members may result in: • More perceived similarity (Sassenberg and Postmes 2002), • More interpersonal trust (Tanis and Postmes 2005) • Stronger focus on the social norms of the group (Postmes et al. 2001). • Increased Coping Potential - These groups can therefore have a vital function in learning people how to cope with the situation they are facing (Davison et al. 2000), • Self-Development Promoting Factors - And membership of groups like this can become an important part of one's self concept and self-definition (Bargh and McKenna 2004).
010.4.15	What's the definition of the Less is More Social Effect?	The Less is More Social Effect So, the less one knows about idiosyncratic characteristics of others in the group (i.e. the more anonymous the individual group members are), the less attention can be drawn to the (possible) interpersonal differences, and the more to the similarity based on the shared group membership (cf. Sassenberg and Postmes 2002).
010.4.16	What's the function of Social Comparison in the Festinger's Theory?	Social Comparison Social comparison theory (Festinger 1954) posits that people will compare themselves with others in times of uncertainty or anxiety, especially in situations in which it is not possible to derive this from the direct environmental context.
010.4.17	What's the On-line Social Validation Potenatial?	On-line Social Validation Potential Social validation is best achieved when people can compare themselves with others that are relatively similar to them (and whose experiences are therefore diagnostic to the self). The availability of similar others makes online support groups a good stage for social comparison purposes.
010.4.18	Why On-line communities can be considered as promoting (facilitating) factors for Social Comparison?	On-line Communities supports the Need to Belong To participate in an online group can provide people with a sense of belongingness and helps people to realize they are not unique (Brewer 1991; Deaux 1993; McKenna and Bargh 1998). On-line Communities supports the Social Comparison Davison et al. (2000) shows that people use online support communities for social comparison. The need for social comparison is inherent to a physical or mental health setting, because of its high level of ambiguity and anxiety (Davison et al. 2000) and people may use the group to glean information on how to cope and behave.

		On-line Communities supports the Social Validation Social comparison is part and parcel of the process of social validation in which people use relevant groups they are part of to establish meaning, values and identity (Turner, 1991).
010.4.19	Describe why the On-line Communities can be considered as Promoting Factors for De-marginalization and self-esteem.	Sense of Community To be amongst others who face a similar situation, or at least have understanding of what someone is going through, can provide a sense of community and safety and make people feel less lonely and unique (King and Moreggi 1998). On-line Communities support De-marginalization This can be especially relevant for people who suffer from a stigmatized physical or mental condition (such as obesity, stuttering, schizophrenia or manic depression) or who feel that an important part of their identity is not accepted by society (such as deviant sexual preferences, kleptomania, or extreme religious/political beliefs) because these people in particular run the risk of feeling lonely, not accepted, and cut off from society (Frable 1993; McKenna and Bargh 1998; Braithwaite et al. 1999; Davison et al. 2000). On-line Communities support Self-Esteem People who perceive themselves as outsiders or outliers because they differ from others on an important dimension of their identity – i.e., who have a marginalized identity (Frable 1993) – can have difficulties because they feel that they are deviant from the people in their social circle.
010.4.20	What's the Self-Catalytic Potential of On-line De-marginalizaton dynamics?	The Self-Catalytic Potential of On-line De-marginalization dynamics Through participation in online social support communities, people with concealed as well as conspicuous marginal identities can attain more self-esteem and gain confidence with respect to their identity, this can reduce the inner conflict between the marginalized part of the identity and the socially accepted standards, and eventually result in more openness to discuss this aspect of identity with significant others such as friends and family (McKenna and Bargh, 1998).

Module 010.5 – On-line Digital Actions		
Id	Pay Off	Explanation
010.5.1	What's the definition of Cyberactivism, and On-line Social Movements?	Cyberactivism and On-line Social Movememnts The last decade has seen the emergence of a thriving literature on topics such as cyberactivism and online social movements (e.g., Rheingold 2002; McCaughey and Ayers 2003; Meikle 2003; Van de Donk et al. 2004b; Dartnell 2006). These publications usually take as their starting point an array of powerful and telling cases which speak to potential roles that technology can fulfil for the future organization of collective action. Among the oft-cited events are the 1994 Zapatista

		uprising (Ronfeldt et al. 1998), the 1999 'Battle of Seattle' (Smith 2001; DeLuca and Peeples 2002) and the toppling of Filipino president Estrada in 2001 (Tilly 2004).
010.5.2	What's the most relevant psychological motivation beyond Collective Actions?	Collective Action Psychological Motivation • A sense of injustice, • A sense of efficacy, • A sense of shared social identity
010.5.3	The Sense of Injustice required some fundamental psychological dynamics to ignite collective actions. Make some examples.	In psychology, the emphasis on a sense of injustice as one key motivator of collective action was articulated in relative deprivation theory (RDT) (Runciman, 1966; Walker and Smith, 2002). The literature acknowledges a range of factors which play a role in whether perceptions of injustice arise and when they will be consequential. Social Comparison Availability Required One is that people need to be prepared compare themselves to particular target others to perceive any inequality that may exist (cf. Festinger 1954). Collective Anchoring Required perceptions of inequality will only lead to collective action if they are collectively anchored, that is if they are grounded in comparisons between groups – fraternal deprivation – rather than comparisons between individuals – egotistical deprivation (see Runciman 1966; Guimond and Dubé-Simard 1983; H. J. Smith and Ortiz 2002). Implicit Consensus Potential One needs groups (not individuals) to arrive at a shared perception of inequality: only if there is (implicit) consensus can collective action begin to be possible. Shared View of Inequity The second is that for this to develop into actual feelings of relative deprivation one needs to achieve a shared view that this is inequity. Ultimately, this depends on a fair amount of intragroup interaction (Postmes et al. 2005). Finally, research has shown that relative deprivation can be broken down into two related aspects. One is the knowledge that inequity exists (a cognitive component), The second the feelings of injustice associated with it (an affective component). The affective component is a much stronger predictor of collective action (Smith and Ortiz 2002).
010.5.4	What's the complex relation between the Sense of Efficacy and the Collective Digital Actions?	Collective Actions Motivational Un-Promoting Factors • One reason for this, it has been argued, is the difficulty of eliciting support for social movements (McCarthy and Zald 1977). • This support depends on decisions by individual, rational actors who aim to minimize personal losses and maximize personal gains (Olson 1968). • Klandermans (1984) proposed that individual motivations for collective action were a

		function of subjective expectancy-value products. In his model, participation in social movements is partly dependent on the value of the intended outcomes of collective action, but it is also and crucially dependent on the expectation of whether collective action would be possible and whether it would be effective. Collective Actions and Sense of Efficacy In the wake of this proposal, efficacy has become one of the key explanations of collective action (Simon and Klandermans 2001). Relatedly, collective actions have been associated with feelings of collective power (Reicher 1996, 2001; Drury and Reicher 2005).
010.5.5	Under which conditions the Social Identity and the Identification dynamics can promote Collective Actions?	Identification and Collective Actions It notes two key reasons why low status groups cease to strive for improvement of their position: individual mobility and social creativity (which occurs when people collectively explain away their disadvantages). Only when group boundaries are impermeable (i.e., individuals can't abandon it), the status differential is perceived as illegitimate (i.e., there is a sense of injustice) and when status relations are insecure (i.e., there is a sense of efficacy) does collective action become likely. Under these very specific conditions, collective action becomes possible to the extent that group members are prepared to mobilize on behalf of their group. One key factor involved in this is group members' identification with the group – and particularly its politicized ideology (Simon 1998; Simon and Klandermans 2001; Stürmer and Simon 2004).
010.5.6	WHat's a GDSS and its function?	GDSS A consistent and robust finding in the group decision support systems (GDSS) literature, is that electronic brainstorming is more equal using such systems (Chun and Park 1998; Rains 2005). In face-to-face groups, certain group members may dominate a brainstorming session, not so in GDSS. A key factor in producing this effect may be that GDSS systems are designed to extract as many ideas as possible. To achieve this, they encourage users to generate ideas in a procedure reminiscent of a production line – contributions are essentially entirely individually generated, with some comparison of ideas generated by others (Munkes and Diehl 2003; Dugosh and Paulus 2005).
010.5.7	Some features of CMC can reduce the On-line collective action ergonomy. Describe their dynamics.	On-line Bad Side Dynamics • In conversations we take turns, which 'blocks productivity' for those who are doing the listening (Stroebe and Diehl 1994). • Electronic communications are not necessarily more equalizing per se (e.g., as argued by Dubrovsky et al. [1991]), • but may also exacerbate existing status differences and • foster greater inequality (Weisband 1994;

		Weisband, Schneider and Connolly 1995), and • increased stereotyping (Postmes and Spears 2002). • Finally, there is a lot of evidence to suggest that the Internet encourages self-segregation into similarly minded groups (Adams and Roscigno 2005, see also Douglas,), thereby exacerbating inter-group inequalities. • The literature consistently emphasizes the freedoms of the individual, discounting the relevance or very existence of social groups (Postmes and Baym 2005). • The promise of individual mobility opportunities is a most effective way to undermine collective action (Tajfel and Turner 1979; Wright and Taylor 1998).
010.5.8	Some features of CMC can enhance the On-line collective action ergonomy. Describe their dynamics.	At the same time, a lot of Internet features enhance the Collective Action Ergonomy Internet Enhances Intra-Group Debate There is no doubt that the Internet enhances the capabilities and versatility for intra-group debate and interaction (see also Flanagin et al. 2006). Internet Activism Potential The Internet has been able to • increase discussion on political topics in web-based discussion fora, • increase targeted mass-communication of social movements to provide their perspective on specific events or issues and • to provide more continuous streams of 'alternative' perspectives on news. Although offline metaphors could be applied to these (the café, the newsletter, etc.), there is nonetheless a reasonable case that the Internet introduces both quantitative and qualitative changes to what activists can achieve and who can join them (Bennett 2004). The persuasive messages and propaganda may take a variety of forms and on the Internet, affective and emotional processes are no less relevant than informational processing is. Also in online collective actions, passions remain a prominent motivator. This is partly because of the increasing possibilities to provide uncensored news and views. Due to the anonymity and perceived lack of (legal) control, the Internet and modern communication technology are excellent vehicles for rumour and the leaking of sensitive and confidential information.
010.5.9	What's the ICT potential for the Organization based Collective Actions?	ICT potential for Organization based Collective Actions • The Internet enables multiple organizations to synchronize their activities and agendas and to subscribe to united causes: the anti-globalization movement is a good illustration of this phenomenon (Clark and Themudo 2006). • Researchers have argued that the Internet Communities has played a role in the 'globalization' of certain concerns and the

		unification of these concerns under a common banner – ironically of anti-globalization (Rosenkrands 2004).
010.5.10	Describe the Klandermans Model of Internet Efficacy Perception of Collective Action.	Klandermans Model of Internet Efficacy Perception • One is the assessment of the degree to which others are likely to join in – some actions may not be widely supported and hence may not ever become truly 'collective' actions. • A second is the belief that the collective action, if carried through, would be efficacious and result in the desired outcome. • The third is the belief that the own contribution to the action will make a difference to its success.
010.5.11	WHat's the Real Life Social Identity Persistance.	Real Life Social Identity On-line Persistence It is typical for the social movement literature to assume that relatively individualistic and 'rational' cost–benefit analyses take into account the aspects of efficacy when individuals decide to join actions or movements (Simon and Klandermans, 2001). Research on the Internet confirms that despite the undoubted potential for Internet users to be more individualistic, a remarkable degree of social embeddedness in 'real life' social contacts and social identities persists (Bargh and McKenna 2004; Boase et al. 2006)
010.5.12	What ICT factors can promote On-line Collective Actions, increasing the collective action ergonomy of a virtual setting?	Virtual Identity. Real Life and On-line Social Identities • Online identities are not markedly different from offline identities in this respect, nor can they be. The underlying psychological process is one, after all, whereby the individual self is defined largely by affiliations with myriad social in-groups (social identities) and (under different conditions) by myriad contrasts to those in-groups as well (personal identities). • This is not just due to mere conservatism or a lack of imagination. Social identities are part of what makes interactions meaningful in the first place (Turner 1991; Postmes 2003; Swaab et al. in press;), hence users engage in processes of social identification, self-categorization and social identity formation, because this is the way that they can make sense of the world 'out there' and the position of the self within it. • There is a lot of evidence that speaks to the myriad ways in which social identities are influential online (Spears et al. 2002). Un-Stigmatizing Effect of ICT A key component of the argument that the Internet liberates users to display their 'real self', for example, is in the observation that users display their stigmatized social identities and bond with others in online social groups such as gays, disabled people, racists, religious people, etc. (McKenna and Bargh 1998). Conformism Effect of ICT Despite the greater freedom (and perhaps to compensate

		for the essentially indeterminate nature of an environment without any boundaries) people are very likely to self-stereotype and apply group characteristics to themselves online. ICT Social Identity Salience Potential Social identities, far from going out the window with the freedoms that the Internet provides, are very much a feature of online social life.

Module 010.6 – A brand new classification for online social networks		
Id	Pay Off	Explanation
010.6.1	What's the definition of Social Decision Scheme, and what's its dynamical structure?	Social Decision Scheme Social decision schemes are methods implicitly or subconsciously used by groups to arrive at a collective decision. SDS can essentially map out predictable group behaviors because group decisions are generally based on the interaction between four behavioral elements. 1. First is individual preference, or the agendas and opinions of each person. 2. Next is patterns of influence. In many groups, some people tend to hold more social power than others, meaning that their votes will be more influential. 3. Third are group preferences, which mostly refers to past behaviors and precedents. 4. Finally is the collective response, which is how the group actually arrives at its decision.
010.6.2	What's the Social Decision Schemes Potential?	Social Decision Scheme Potential Fundamental ability to process multiple alternatives and to choose an optimal course of action (Gouran & Hirokawa, 1983, 1986, 1996); Social Decision Schemes provide implicit group's rules to select an alternative; There are many types of Social Decision Schemes (e.i. Delegating, Random decisions or Unanimity) in order t maximize their social ergonomy.
010.6.3	What are the fundamental features of the so –called Techno Democracy?	Techno Democracy • It will allow the individuals to interact with fellow citizens and elected officials in ways that go beyond traditional structures (Dyson et al., 1994); • The issue of Web's Information: Web sites of governmental institutions have been structured to provide information but not to encourage deliberation (Ferber, Foltz, & Pugliese, 2005b); • It can exclude the limitation of variables such as time, spation and communication range.
010.6.4	From the VirtHuLab research about Social Network Classification emerges that there are two constants for modern OSNs. What?	From the descriptive statistics of the discrete and continuous observables it emerges that in 2017 online social networks are described by two constant characteristics: (I) Followers, (II) Possibility to look for others (search).
010.6.5	From the VirtHuLab research about Social Network Classification how	Clusters Analysis: 4 Groups of Online Social Networks Cluster 1: Specific OSNs. In this Cluster are OSNs with

	many clusters emerged, and what were they characteristics?	specific domains, like Linkedin that improves the possibility to find work or placement. Cluster 2: Massive OSNs. In this group are OSNs with high grade of share contents, the biggest number of users and very functional Status Systems. Cluster 3: Communication Host OSNs. Cluster 3's online social networks are characterized by the possibility of a high degree of telepresence. They allow synchronous communication, calls, single video-calls and group-calls, in some cases. Cluster 4: Audience OSNs. These OSNs have diversified functions but, as in the case of Twitch and Tumblr, they are used to share personal content to attract mass and audience.
010.6.6	What was the Factorial Structure emerging from the VirtHuLab research regarding the Social Network Classification?	Results The analysis produced a 3-factor model that explains about 71% of the variance. The 3 variable factors are described differently from the observables considered in the research. (A) Cyber Reputation (B) Individual Identity (C) Social Identity
010.6.7	Describe the main features composing the Cyber Reputation Factor, emerging from the VirtHuLab research on SNSs classification.	The CRF increases with Status System and Cross Contacts; And decreases with Telepresence, Subcommunities
010.6.8	Describe the main features composing the Social Identity Factor, emerging from the VirtHuLab research on SNSs classification.	The SIF increases with Public/Private, OSN Size and Closure Degree; while decreases with Subcommunities
010.6.9	Describe the main features composing the Individual Identity Factor, emerging from the VirtHuLab research on SNSs classification.	The IIF increases with Telepresence, Followers and Subcommunities

Module 011.1 – On-line Decision Making		
Id	Pay Off	Explanation
011.1.1	What's the Group Effectiveness Rationale?	Group Effectiveness Rationale A common rationale for the use of groups for decision-making and problem-solving via the internet, is that groups make better decisions than individual when facing complicated problems (Schweiger & Sandberg, 1989)
011.1.2	What are the requirements of High-quality decision by group facing complex tasks, related with the variety of possible perspectives?	Complex Task Requirements High-quality decisions by group facing complex, ambiguous situations often require multiple perspectives (Hoffman & Maier, 1961; Triandis, Hall & Ewen, 1965). the expression of contrary viewpoints (Nemeth, 1986), and the evaluation of multiple alternatives (Schweiger, Sandberg & Ragan, 1986)
011.1.3	What are the main differences in Group Decision Making between CMC and FtF?	Decision Making: CMC Vs FtF • CMC groups more closely followed the classic general problem solving process (problem definition, orientation, and solution

		development) while FtF groups tended to follow a linear sequence of interactions. • Interestingly, the participants in the CMC groups also reported higher satisfaction with the process and also believed their proposed solutions were of higher quality (Jonassen and Kwon, 2001) • The most effective teams tailored communication patterns to the task and used a combination of FtF communications supplemented by computer-mediated communication (CMC)(Maznevski and Chidoba, 2000) • It also appears that the order of the FtF and CMC discussions are important: FtF discussion that are preceded by CMC discussions (either synchronous or asynchronous) are perceived to be more enjoyable by the participants and include a greater diversity of ideas than are FtF not preceded by CMC exchanges (Dietz-Uhler and Bishop-Clark, 2001) • Surprisingly, FtF participants feel more influential and satisfied than CM groups regardless of the decision making technique adopted (Thompson and Coovert, 2002) • An interaction between the communication mode and communication process goals have been found. When individual's goal was merely to convey information, the FtF and CM teams performed equally well. When the goal was to converge on a best solution, however, the FtF communication resulted in better performance (Murthy and Kerr, 2003).
011.1.4	How Anonimity can benefit to Group Decision Making? Make some examples.	Anonimity and Group Decision Making • Low-status individuals who have helpful information but are not wanting to express their views in front of high-status individuals. • Individuals making incorrect attributions about another's expertise and incorrectly deferring to them • High-power individuals commanding too much discussion time • Conformity to the group • A reliable effect of anonimity was to lead to more contributions to the group, especially critical contributions (Postmes and Lea, 2000)
011.1.5	What's the Anonimity polarization risk for Group Decision Making?	Anonimity and Polarization Polarized groups do not always make the best decisions, as the groupthink literature has effectively demonstrated. Anonimity increased group polarization by causing individuals to generate more novel arguments and also engage in a more one-upmanship behaviours. (Sia, Tan & Wei, 2002). CMC conditions where individuals are identified result in less polarization while anonymous CM groups led to stronger polarization.

011.1.6	What's the relation between CMC competence and On-line Group Decision Making?	ICT Fluency and Group Decision Making The competence in CMC increases mutual understanding and satisfaction, and approximates the results achieved in FtF conditions (Cornelius & Boos, 2003)
011.1.7	What's the relation between agreement and Group Decision Making?	Agreement and Group Decision Making Agreement is an important social outcome of group processes. Results indicate that agreement can be achieved in asynchronous anonymous CM groups while exchanging only a few characters of information about their respective positions.
011.1.8	Whats a Key Software Design Criteria for obtaining Agreement in Group Decision Making?	Agreement and Virtual Setting Ergonomics Conclusions indicate the key software design criteria for obtaining agreement is not richness, but dynamic many-to-many linkages between the group members (Whitworth, Gallupe & McQueen, 2001)
011.1.9	What's the Warranting Principles of On-line Impression Management?	Warranting Principle The warranting principle states that observers give greater credence to cues that are harder to fake for the person being judged. The warranting principle is based on the assumptions that people try to present themselves in the best possible way and that observers know this and take it into account by weighting the information based on the difficulty of being manipulated by taget (Walther & Parks, 2002)
011.1.10	What's the Negativity Effect of On-line Impression Management?	Negativity effect A competing perspective is the negativity effect, which states that people give more credence to negative information (as opposed to positive information), and is supported by much research in social psychology (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001)
011.1.11	What's the Trade-off Heuristics?	Trade-off Heuristics People use information that cannot be easily manipulated by the target to make decisions (Warranting principle). This finding could be reinterpreted as people following the heuristic "Identity information that cannot be manipulated; weight each piece of information accordingly; arrive at a decision". This would be a tradeoff heuristic because it involves looking at multiple cues and weighting them appropriately (Walther, et. al, 2008, 2009)
011.1.12	Describe an example of Choose the Best Heuristics.	Choose the best Heuristics Many shopping websistes allow people to rate and review the products they are selling. When people choose the product that has the highest rating in its category, they are using the "choose the best" heuristics.
011.1.13	What basically states the Inpunt-Process-Output model (IPO) of Hackman & Morris?	Input-Process-Output model (Hackman & Morris, 1975) This model states that team and environment qualities (inputs) affect team outcomes (outputs) through various team processes
011.1.14	Inputs are the initial conditions and qualities of the Virtual Teams (VT) and environment. VT researchers have identified a number of important factors that influence decision making. What's the role of technology?	Technology • No communication technology is inherently superior, the best technology for a specific situation depends on the qualities of task and the communication technology (Ebrahim, Ahmed, & Taha, 2009).

		• VTs take longer to make decisions (Cramton, 2001; Hollingshead, 1996) • Team members are less able to accurately assess other members' knowledge in VT (Ebrahim, Ahmed, & Zahari, 2009) Technology: the Good Side • These difficulties are due to reductions in nonverbal cues present in most CMC (Martins, Gilson, & Maynard, 2004) • The difficulties can be partially mitigated by using more rich communication mediums (e.g., video chat). Studies have found that the use of rich communication technologies can improve decision quality (Baker, 2002), and increase general team performance (Baker, 2002; Carlson & Zmud, 1999; May & Carter, 2001). • The use of rich communication technologies can promote trust (Pauleen & Yoong, 2001), and team commitment in certain circumstances (Workman, Kahbweiler, & Bommer, 2003)
011.1.15	Having the best technology does not ensure that the team will perform well or make good decisions. VT members need to be proficient in utilized technology or the benefits of the technology will not be realized, What's the role of training in On-line Group Decision Making?	Training • VTs perform lower than traditional teams during the early stages of the team's life cycle, but approached the traditional teams' level of performance as time passed (McGrath and Hollingshead, 1994). • Training has been shown to increase decision-making quality and team performance (Kaiser, Tullar, & McKowen, 2000) • Training foster team members' feeling of cohesiveness, trust, and commitment to team goals (Beranek, 2000) • An alternative training approach - mentoring programs - have also been found to be effective (Suchan & Hayzak, 2001; Hertel, Geister, and Konradt, 2005)
011.1.16	When VTs are used, geography and time (i.e., time zones) are no longer limiting factors in choosing members for a team, the best person can be selected regardless of physical location. This advantage, however, comes at a price. What's the role of team composition and size?	Team Composition • Teams with culturally diverse group members tend to have more difficulty both communicating and coordinating (Van Ryssen & Godar, 2000) • Teams members from different regions of the same country may have difficulty coordinating with each other (Robey, Khoo, & Powers, 2000) • VT members attempting to understand and accept these differences can mitigate the negative effects (Robey et. al., 2000) • as can developing clear protocols and project roles (Malhotra & Majchrzak, 2004) ***Team Size*** • ***Large groups do not necessarily make better decisions than small ones*** *(Kerr & Tindale, 2004),* ***due to negative effects like production blocking and process loss.*** • ***Production blocking is sometimes less problematic in VTs than traditional teams,***

		particularly on tasks such as idea generation, mainly ***because VTs allow multiple members of the group to speak at once*** *(Valacich, Dennis & Nunamaer, 1992)*
011.1.17	What's the impact of On-line Communication factors on the Processes phase of the IPO Model?	Communication (I) • VTs tipically do not communicate as well as their traditional counterparts (Bhappu, Griffith, & Northcraft, 1997; Ebrahim et. al., 2009; Hollingshead, 1996) • The observed difference is often attributed to reduced nonverbal information in CM discussions (Sproull & Kiesler, 1986) • Another difficulty arises with the use of asynchronous forms of electronic communication: How does one interpret a nonresponse? etc … • However, CMC has its benefits. Communicating over an electronic medium has been found to have an equalizing effect in regards to social status (Bikson & Eveland, 1990) Communication (II) • People lower in social status are more likely to contribute when the communication is done through an electronic medium. • In decision-making contexts, using electronic communication mediums can be useful in encouraging low-status individuals to share critical information. • Certain communication technologies keep a digital record of the dialogue. which can be useful for referencing decisions made during the meeting. • Certain types of groupware can increase team effectiveness by reducing the occurrence of harmful group phenomenon. Researchers found that social comparisons enabled by these technologies were effective at reducing social loafing in electronic brainstorming groups (Shepards et. al., 1996)
011.1.18	What's the impact of Interpersonal Processes factors on the Processes phase of the IPO Model?	Interpersonal processes (I) • One interpersonal procedure that has received considerable attention is the formation of trust. Interestingly, the factors that contribute to the formation of trust seem to depend on the history of the team and the phase of team's life cycle. • When the team is just forming, trust is primarily determined by members' initial propensity to trust and the members' perceptions of their teammates' integrity and competence (Aubert & Kelsey, 2003) • Later on, trust is less influenced by perceptions of others' competence, while the importance of perceived integrity and one's propensity to trust remain the same. Interpersonal processes (II)

		• Conflict is more common in VTs than in traditional teams (Hinds & Mortensen, 2005) • People are more likely to swear, insult, or name-call in CMC (Siegel, Dubrovsky, Kiesler, & McGuire, 1986) • Conflict in actual VT is primarily due not to disinhibition but due to miscommunications (Hertel, Geister, & Konradt, 2005) • Disagreements are not necessarily a bad thing, as long they are carried out in a professional manner. Disagreements cause groups to question assumptions, generate and consider more alternatives, and have been shown in many cases to result in better decisions (Jehn & Mannix, 2001).
011.1.19	In the I-P-O framework, decision quality is a result of a complex interplay between initial inputs and processes. But do VTs make better decisions than traditional ones?	The evidence is mixed. Outputs • Some researchers have reported instances where VTs have outperformed their traditional counterparts (Chidambaram & jones, 1993) • but the majority of studies resulted in either no difference between VTs and traditional teams in terms of decision quality (Archer, 1990), or number of ideas generated (lind, 1999) • The only consistent findings in regards to online decision-making is that online teams take longer than non-virtual teams (Cappel & Windsor, 2000; Graetz, Boyle, Kimble, Thompson, & Garlock, 1998)

Module 011.2 – Collective Intelligence		
Id	Pay Off	Explanation
011.2.1	What was the first definition of Collective Intelligence provided by Malone (2008)?	The working definition of collective intelligence that we're using is that collective intelligence is groups of individuals doing things collectively that seem intelligent (Malone, 2008) Now, if you think about it that way, collective intelligence has existed for a very long time. Families, companies, and countries are all groups of individual people doing things that at least sometimes seem intelligent. Beehives and ant colonies are examples of groups of insects doing things like finding food sources that seem intelligent. And we could even view a single human brain as a collection of individual neurons or parts of the brain that collectively act intelligently. (Malone, 2008)
011.2.2	What was the first definition of Collective Intelligence provided by Szuba (2001)?	Collective Intelligence by Szuba Collective intelligence itself is a certain property of a group of beings which is expressed/observable and measurable. It is not assumed that the beings are cooperating or that they are conscious beings; nothing is assumed about the communication system; we do not even assume that these beings are alive (subsequently, a definition of being alive is not necessary). we can not

		assume willful cooperation for collective intelligence, or else the definition of cooperation would have to be very vague. (Szuba, 2001)
011.2.3	What was the first definition of Collective Intelligence provided by Luo (2009)?	Collective Intelligence it's a social kind of intelligence (Lou, 2009) as it emerges from interactions and cooperative and competitive behaviors implemented reciprocally by all members of a cluster. In recent years, the concept of collective intelligence has been widely discussed from various aspects. One series of related work is inspired by the "Swarm Intelligence" phenomena that can commonly be observed in the biological world. For example, in an ant colony, highly-intelligent collective activities of the whole colony may emerge from the local interactions between the individual ants, which embody very limited intelligence per se. the collective intelligence of human groups is the idea that a human group may manifest higher capabilities of information-processing and problem-solving than any individual participant of that group does (Luo, 2009)
011.2.4	What was the first definition of Collective Intelligence provided by Heylinghen (1999)?	Collective Intelligence by Heylinghen Collective intelligence is defined as the ability of a group to solve more problems than its individual members. It is argued that the obstacles created by individual cognitive limits and the difficulty of coordination can be overcome by using a collective mental map (CMM), i.e., for istance a common culture. (Heylinghen, 1999)
011.2.5	What's the Collective Intelligence Paradox described by Szuba?	Collective Intelligence Paradox It is a paradox that the evaluation of the collective intelligence of social structures can be easier than the evaluation of the IQ of a single being. Many elements of collectively intelligent activity can be observed, measured, and evaluated in a social structure. We can easily observe displacements and actions of beings as well as exchange of information between beings (e.g. language or the ant pheromone communication system) (Szuba, 2001)
011.2.6	What was the first definition of Collective Intelligence provided by Singh (2011)?	Collective Intelligence by Singh A group of agents, whether they are people, insects, robots, or software, together can be more intelligent than the most intelligent member who is part of the same (Singh, 2011).
011.2.7	What was the first definition of Collective Intelligence provided by Lévy (2000)?	Collective Intelligence by Lévy With the intent to explain the COIN potential, Lévy says: "everyone knows something, nobody knows everything and what any one person knows can be tapped by the group as a whole" (Lévy, 2000).
011.2.8	What was the first definition of Collective Intelligence provided by Smith (1994)?	***Collective Intelligence by Smith*** *Individuals gather in collaborative groups because alone they would not be rare to solve complex tasks. This could occur either because the individual does not have all the knowledge and skills necessary to solve the task, or because the resolution of it, by a single subject, would require too much time. (Smith, 1994).* *Paraphrasing Durkheim it's be possible to say that the*

		Collective Intelligence is an intelligence superior to that of the individual as it transcends the individual in time and space.
011.2.9	What's the definition of Swarm Intelligence?	Swarm Intelligence An example of COIN observable in the biological world was called Swarm Inteligence. It is the property of a system in which the collective behavior of non sophisticated agents determines the emergence of functional global patterns, through the interaction with the environment (Bart, Parthasarathy, Wang, Hackood & Beni, 1986).
011.2.10	What's the Collective Intelligence Adaptation Principle?	Collective Intelligence Adaptation Principle Collective Intelligence, or the ability to cooperate with others conspecifics in order to solve tasks that could not be completed only at the individual level, guaranteed evolutionary success of many species including the human. Its effectiveness and its adaptivity have made possible that it could became an evolutionarily stable strategy and that it could be managed innately and automatically by all human beings.
011.2.11	What's the Collective intelligence Beck Conjecture?	Collective Intelligence Beck Conjecture In all times and all over the world, tribes have supplanted the other, and since morality and cooperative skills are elements that favoured the conquering tribes, these features have spread among most men. Preserving the groups that show a cooperative behaviour, natural selection might act indirectly on the individual and promoting altruistic personality traits (Beck, 2012).
011.2.12	From a study emerged that the COIN can be measured according to three factors, what?	From a study emerged that the COIN can be measured according to three factors: -Individual social skills -Turnover in conversation -Number of female members It does not seem to significantly correlate with the value of the intelligence quotientof any of the group members, even of the most intelligent. (Williams Woolley, Chabris, Pentland, Hashmi & Malone, 2010).
011.2.13	What's the Collectiuve Intelligence Definition provided by Forsyth (2009)?	Collective Intelligence by Forsyth Human beings usually turns to groups when they have to solve complex problems because they have better decision-making skills than single individuals since groups can process a larger amount of information, faster and more accurately (Forsyth, 2009).
011.2.14	When the group activate its Collective Intelligence Potential (What's the Collective Intelligence Antecedents)?	Collective Intelligence Antecedents • Smith (1994) stated the reasons that people normally form collaborative groups – the task is too large to be completed by an individual within limited time and no one possesses all of the skills and knowledge required. • Through collective intelligence, groups of individuals often work collectively so as to acquire new knowledge on a just-in-time basis (Jenkins, 2009). • Levy (2000) described the potential of

		"collective intelligence" as "everyone knows something, nobody knows everything and what any one person knows can be tapped by the group as a whole." • In regards to the motivation of collaborative behaviors, Brown and Lauder (2001) defined collective intelligence as a basis for an empowerment opportunity: "pooling of team intelligence to attain common goals or resolve common problems" • A group implement Collective Intelligence every time, working, it is able to find a larger number solutions, that are also better, respect to what the single members would be able to find if they worked exclusively at individual level.(Heylighen,1999)
011.2.15	What states the Group Mind Hypothesys?	The Group Mind Many Models of computations have recently been proposed and applied to collective intelligence. Experiments with chaotic collective inferences in a social structure with use of such models, demonstrate that a group (with some restrictions) can complete an inference with an appropriate conclusion, even when facing some internal inconsistencies, i.e. it can work as a group mind. (Szuba, 2001)
011.2.16	What the C factor of Collective Intelligence Hypothesys?	The C Factor of Collective Intelligence The journal Science has recently published an intriguing paper by Woolley, Chabris, Pentland, Hashmi, and Malone (2010) in which evidence of a 'collective intelligence' or 'c-factor' undergirding group performance on a variety of group tasks is presented. They argue that this is similar (but not strongly related) to g and its association with individual differences scales.
011.2.17	What were the results of Collectuve Intelligence Experiments conducted by Luo (2009)?	The C Factor of Collective Intelligence • In the first study an average correlation of r = .28 was observed between group scores on different tasks, • and exploratory factor analysis revealed that the first factor accounted for over 43% of the variance. • Interestingly, it was also found that the average and maximum intelligence scores of individual group members were not significantly correlated with C. • The second study increased the size and number of groups along with the diversity of group tasks, and substantively replicated the findings of the first study. (Luo, 2009) By combining the findings of both studies, the researchers found that: • the average intelligence of individual group members was in fact modestly correlated with C (r=.15, p.<.05), • as was the intelligence of the highest-scoring team member (r = .19, p.<.01).

		And Three other unrelated factors appeared to be much more strongly correlated with C however: • average social sensitivity of group members, measured using the 'Reading the Mind in the Eyes Test' (Baron-Cohen, Wheelwright, Hill, Raste, & Plumb, 2001), r=.26, p.<.01; • the variance in the number of speaking turns taken by group members, a measure of the degree to which individuals dominated conversations, (r = −.41, p.<.01); • the proportion of females in the group (r = .23, p.<.01). (Luo , 2009)
011.2.18	What's the definition of Widsom of Crowds?	The Wisdom of Crowds Surowiecki's book The Wisdom of Crowds (2004) vividly describes the phenomenon and highlights some of the potentially underlying mechanisms. A group of average people can – under certain conditions – achieve better results than any individual of the group. This seems to hold even if one member of the group is more intelligent than the rest of the group
011.2.19	Surowiecki defines various conditions for the successful application of the "Wisdom of Crowds", such as:	(1) diversity in opinions, ; (2) independence, and (3) decentrality of group members or within a group. Thus, best collective decisions are not made by consensus building and compromises, but through a competition of heterogeneous independent opinions, i.e. through the usage of collective intelligence (Surowiecki 2004).
011.2.20	What's the implicit definition of Collectuve Ibntelligence provided by Surowiecki?	Best collective decisions are not made by consensus building and compromises, but through a competition of heterogeneous independent opinions, i.e. through the usage of collective intelligence (Surowiecki 2004).
011.2.21	What's the definition of Opportunistic team cognition?	Opportunistic team cognition - Teams often create novel and unexpected combinations of knowledge in ways that individuals could not (Hargadon, 1999). Such opportunistic team cognition becomes more possible when there is a collective critical thinking process. In other words, outcomes (e.g. augmented intelligence, new knowledge, innovative solution) led by iterative team reflections and cognitions qualify to be the result of collective intelligence because such critical thinking processes involve the analysis of premises, arguments, and evidence arising from team interactions (Kamin et al., 2001).
011.2.22	What's the four steps of the model of Norris & Ennis of Critical Thinking process?	The Wisdom of Crowds: (1) clarifying information, (2) assessing evidence, (3) judging inferences, and (4) \applying appropriate strategies and tactics
011.2.23	A more historical source of critical thinking can be found in Bloom's cognitive taxonomy of educational objectives (Bloom, 1956).	A more historical source of critical thinking can be found in Bloom's cognitive taxonomy of educational objectives (Bloom, 1956). The top three of Bloom's categories: (1) analysis, (2) synthesis, and (3) evaluation , are comparable to the definitions of critical thinking by Kennedy et al. (1991).
011.2.24	What's the Newman hypothesys of Ctricial Thinking Effect?	Newman Hypothesys Newman et al. (1997) concluded that computer-mediated conferencing facilitates higher levels of

		critical thinking while face-to-face interactions encourage more creative and higher volumes of interaction. For this regard, Newman et al. (1997) also provided discrete evidence for each phase of Garrison's (1991) critical thinking model and a specific scenario in which teams tackled explicit problem-solving tasks.
011.2.25	What are the Obstacles for Collective Intelligence in the Heylinghen framework?	**Collective Intelligence Obstacles in the Heylinghen Framework** First, however competent the participants, their **individual intelligence is still limited**, and this imposes a fundamental restriction on their ability to cooperate. Another recurrent problem is that **people tend to play power games**. Everybody would like to be recognized as the smartest or most important person in the group, and is there- fore inclined to dismiss any opinion different from his or her own. Such power games often end up with the establishment of a "pecking order", where the one at the top can criticize everyone, while the one at the bottom can criticize no one. The result is that the people at the bottom are rarely ever paid attention to, however smart their suggestions. **Coordination**. To tackle a problem collectively, the different subgroups must keep close contact. This implies a constant exchange of information so that the different groups would know what the others are doing, and can use each other's results. But this again creates a great information load, taxing both the communication channels and the individual cognitive systems that must process all this incoming information. Such load only becomes larger as the number of participants or groups increases.
011.2.26	What's the definition of problem solving provided by Heylinghen?	Problem-Solving by Heylinghen To better understand collective intelligence we must first analyse intelligence in general, that is, the ability to solve problems. A problem can be defined as a difference between the present situation, as perceived by some agent, and the situation desired by that agent. Problem-solving then means finding a sequence of actions that will transform the present state via a number of intermediate states into a goal state. Of course, there does not need to be a single, well-defined goal: the agent's "goal" might be simply to get into any situation that is more pleasant, interesting or amusing than the present one. The only requirement is that the agent can distinguish between subjectively "better" (preferred) and "worse" situations (Heylighen 1988, 1990).
011.2.27	What's the definition of Collective Problem Solving provided by Heylinghen?	**Collective Problem-Solving** To generalize this definition of a problem for a collective consisting of several agents it suffices to aggregate the desires of the different agents into a collective preference and their perceptions of the present situation into a collective perception. • In economic terms, **the aggregate desire becomes the market "demand" and the aggregate**

		perception of the present situation becomes the "supply" (Heylighen, 1997). • It must be noted, though, that what is preferable for an individual member is not necessarily what is preferable for a collective (Heylighen & Campbell, 1995): • in general, a collective has emergent properties that cannot be reduced to mere sums of individual properties. (Therefore, the aggregation mechanism will need to have a non-linear component.)
011.2.28	What's the Definition and Potential of Mental Maps in the Heylinghen model?	The Mental Map Potential for Collective Intelligence The efficiency of mental problem-solving depends on the way the problem is represented inside the cognitive system (Heylighen 1988, 1990). Representations typically consist of the following components: • a set of problem states, • a set of possible actions, • and a preference function or "fitness" criterion for selecting the most adequate actions. The fitness criterion, of course, will vary with the specific goals or preferences of the agent. Even for a given preference, though, there are many ways to decompose a problem into states and actions.
011.2.29	Within the Heylinghen theorethical frameworks, Mental Maps present a brand new eziology for actions, states, space a,d fitness function. Describe it.	The Mental Maps: Zoology of a "Brand New Setting" • Actions can be represented as operators or transitions that map one state onto another one. • A state that can be reached from another state by a single action can be seen as a neighbor of that state. • Thus, the set of actions induces a topological structure on the set of states, transforming it into a problem space. • The simplest model of such a space is a network, where the states correspond to the nodes of the network, and the actions to the edges or links that connect the nodes. • The selection criterion, finally, can be represented by a preference function that attaches a particular weight to each link. • This problem representation can be seen as the agent's mental map of its problem environment.
011.2.30	Descrbe the "hill-climbing" with backtracking heuristics.	"hill-climbing" with backtracking 1. from the present state choose the link with the highest weight that has not been tried out yet to reach a new state; 2. if all links have already been tried, backtrack to a state visited earlier which still has an untried link; 3. repeat this procedure until a goal state has been reached or until all available links have been exhausted. The efficiency of this method will obviously depend on how well the nodes, links and preference function reflect the actual possibilities and constraints in the environment.

011.2.31	In the Heylinghen framework to increase the problem-solving ability ability of a group requires two ingredients. What?	Increasing problem-solving ability will generally require two complementary processes: 1. Enlarging the map with additional states and actions, so that until now unimagined options become reachable; 2. Improving the preference function, so that the increase in total options is counterbalanced by a greater selectivity in the options that need to be explored to solve a given problem.
011.2.32	What's the Mental Map Diversity Factor within the framework of Heylinghen?	Mental Map Diversity Factor 1. The mental maps' diversity is healthy, since it means that different individuals may complement each others' weaknesses. 2. Imagine that each individual would have exactly the same mental map. In that case, they would all find the same solutions in the same way, and little could be gained by a collective effort. (In the best case, the problem could be factorized into independent subproblems, which would then be divided among the participating in- dividuals. This would merely speed up the problem-solving process, though; it would not produce any novel solutions). 3. As it is clear that a Collective Mental Map (CMM) cannot be developed by merely registering and editing individual contributions, we will need to study different methods to collectively develop a mental map.
011.2.33	What are the strategies to develop Collective Mental Maps within a group?	Collective Mental Map Development Strategy: "Voting" Probably the most basic method for reaching collective decisions and avoiding conflicts is voting. This method assumes that all options are known by all individuals, and that the remaining question is to determine their aggregate preference. In the simplest case, every individual has one vote, which is given to the options that this individual prefers above all others. Adding all the votes together determines the relative preferences of the different alternatives for actions. Collective Mental Map Development Strategy: "Averaging" - The three basic mechanisms of : (I) averaging, (II) feedback and (III) division of labor. gave us a first idea of a how a CMM can be developed in the most efficient way, that is, how a given number of individuals can achieve a maximum of collective problem-solving competence. Collective Mental Map Development Strategy: "Superposing" A collective mental map is developed basically by superposing a number of individual mental maps. There must be sufficient diversity among these individual maps to cover an as large as possible domain, yet sufficient redundancy so that the overlap between maps is large enough to make the resulting graph fully connected, and so that each preference in the map is the superposition of a number of individual preferences that

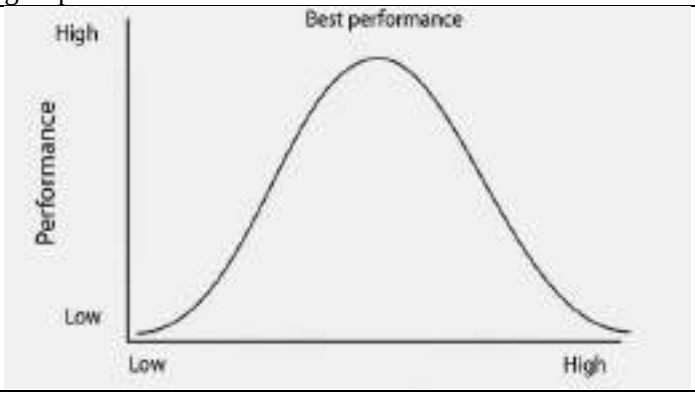
		is large enough to cancel out individual fluctuations. The best way to quickly expand and improve the map and fill in gaps is to use a positive feedback that encourages individuals to use high preference paths discovered by others, yet is not so strong that it discourages the exploration of new paths.
011.2.34	Describe the concept of Genes of Collective Intelligence, provided by Malone (2008)	The Genes of Collective Intelligence Malone's team calls these building blocks the "genes" of collective intelligence systems. And they define a gene as a particular answer to one of the key questions (Who, Why, What, or How) associated with a single task in a collective intelligence system. (Malone, 2009)
011.2.35	Describe the genes Who of the Malone's model of Collective Intelligence.	Who? The first question to be answered is, Who undertakes the activity? Here there are two basic genes. Hierarchy. In traditional hierarchical organizations, this question is typically answered when someone in authority assigns a particular person or group of people to perform the task. The task may be assigned to personnel inside the firm or to people outside it, through the hiring of a subcontractor. Crowd. In the Crowd gene, activities can be undertaken by anyone in a large group who chooses to do so, without being assigned by someone in a position of authority.
011.2.36	Describe the genes Why of the Malone's model of Collective Intelligence.	• Money. The promise of financial gain is an important motivator for most actors in markets and traditional organizations. • Love. Love is also an important motivator in many situations, even when there is no prospect of monetary gain. The Love gene can take several forms: people can be motivated by their intrinsic enjoyment of an activity, by the opportunities it provides to socialize with others, or because it makes them feel they are contributing to a cause larger than themselves. Studies of Wikipedia have shown that its participants are motivated by all three of these variants of the Love gene. • Glory. Glory or recognition is another important motivator. The programmers in many open source software communities, for example, are motivated by the desire to be recognized by peers for their contributions.
011.2.37	Describe the genes What of the Malone's model of Collective Intelligence.	*What?* The third question to be answered for any activity is: ***What is being done***? In traditional organizations, the answer to this question is often spoken of as *the* ***mission*** *or* ***goal***. For What, the many organizational goals encountered in collective intelligence systems can be boiled down into two basic genes. ***Create***. In this gene, the actors in the system generate something new—a piece of software code, a blog entry, a T-shirt design.

		Decide. In this gene, the actors evaluate and select alternatives—deciding whether a new module should be included in the next release of Linux, selecting which T-shirt design to manufacture, deciding whether to delete a Wikipedia article.
011.2.38	Describe the genes How of the Malone's model of Collective Intelligence.	The final question to be answered concerning an activity is, How is it being done? In traditional organizations, the How question is typically answered by describing the organizational structures and processes. Many collective intelligence systems still use hierarchies for some of their tasks, but what is novel is how they use crowds. So we focus here on instances of the How gene where the crowd does the Create or Decide task. A key determinant of the answer to this question is whether the different members of the crowd make their contributions and decisions independently of each other or whether there are strong dependencies between their contributions. The two How genes associated with the Create task are ***Collection*** and ***Collaboration***. • ***Collection***. This gene occurs when the items contributed by members of the crowd are created independently of each other. *For example, YouTube videos are created mostly independently of each other, and this makes YouTube a collection. Other examples of this common gene include Digg, a collection of news stories, and Flickr, a collection of photographs.* • An important subtype of the Collection gene is the ***Contest* gene**. In contests, like Threadless, one or several items in the collection are designated as the best entries and receive a prize or other form of recognition. • In another example of contests, ***InnoCentive***, companies offer cash rewards, typically totaling in the five or even six figures, to researchers anywhere in the world who can solve challenging scientific problems such as how to synthesize a particular chemical compound. ***Collaboration*** The Collaboration gene occurs when members of a Crowd work together to create something and important dependencies exist between their contributions. *For example, even though there is extensive hyper-linking between them, articles in Wikipedia are meant to stand on their own as independent entities. This means Wikipedia as a whole is a Collection of articles. But the additions and editorial changes that different contributors make within a single Wikipedia article are strongly interdependent. So each individual Wikipedia article is a Collaboration, comprised of contributions submitted by a number of users. Another important example of the Collaboration gene is Linux, and any other open source software project, where there are strong interdependencies among the modules submitted*

		by different contributors. For Decide tasks, there are two possible genes: ***Group Decision*** and ***Individual Decisions***. ***Group Decision.*** The Group Decision gene occurs when inputs from members of the crowd are assembled to generate a decision that holds for the group as a whole. *In some instances, such as Threadless, this decision determines the subset of contributed items that will be included into the final output. In other instances, such as Digg, the decision relates to generating a common rank-ordering of the contributed items. In yet other instances, such as prediction markets, the decision relates to aggregating individual inputs to form a publicly visible estimate of a quantity. (Malone, 2009).* Important variants of the Group Evaluation gene are ***Voting***, ***Consensus***, ***Averaging***, and ***Prediction Markets.***
011.2.39	Describe the Global Brain Hypothesys.	The Global Brain Hyphothesys Inspired by the ideas of Swarm Intelligence and the "global brain", a concept of "community intelligence" is suggested, reflecting that some "intelligent" features may emerge in a Web-mediated online community from interactions and knowledge-transmissions between the community members.

Module 011.3 – Empathy and Collective Intelligence		
Id	Pay Off	
011.3.1	Describe the concept of Wisdom of Crowds and its hystory.	The wisdom of crowd effect is a statistical phenomenon and not a social psychological effect, because it is based on a mathematical aggregation of individual estimates (Lorenz, Rauhutb, Schweitzera & Helbingb, 2010). First evidences of this effect in 1907 when Galton find that aggregating judgments of non expert could produce more accurate estimations than single expert judgment (Galton, 1907). This effect has become an interesting argument of study in numerous field of research such as market predictions, political predictions, group decision making, community management and digital crowdsourcing (Yu, Chai & Liu, 2017) qModels focused their approaches on aggregating and/or weighting in different ways the judgment expressed by single individuals (Du, Hong, Wang, Wang & Fan, 2017).
011.3.2	Descrube the "surprisingly Popular Algorithm".	'Surprisingly Popular' algorithm "(...) select the answer that is more popular than people predict. We show that this principle yields the best answer under reasonable assumptions about voter behaviour, while the standard 'most popular' or 'most confident' principles fail under exactly those same assumptions." (Prelec, Seung & McCoy, 2017). The algorithm ingredients: • actual judgment of a person (a or b) • estimated probability of being correct (0.5 to 1) • estimated percentage of other people chose answer (a) (McCoy & Prelec, 2017)

011.3.3	Descrbe the main resulta of the Wooley et al experment about Collective Intelligence.	The 3 Factors Model of Woolley et alCombining the findings of the two studies, the average intelligence of individual group members was moderately correlated with c ($r = 0.15$, $P = 0.04$), and so was the intelligence of the highest-scoring team member ($r = 0.19$, $P = 0.008$). Factor C was significantly correlated positively with social sensibility (RME) ($r = 0.26$, $P = 0.002$) and the proportion of female in the group ($r = 0.23$, $P = 0.007$) and negatively with low speaking turn variance ($r = –0.41$, $P = 0.01$). “By analogy with individual intelligence, we define a group’s collective intelligence (c) as the general ability of the group to perform a wide variety of tasks. (...) is a property of the group itself, not just the individual in it.”
011.3.4	What’s the leation bewteen Social Influence, Group Performance, Team Composition, and Synchronicity of Facial Expression, with Collective Intelligence?	Social Influence - “Social influence triggers the convergence of individual estimates and substantially reduces the diversity of the group without improving its accuracy” (Lorenz, Rauhutb, Schweitzera & Helbingb, 2010). Group Performance - CI has been found to be an important predictor of group performance (Kim, Engel, Woolley, Lin, McArthur & Malone, 2015; Woolley, Aggarwal, & Malone, 2015) both in real environments and virtual (Engel, Woolley, Jing, Chabris, & Malone, 2014) and in differents cultures (Engel, Woolley, Aggarwal, Chabris, Takahashi, Nemoto, & Malone, 2015) Team Composition - CI has been shown to be heavily influenced by team composition in particular diversity (i.e., sex and cognitive) Synchrony in Facial Expression - Synchrony in facial expressions (indicative of shared experience) was associated with CI and synchrony in electrodermal activity (indicative of shared arousal) with group satisfaction. Furthermore, various forms of synchrony mediated the effect of member diversity and social perceptiveness on CI and group satisfaction (Chikersal, Tomprou, Kim, Woolley & Dabbish, 2017)
011.3.5	What were the main results of the experiment of Gupta and Bates of 2017?	(Bates & Gupta, 2017) ● First rigorous replicative study of Woolley et al. of 2010. ● Findings: “Individual IQ accounted for around 80% of group-IQ differences.” ● Conclusions: “In structural tests, this group-IQ factor was indistinguishable from average individual IQ, and social sensitivity exerted no effects via latent group-IQ.” “Considering the present findings, work directed at developing group-IQ tests to predict team effectiveness would be redundant given the extremely high utility, reliability, validity for this task shown by individual IQ tests”.
011.3.6	What was the impact of Collective Intelligence factor in the Malone’s experimentla results?	43%
011.3.7	What’s the definition of Collective intelligence provided by Wooley,	Existing research suggests that group collective intelligence is likely to be an emergent property that

	Aggarwal, and Malone (2015)?	results from both top-down and bottom-up processes» (Woolley, Aggarwal e Malone, 2015).
011.3.8	Describe the Top-Down and the Buttom-Up processes that can be considered ads predictor of Collective Intelligence.	Top down processes Include group structures and norms that regulate collective behavior in ways that enhance the quality of coordination and collaboration. Bottom up processes - Involve the member characteristics that contribute to enhance group collaboration.
011.3.9	What do not predicts collective intelligence?	Group satisfaction; Social Cohesiveness; Psichological Safety
011.3 10	What predict Collective Intelligence?	More collectively intelligent groups communicate more and participate more equally than other groups (Engel et al.,2014); Cognitive Style Diversity; The proportion of women in the group; The average social perceptiveness of group members.
011.3.11	What's the form relation between Cognitive Style Dyvesrity and Performance of the Group?	

Module 011.4 – Collective Intelligence- the case of crowdsourcing		
Id	Pay Off	
011.4.1	What's the definition of Social Problem Solving provided by D'Zurilla (1986)?	The Social Problem Solving can be defined as the ability to solve a problem within an ecological and social environment (D'Zurilla, 1986).
011.4.2	What's the relation between Cooperation and Group Size found by Barcelo et al. (2015)?	Cooperation and Grup Size "Recently studies found that cooperation tends to decrease in function of increasing the size of the group, if the theoretical pay-off obtained from the full cooperation is structured to remain constant with increasing the members part of the group (Pecorino,1999; Barcelo & Capraro, 2015; Capraro & Barcelo, 2015)
011.4.3	What's the definition of Social Facilitation?	Social Facilitation Improvement in task performance that occurs when people work in the presence of other people.
011.4.4	What's the definition of Synergy?	Synergy The combining of two or more independent systems that yields an effect that is greater than the sum of the individual effects.
011.4.5	What's the Assembly Bonus Effect?	Assembly Bonus Effect Producing an outcome as a group that is superior to the results that could have been achieved by a simple aggregation or accumulation of group members' individual efforts; a gain in performance that is caused by the way the members fit together to form the work group.
011.4.6	What's the Köhler Effect ?	Köhler Effect An increase in performance by groups working on

		conjunctive tasks that require persistence but little coordination of effort and is likely due to the increased effort expended by the less capable members.
011.4.7	What's the Increased Involvement Factor of Crowdsourcing?	• Loafing is less likely when people are involved in their work. (Stark, Shaw, & Duffy, 2007). • So long as the competition remains "friendly," group members may persevere with much greater intensity when they are vying with others in the group for the best score (Hinsz, 2005). • Challenging, difficult tasks reduce loafing, but so do ones that will determine group members' personal outcomes—either by reward or by punishment (Brickner, Harkins, & Ostrom, 1986; Shepperd, 1993, 1995; Shepperd & Wright, 1989). • Social loafing is also reduced when rewards for successful performance are group-based rather than individually based—so long as the group is not too large in size (DeMatteo, Eby, & Sundstrom, 1998) and the reward is divided nearly equally among all the group members (Honeywell-Johnson & Dickinson, 1999; Liden et al., 2004). • Involvement may even prompt group members to compensate for the expected failures or incompetencies of their fellow group members by expending extra effort. (Williams, Karau, 1991)
011.4.8	What's the Ringelman Effect?	Ringelmann Effect The tendency, first documented by Max Ringelmann, for people to become less productive when they work with others; this loss of efficiency increases as group size increases, but at a gradually decreasing rate.
011.4.9	What's the definition of Free Riding?	Free Riding Contributing less to a collective task when one believes that other group members will compensate for this lack of effort.
011.4.10	What's the definition of Sucker Effect?	Sucker Effect The tendency for individuals to contribute less to a group endeavor when they expect that others will think negatively of someone who works too hard or contributes too much (considering them to be a "sucker").
011.4.11	What's the definition of Task Demand?	Task Demands The effect that a problem or task's features, including its divisibility and difficulty, have on the procedures the group can use to complete the task.
011.4.12	What's the Distraction Conflict Theory?	**Distraction-Conflict Theory** An analysis of performance gains in groups assuming that when others are present, attention is divided between the other people and the task; this attentional conflict increases motivation, and so it facilitates performance on simple, well-learned tasks**.**
011.4.13	Provide a definition of Crowdsourcing based on the COIN framework.	With the recent spread of the latest communication technologies, it is now possible to hypothesize application of COIN involving a huge number of people. This new kind of COIN (Arolas & Guevara, 2014; Zhao & Zhu, 2012), or crowds involvement process , was called Crowdsourcing (Howe, 2006).
011.4.14	Provide a definition fo Game	The Game Theory, through mathematical models,

	Theory.	investigate social phenomena, strategies and processes of decision-making involved in the interaction of human and social organization. It has two basic assumptions: -decision makers are rational, in the sense that they pursue a clearly defined goal knowing the entire set of possible combinations of events that the game can lead - and they think in a strategic way, taking into account for their actions knowledge or expectations regarding the behavior of the other decision-makers (Osborne & Rubinstein, 1994).
011.4.15	Describe the Social Heuristics Hypothesys.	Some of studies, starting from the evidence that in the Public Goods Game (PGG) participants who take faster decisions tend to contribute more to the common fund, compared to those who take longer to decide, have recently hypothesized that cooperative behaviour could be the result of a Social Heuristic (SHH) (Rand, Greene & Nowak, 2012; Rand, Peysakhovich, Kraft-Todd, Newman, Wurzbacher, Nowak & Greene, 2014). The heuristic reasoning is a kind of intuitive reasoning that uses few cognitive resources, faster than systematic.
011.4.16	Define the Collective Intelligence Heuristics.	**Collective Intelligence Heuristics** This exhibition of a collective behaviour in solving difficult problems also in an environment who encouraged competitive actions could be seen as the manifestation of a characteristic owned by human beings that may be called “Collective Intelligence Heuristic”. Such heuristic could unconsciously bring people to look for a collective action when they have to solve complex problem

Module 012.1 – Digital Pro-Social Behaviour		
Id	Pay Off	Explanation
012.1.1	Define the Internet Prosocial Behaviour.	Every day hundreds of thousand of people voluntarily help strangers on the net with no expectation of direct reciprocity or reward. Prosocial behaviour Voluntary intentional behaviour that results in benefits for another (Eisenberg & Miller, 1987)
012.1.2	Propose some examples of Internet Prosocial Behaviour	Ways of Internet Prosocial behaviour: (1) Donating funds to worthy causes through online charitable organizations; (2) Donating idle computing power from their personal computers (PCs) to help scientists analyze large data files; (3) Working on projects that create freely-available information products like open source software and encyclopedia articles; (4) Working on projects organized for socially-worthwhile causes, such as electronically mentoring disadvantaged students or making public domain literature freely available on the web; (5) Offering support to one another in discussion forums
012.1.3	What are the components of the Penner model of Prosocial Behaviour?	***Penner Model of Prosocial Behaviour*** – (I) Demographic Variables; (II) Personality Variables; (III) Volunteer organization contribution Variables. All affecting the Prosocial volunteer behaviour.

012.1.4	What are the four main (classical) prosocial context provided by the Internet?	Technical and social components interact to form the context that support prosocial behavior on the net. Categories of Pro-Social Contexts - Four main categories of prosocial contexts are; (1) Support group discussion forums; (2) Service projects; (3) Open collaborative work projects; (4) Citizen science projects
012.1.5	What are some main on-line context attributes affecting the Prosocial Behaviour/Experience?	Despite differences among them all of these contexts share attributes that affect the online prosocial experience (Amichai-Hamburger, 2008). ***Contexts attributes affecting online prosocial experience:*** (1) **Transaction costs are substantially lower** than they would be in an offline context; (2) **People can participate at any hour** of the day or night from any place with technology and net access; (3) **They can fit their contributions into their own time schedule** Volunteers note that convenience and schedule flexibility are two common reasons for choosing to volunteer online (Mukherjee, 2010).
012.1.6	What's the relation between the Visible status characteristics and attribution, and the prosocial behaviours for those who need help?	Those who need help: (I) In the offline world, physically attractive people are more likely to be helped than are unattractive people (Athanasiou & Green, 1973; Byrne, Baskett, & Hodges, 1971; Chaiken, 1979; Dommeyer & Ruggiero, 1996; Harrell, 1978; Mims, Hartnett, & Nay, 1975; Piliavin & Piliavin, 1975; Scott, 1969; West & Brown, 1975; Wilson, 1978); (II) Social similarity affects helping in the offline world (Eagly & Crwoley, 1986; Emswiller, Deaux & Willits, 1971; Simon, Stürmer, & Steffens, 2000; Simon et. al, 1998; Wellman & Wortley, 1990); (III) In the offline world, one of the impediments to asking for help is the perceived threat to one's public self-image (Karabenick & Knapp, 1988); (IV) Physical invisibility may reduce that perceived threat in the online world; so, too, may the use of pseudonyms, screen names, or anonymous postings.
012.1.7	What's the relation between the Visible status characteristics and attribution, and the prosocial behaviours for those who give help?	Those who give help: (1) In the offline world, bystander helping is influenced by the number of other people available to provide help (Latané & Darley, 1970). The motivation is reduced whenever people see that others are available to give help; (2) In the Online world is hard to know how many potential helpers are available. The combination of visible needs for help and unknown numbers of potential helpers may make the felt need to offer help more salient; (3) Physical invisibility also reduces the barriers to offering help for people whose age, gender, race, or other visible attributes lead people to discount their contributions in the offline world, regardless of their actual usefulness.
012.1.8	What's the relation between Social Pressure and the decision to make an initial contribution in terms of prosocial ehaviour?	Social Pressure Factor – (1) In the offline world, "volunteer social pressure", or "a potential volunteer's subjective perceptions of how significant others feel about him/her becoming a volunteer and his/her motivation to comply with theese feelings" is

		an important determinant of the initial volunteering decision (Penner, 2002); (2) Social pressure is lower in online volunteering than in offline volunteering because online volunteering is tipically done in the privacy of one's own computing environment rather than in the physical presence of others; (3) Crowdfunding, a relatively new type of contribution platform, provides a contribution context in which social pressure may becoome salient.
012.1.9	Describe the complexity between the Motivation to help, and the prosocial behaviour on-line.	Motivation to Help – (1) Prosocial behavior may be motivated by altruism or egoism and often by a combination of both (Batson, 1991: Batson & Powell, 2003; Nelson, 1999; Piliavin & Charng, 1990); (2) Altruistic prosocial behavior is motivate purely by the desire to increase another person's welfare; egoistic prosocial behavior is motivate purely by the desire to increase one's own welfare or that of one's group or cause through helping others (Batson, 1998; MacIntyre, 1967); (3) In a number of studies, online help providers have attested to the altruistic motives of empathy, community interest, and generalized reciprocity, and egoistic motives of self-development, reputation enhancement, and fun (Butler, Sproull, Kiesler, & Kraut, 2007; Lakhani & Von Hippel, 2003; Nov, 2007; Oreg & Nov, 2008; Pope, 2001; Schroer & Hertel, 2009; Wasko & Faraj, 2000); (4) In a comparative study of personality attributes across different types of contribution context, reserchers found that egoistic motives and values were stronger in volunteer software project contributors and altruistic motives and values were stronger in Wikipedia contributors, but volunteers in both contexts reported both types of motives (Oreg & Nov, 2008); (5) In electronic contexts a majority of the help is often provided by a minority of the members who incur substantial costs of their own time. Eighty percent of English language Wikipedia context is written by 10% of Wikipedians (Priedhorsky et al., 2007); (6) Within the online discussion forums for technical support, 11-15% of forum participants provided almost half the answer within a given time period (Moon & Sproull, 2008); (7) About 88% of the code in the Apache server software project was contributed by 15 core developers (Mockus, Fielding & Herbsleb, 2002); (8) Occasional ad hoc positive feedback as well as intrinsic benefit is probably sufficient to offset the cost of infrequent helper (Yang & Lai, 2010); (9) The greater the cost of the helping behaviour, the greater the need for personal rewards if the helping is to be sustained (Field & Johnson, 1993; Omoto & Snyder, 1995); (10) In the elctronic context, participants who report being motivated by community or group interest often provide the most valuable contributions (Bateman, Gray & Butler, 2011; Blanchard & Markus, 2004; Butler et al., 2007;

		Constant et al., 1996; Meyer et al., 2002); (11) Team affiliation is positively related to a person's contribution level even though the contribution is merely idel PC cycles (Nov, Anderson & Arazy, 2010)
012.1.10	What's the relation between Prosocial behaviour and Social Learning Theory?	Social Learning theory suggests that prosocial behaviour is learned (Bandura, 1977; Batson, 1998). In general rewards reinforce helping behaviour, punishments reduce unhelpful or hutful behaviour. (1) Within a group context, social recognition, not just private reward, increases prosocial behaviour (Fisher & Ackerman, 1998); (2) Observational modeling processes with reinforcement will result in learning over time (Compeau & Higgins, 1995); (3) Some contexts use software that records and displays recognition points!! (4) The combination of visible contributions with both ad hoc and systematic feedback suggests that the minimum criteria for learning how to engage in prosocial behaviour in the electronic context are met (Moon & Sproull, 2008). Social learning theory also suggest that low cost trials are more effective than high cost ones in the initial stages of learning – (1) Studies on internet discussion group have reported a mean message length ranging from 8 to 30 lines of new text (Galegher, Sproull & Kiesler, 1995; Wasko & Faraj, 2000); (2) They have also reported a mean participation time of 10-20 minutes per session (Boberg et al., 1995; Lakhani & Von Hippel, 2003)
012.1.11	Describe why, Social Identity Theory and Self-Categorization Theory (Tajfel & Turner, 1986; Turner, Hogg, Oakes, Reicher & Wetherell, 1987) are helpful in understanding why some people exhibit sustained prosocial behaviour.	Social Identity Theory and Self-Categorization Theory (Tajfel & Turner, 1986; Turner, Hogg, Oakes, Reicher & Wetherell, 1987) are helpful in understanding why some people exhibit sustained prosocial behaviour. (1) Identification leads to selective social comparisons that emphasizes intergoup difference along dimensions that favor the ingroup and confer positive distinctiveness on the ingroup when compared to the salient outgroup (Hogg & Abrams, 1988); (2) Categorizing the self and others in terms of groups emphasizes group members' fit with the relevant group prototype or "cognitive representation of features that describe and prescribe attributes of the group" (Hogg & Terry, 2000); (3) People legitimated their requests for help in their messages by describing their membership in the group and by appealing to the group's shared history (Galegher et al., 1998). Social Identity Theory – (1) Requests that did not reference the group were much less likely to receive a reply/help. (2) People in cohesive groups exhibited greater linguistic norm conformity than people in ad hoc groups (Sassenberg, 2002); (3) Group prototypes are negotiated and redefined through member interactions (McKenna & Green, 2002; Postmes, Spears & Lea, 2000); (4) In other words, participants in electronic contexts collectively define who is an

		admired member and what is a high-quality contribution through comments and feedback provided in response to member contributions; (5) *In both offline and online contexts, frequent participants are likely to form relational bonds with one another (Lawler, Thye & Yoon, 2000), especially if they expect the group to persist over the long term (Chidambaram, 1996; Walther, 2002); (6)* ***In electronic prosocial contexts, as people participate over time they become aware of other members who repeatedly provide valuable help****.* (7) ***Active members will form a sense of community*** *with other core members and become committed to this core subgroup of the larger group (Moon, 2004) These higly identified volunteers will help other members, not only as a service to those needing help and as a matter of self-interest, but also in order to demonstrate their identification with and commitment to the core group of volunteers who sustain the group as a whole (Hertel, Niedner and Herrmann, 2003)*; (8) **Subgroup identification**, but not identification with the group as a whole**, increased contributions rate** (Rashid et al., 2006); (9) **The more the participants believes that other members correctly perceive their salient identities, the more likely they are to make a contribution** and the more satisfied they are with their community experiences (Ma & Agarwal, 2007); (10) **Volunteers who joined Wikipedia subgroups exhibited more prosocial behaviours than volunteers who did not join subgroups** (Kittur, Pendleton & Kraut, 2009)
012.1.12	Volunteerism studies in the offline world have generally found that participation in voluntary association management can foster commitment (Simon et al., 1998; Wilson, 2000). Describe some experimental evidences.	Volunteerism studies in the offline world have generally found that participation in voluntary association management can foster commitment (Simon et al., 1998; Wilson, 2000) – (1) Group identification increases cooperative behaviours related to group maintenance and survival (Ashforth & Mael, 1989; Mael & Ashforth, 1995; Tyler, 1999); (2) Volunteer who maintains a list, often called a list of "owner", spends substantially more time than other members in infrastructure maintenance, social control, and external promotion (Butler et al., 2007); (3) Leaders in open collaborative work projects have been shown to model desirable behaviours, unblock bottlenecks, and establish productive subgroup structures (Kittur et al., 2009; Moon & Sproull, 2008; Vibbur, 2009)
012.1.13	Many studies across a variety of online contexts report that participation is beneficial to participants. Reports some examples.	Many studies across a variety of online contexts report that participation is beneficial to participants. (I) Protégés in online mentoring report positive attitudinal and behavioural outcomes (Bennet, Tsikalas, Hupert, Meade & Honey, 1998; Muller & Barsion, 2003; Watson, 2006); (II) Medical and Psychological support groups derive health benefits from their participation in addition to information

		and social benefits: health status include: (a) Shorter hospital stays (Gray et al., 2000), (b) decrease in pain and disability (Lorig et al., 2002), (c) decrease in social isolation (Galegher et al., 1998), (d) decrease in depression (Glasgow, Boles, McKay, Feil & Barrera, 2003), (e) increase in quality life (Shaw, Hawkins, McTavish, Pingree & Gustafson, 2006), (f) increase in social support (Glasgow et. al, 2003; Han et al., 2011), (g) decrease in health intervention program attrition (Richardson et al., 2010), (h) increase in self efficacy and psychological well being (Cummings et al., 2002; Mckenna & Bargh, 1998; Rains & Young, 2009).
012.1.14	Many studies across a variety of online contexts report that participation is beneficial to participants.	Many studies across a variety of online contexts report that participation is beneficial to participants. (1) Active members of online discussion groups and volunteer collaborative work groups report that information benefits are important to them (Baym, 1999; Lakhani & Von Hippel, 2003; Lakhani & Wolf, 2005; Panciera, Masli & Terveen, 2011; Wasko & Faraj, 2000). (2) Some members also derive the social benefits that can come from interacting with other people: getting to know them, building relationship, making friends, having fun (Baym, 1999; Butler et al., 2007; Chiu, Hsu & Wang, 2006; Ellison, Steinfield & Lampe, 2007; Nov et al., 2011)
012.1.15	A few studies have focused specifically on benefits to those who help others. Make some examples.	A few studies have focused specifically on benefits to those who help others. (I) As predicted by social learning theory, people who devote substantial time and attention to helping others report receiving both egoistic and altruistic benefits, but relatively greater altruistic benefits than those who are less involved. (II) Group owners (who spent more time helping the group) reported receiving different levels and types of benefits compared to other members: Lower levels of information benefits, higher levels of prosocial benefits, such a as the satisfaction of helping other people and supporting the real world community associated with the group's topic (Butler et al., 2007). (III) The in-role volunteer activity, which is behavior specified by a person's role as a volunteer, encourages an altruistic self-image and commitment to the community (Callero, Howard & Piliavin, 1987; Piliavin & Callero, 1991); (IV) Members of professional online communities report increased self-esteem, enhanced reputations, knowledge, self efficacy and enjoyment in helping others (Chiu et al., 2006; Wasko & Faraj, 2005); (V) People who contributed help derived learning benefits, reputational benefits, and benefits related to advancing the group (Lakhani & Von Hippel, 2003); (VI) People who donated code were more likely to report identification with the software development group, whereas people who only used the code were more likely to report only egoistic benefits from

		participation (Hertel et. al, 2003); (VII) People who contributed to a wiki system reported a sense of having benefited to the wiki community, whereas people who merely consumed wiki information reported only personal information benefits (Panciera et al., 2011); (VIII) Mentors reported they derive satisfaction from "helping the next generation move ahead" and insight into their own career experiences (Muller & Barsion, 2003); (IX) Those who mentor derive both altruistic and egoistic benefits from so doing (Higgins & Kram, 2001); (X) Because the internet encourages users to share more intimate information about themselves, close and personal relationships may develop among users much faster than in offline relationships (Amichai-Hamburger, 2008); (11) Internet technologies in general enable volunteers to explore, develop, and redefine their identities due to fewer physical constraints and increased control over the type of information shared in the online environment (Amichai-Hamburger, 2008; Williamson, Wright, Schauder & Bow, 2001)

Module 012.2 – On-line Moral Disengagement		
Id	Pay Off	Explanation
012.2.1	What's the relation between gender and moral disengagement?	Gender Effects on Moral Disengagement – (I) Males with lower level of education and members of the major ethnicity groups tend to perform moral justification, minimization of harmful effects, disavowal of responsibility and dehumanization (McAlister, Bandura, Owen, 2006). (II) However, female members of minority ethnicity groups, are less favorable to moral justifications and less inclined to minimize civilian casualties (McAlister, Bandura, Owen, 2006).
012.2.2	What's the relation between age and moral disengagement?	***Regarding the age, in course of development from 14 to 20 years old, 4 groups can be identified*** *(Paciello, Fida, Tramontano, Lupinetti and Caprara, 2008):* (I) Nondisengaged, (II) Normative; (III) Chronic Disengaged; (IV) Later Desister .
012.2.3	What's the Psychological factors affecting moral disengagement?	***(I) Empathy negatively correlates with moral disengagement, thus indicating that people who are able to empathize with others are less likely to disengage morally (Deter, Trevino and Sweitzer, 2008). (II) Social desirability correlates positively with empathy and negatively with moral disengagement: in particular, those who respond in a socially desirable way report fewer beliefs related to moral disengagement (Zeligman, 2014). (III) Traits of Cynicism, External locus of control are predictive of a greater Moral Disengagement (Deter, Trevino and Sweitzer, 2008); (IV) When measured concurrently with narcissism, psychopathy and machiavellism (Dark Triad) are better predictors of unethical and antisocial outcomes (Kish-Gephart,***

		Harrison & Treviño, 2010). (V) Psychopathy and machiavellism are a predictor of moral disengagement (Egan, Hughes and Palmer, 2015)
012.2.4	Describe some mechanisms of the Moral Disengagement Typical Dynamics.	(a) Displacement and Diffusion of Responsibility are incorporated into the structure of a military mode, shifting responsibility to the lower ranks. At the same time, dehumanizing the enemy makes his possible death diminished by remorse (Ivie, 1980, Keen, 1986). (b) Moral sanctions decrease, even if the destructive effects such as the possibility of civilian victims, are sufficiently reduced or obscured. Television, and more generally the means of communication, can therefore be strategic tools for the social management of moral disengagement (Bandura, 2004).
012.2.5	Describe the relation between size of the group and moral disengagement.	**(I) There is a relationship between the size of the group and the spread of responsibility,** namely in larger groups there is a significant diffusion of responsibility; (II) **Dehumanization increases proportionally to the size** and the **dispersion** of the group; (III) **There is a correlation between attribution of guilt and group size**. It seems that in many groups there is a lower sense of guilt.
012.2.6	Moral disengagement and virtual environments. Introduce such a complex relation.	(a) The literature claims that moral disengagement is a predictor of cyberbullying (Kowalski et al., 2014). (b) Lowry, Zhang, Siponen, Wang (2016) believe that moral disengagement is a natural consequence of deindividuation. (c) Pornari & Wood (2010) claims that the high degree of anonymity in the virtual environment increases the likelihood of harmful behavior towards others. (d) The absence of many negative feelings (for example, guilt, shame, self-condemnation); (e) Reduction of the "possibility of empathizing with the victim" (Robson & Witenberg, 2013). (f) Anonymity suspends normal forms of social interaction and social customs; in this way, "problematic behaviors can be recognized, rationalized and reciprocally encouraged by others".

Module 012.3 – On-line Bystander Effect		
Id	Pay Off	Explanation
012.3.1	What factors affect Bystander effect in real environments?	Contextual factors: (I) group size; (II) situational ambiguity; (III) belonging to the geographycal/cultural context. Victim factors: (I) Gender; (II) Victims numerosity; (III) Etnicity. Bystander factors: (I) Gender; (II) Age. Psychological and Psychosocial factors: (I) Self Efficacy; (II) Empathy; (III) Social Desirability; (IV) Social Responsibility; (V) Self Esteem.
012.3.2	What factors were reported before the VirtHuLab experiment as affecting Bystander effect in virtual environments?	(I) Group size; (II) Ethnicity; (III) Age;
012.3.3	What kind of relation linked in the VirtHuLab experiment, the Group Size	A curvilinear (logarithmic) relation, asymptotically approaching the 100%.

	and the Bystander effect?	
012.3.4	What dimensions appeared to increase the On-line bystander effect in the VirtHuLab experiment?	(1) Group size; (2) Social desirability; (3) General Self Efficacy; (4) Number of Topics in SNS.
012.3.5	What dimensions appeared to decrease the On-line bystander effect in the VirtHuLab experiment?	(1) Age; (2) Openness; (3) Coscentiousness; (4) Importance given to SNS contacts; (5) Activity (messaging) on SNS; (6) Internet Forum participation.

Module 013.1 – Evolution of Cooperative Behaviour		
Id	Pay Off	Explanation
013.1.1	What's the Hamilton Law of Cooperation?	Cooperation can be established only if benefits outweigh costs. Fitness=Direct Component+Indirect Component (Hamilton, 1964)
013.1.2	What's the role of Reciprocity in determining cooperation among humans?	Direct reciprocity: when individuals interact in a cooperative way preferentially with those organisms that provided them help in the past. Indirect reciprocity: when cooperation is directed towards those who are known to have collaborated with others within the group. Reciprocity mechanism to function properly need typically human memory and cognitive skills to keep track of the past behavior of the interactors.
013.1.3	What's the main factor probably affecting the evolution of cooperation in nature?	An Environment characterized by a wide (accessible) social support.
013.1.4	What are the physiological proofs a probable adaption of Human beings to the tendency to cooperate with others?	(1) Activation neural networks related to reward (Moll, Oliveira-Souza & Zahn, 2008). (2) Reduction in stress and anxiety levels (Brown et al., 2009). (3) Empathy (i.e., understand the intentions and the emotional states of others) (Singer & Lamm, 2009).
013.1.5	What's the Ontogenesys of the Tendency to Cooperate?	People are naturally predisposed to cooperate. (1) Helping others to achieve their goals 14-18 months (Warneken & Tomasello, 2006); (2) Sharing goods (i.e., food) with others 12-18 months (Hay, 1979); (3) Share valuable information 12 months (Liszkowski, Carpenter, Striano & Tomasello, 2006); (4) After the third year there is a modulation of the sharing behavior. Sharing behaviour results influenced by the judgments that children have of how resources should be distributed (Spelke & Olson, 2008). So in this phase we have the emergence of the Social Norms.
013.1.6	Why Adolescence appears to be an interesting evolutionary phase to study Cooperation?	In spite of the very early appearance cooperative behaviors require a development to be used appropriately within a broader social context. Adolescence appears as a crucial importance moment Because of the Perspective taking ability in such a moment. Research found Higher levels of trust in a Trust Game (Fett et al., 2014), and an Expansion of prosocial behaviours in adolescence. However, to ensure that a real cooperation can be established between two or more individuals trust and perspective taking alone are not sufficient. Indeed, it is necessary an appropriate use of the reciprocity mechanisms (i.e., the implementation of appropriate

		actions in response to the conducts adopted by others in the past). Particular pattern of social behaviour that characterizes adolescence (i.e., use of trust, but poor ability to reciprocate) (Gutiérrez-Roig et al., 2014). Cooperation among adolescents may results unstable.
013.1.7	However, why individuals should have a predisposition to collaborate and to punish?	Conditions of Cooperation as an evolutionarily stable strategy (ESS): (1) Group level selection based on genetics (Gintis, 2000) - strong reciprocators support cooperation even in times of threat for the group; (2) Cultural group selection based on social learning (Boyd & Richerson,1988) - selection of groups with more effective norms (e.g., reciprocity); (3) Individual level (Gardner & West, 2004) - Evolution of cooperation as altruism towards relatives and then maintained with punishment
013.1.8	What are the so called “Rational Models” describing human cooperation, and what the cticisism against them?	Decision making. Rational models - Expected Utility theory (von Neumann & Morgenstern,1944); (a) individuals are able to identify the best decision for their own gain; (b) gains = quantity and its probability. Bounded rationality (Simon, 1947). Prospect Theory (Kahneman and Tversky, 1979). Critics - “There is no doubt that a gain of one thousand ducats is more valuable for a poor than for a rich, although both earn the same amount" (D. Bernoulli, 1738).
013.1.9	What are the so called “Irrational Models” descrbing human cooperation?	Decision making. Irrational models - Heuristics from Heuristics and Biases theory to a sophisticated form of reasoning, and an Adaptive and economic rules related to a specific task or domain. "Fast and frugal" techniques are simple enough to operate effectively when the time and the information available or the possibility of calculation are limited (Gigerenzer & Goldstein, 1996).
013.1.10	Heuristics influence cooperation decision making?	Yes, in many ways. A good example is the “Social Heuristics Hyphothesys”.
013.1.11	Describe the “Social Heuristics Hyphothesys”.	Social heuristics hypothesis (Rand et al., 2014). (I) Social norms are internalized in the form of automatic behavioral predispositions (Chudek & Henrich, 2011). (II) We internalize those strategies that are generally advantageous in our daily social interactions. (III) There are two types of processes: an automatic one (i.e., heuristics) and another more reflective. (IV) The deliberative process pushes towards the best outcome in a specific context In certain circumstances heuristics foster cooperation even in situation where this results disadvantageous.
013.1.12	What’s the role of Reputation for cooperation in virtual environments?	Reputation as Reciprocity Support - The reciprocity mechanisms work properly if supported by reputation (i.e., the track of the past behavior of an individual) (e.g., Nowak & Sigmund, 1998; Ohtsuki & Iwasa, 2004). Possibility to effectively identify an appropriate social partner. The language and the exchange of information appears essential to ensure that this large-scale cooperation model can work properly (Dunbar, 2004). Benefits of avoidance: (1) Cost of cheaters’ identification; (2) Cost of

		communication

Module 013.2 – From Gossip to Digital Reputation		
Id	Pay Off	Explanation
013.2.1	What's the psychosocial definition of Gossip?	Gossip is an efficient process through which the social evaluations (i.e., reputation) are transmitted (Conte & Paolucci, 2002).
013.2.2	What are the Virtue of Gossip in temr of psychosocial benefit to the community?	(1) The evaluation source remains undefined; (2) It develops in the absence of the evaluation target (e.g., Talanoa); (3) Can not be falsified (e.g., Hopi); (4) It maintains the values of the group and its identity (e.g., Makah); (5) It prevents retaliation. (6) Reduction of communication costs; (7) Gossip is also a powerful and efficient mean for the transmission of rules and norms of a culture. Not only that, at the same time reaffirms these rules (Baumeister, Zhang & Vohs, 2004).
013.2.3	Previous results confirmed a role of Reputation and Gossip in Public Good Dilemma Games. What?	The need to preserve a good reputation, maintained a high level of contributions to the public good. Differently, when indirect reciprocity turns were not present, the contribution of the players dropped rapidly to zero. Participants who received the threat of gossip manipulation were more generous than control participants, but only when the third party could personally identify them was this difference significant. There are solid evidences of the fact that the gossip and reputation can encourage cooperation. (a) On the one hand, these two factors can drive an individual to selectively interact with those who cooperate (i.e., have a positive reputation), and (b) on the other they can also be seen as a deterrent that could dissuade people from acting selfishly (i.e., possible negative reputation transmission).
013.2.4	What are the definitions of Good Gossip and Prosocial Gossip?	Good Gossip: - Any act of gossip that serves a goal other than the selfish personal ends of the gossiper. (Ben-Ze'ev,1994). Prosocial Gossip: - The sharing of negative evaluative information about a target in a way that protects others from antisocial or exploitative behavior. Such information sharing is prosocial because of the overall cooperation and group benefit it engenders. (Feinberg, 2012)
013.2.5	In the VirtHuLab experimemnt about Prosocial gossip, what was the general tendency of participants?	Humans tend to be pro-social gossiper - Individuals gave more frequently a coherent suggestion as an observer and a coherent feedback as a receiver
013.2.6	What was the relation between the activation of reputation and the average donation?	The average donation increased when the reputation was present.
013.2.7	What was the difference between college students and teenager, in the VirtHuLab experiments about Prosocial Gossip, in terms of use of reputation?	College students seem to be more sensitive to competitive incentives, while teenagers appear to be more impacted by reputation. College Students reach Better scores, Better reputation, Better use of reputational information. Nevertheless, Reputation appeared to induce prosocial behaviours in adolescents that are not encountered in university

		students. When the observer's reputation was active teenagers reduce the inconsistency of their suggestion (i.e., made more frequently direct prosocial gossip). A different use of reputation - Adolescents tended to require the assessment of observers with good and with bad reputation, avoiding to address their requests to those who have an ambiguous reputation (i.e., like - dislike close to 0). Prosocial (informative) behaviour of adolescents is more unstable - Adolescents giving a coherent suggestion provided less feedbacks (i.e., like or dislike) compared to college students, while the two groups did not differ in relation to an incoherent suggestion.
013.2.8	Define the Reputationa Heuristics.	***Reputational Heuristics*** biases our on-line behaviors, reasoning and social perception. In virtual environments reputation tend to polarize and in general to be maintained (has a certain inertia), because of the absence of other reliable cues provided by the communication environment.

Module 013.3 – The "beauty of strangers effect": complex on-line reputation dynamics		
Id	Pay Off	Explanation
013.3.1	In the VirtHuLab experiments about the relation between Fairness in the Ultimatum game and Reputation, what was the effect of the "only" presence of a reputational system on the average amount of the donation?	When a reputational system is present, we observe a decrease of the amount offered. When the receiver's reputation is unknown, the donors are usually more generous and behave like the other has a good reputation. In this case, the average of donation, is between 3,5 and 4.
013.3.2	In the VirtHuLab experiments about the relation between Fairness in the Ultimatum game and Reputation, what was the phenomenon describing the interplay between reputation and fairness, described as the "Beauty of Strangers Effect"?	The experiments demonstered how when the reputation was OFF donors allocated their resources like the receiver has had a good reputation (between 3.5 and 4). Apparently in a non-linear way, the average donation is related to the receiver's reputation. As the receiver's reputation increases also the donation is higher, even if in a non-linear way.
013.3.3	In the VirtHuLab experiments about the relation between Fairness in the Ultimatum game and Reputation, what was the relation between the acceptance rate and the reputation of the donor?	For the same amount offered, donors with a positive reputation show a higher acceptance rate, than donors with a negative reputation. The receivers are willing to accept low offers when they come from donors with high reputation.
013.3.4	In the VirtHuLab experiments about the relation between Fairness in the Ultimatum game and Reputation, what was the relation between the coherence of the likes and the reputation of the donor?	Considering an equal donation, the donors with higher reputation will receive a more positive feedback compared to the donors with lower one. And vice versa.

Module 014.1 – On-line fake news dynamics		
Id	Pay Off	Explanation
014.1.1	What's the Filter Bubble Effect?	A filter bubble is the intellectual isolation that can occur when websites make use of algorithms to selectively assume the information a user would want

		to see, and then give information to the user according to this assumption. Filter Bubbles result from personalized searches when a website algorithm selectively guesses what information a user would like to see based on information about the user (such as location, past click-behavior and search history). As a result, users become separated from information that disagrees with their viewpoints, effectively isolating them in their own cultural or ideological bubbles.
014.1.2	What's the Echo Chamber Effect?	An Echo Chamber is a metaphorical description of a situation in which information, ideas, or beliefs are amplified or reinforced by communication and repetition inside a defined system.
014.1.3	Report some definitons of Fake News?	"We define "fake news" to be news articles that are intentionally and verifiably false, and could mislead readers." (Allcott & Gentzkow, 2017) "We define "fake news" to be fabricated information that mimics news media content in form but not in organizational process or intent." (Lazer et al., 2018)
014.1.4	What's the relation between Gender and Fake News Resilience?	Gender and Fake News Resilience – (I) More women than men share (and intend to share) misinformation. (II) Women, when compared to men, may not be fully perceiving their information/misinformation sharing as an informational activity. (Chen et al., 2015)
014.1.5	What's the relation between Study-level and Fake News Resilience?	Study-level - Undergraduate students share (and intend to share) misinformation more frequently than graduate students. This may be attributed in part to undergraduates' higher social media usage. (Chen et al., 2015)
014.1.6	What's the relation between Personality Traits and Fake News Resilience?	Extraversion - Extroverts were more prone to share misinformation for socializing purpose. (Chen & Sin, 2013) Openness - Open people share more misinformation to explore its novel ideas even if it contradicts scientific views.(Chen, 2016) Conscientiousness - Respondents with high conscientiousness were less likely to share misinformation for self-expression and status seeking motivations. (Chen & Sin, 2013) Neuroticism - For more neurotic people, sharing doubtful information on social media may lead to negative social consequences. (Chen, 2016)
014.1.7	What's the relation between Social Media Self Efficacy and Fake News Resilience?	Social Media Self Efficacy Social media self-efficacy is based upon a person's level of social media content production and consumption, perceived social media skill and confidence in his or her ability to successfully find information online. Users with higher social media self-efficacy find information shared via social media to be more trustworthy than do those lower in social media self-efficacy. (Hocevar, Flanagin & Metzger, 2014)

014.1.8	What's the definition of Information Literacy?	Information literacy - Ability to define problems in terms of their information needs, and to apply a systematic approach to search, locate, apply, and synthesize the information and evaluate the entire process in terms of effectiveness and efficiency.

Module 015.1 – From Virtual Settings to Clinical Settings		
Id	Pay Off	Explanation
015.1.1	Hoorn, Konijn and Van der Veer (2003) already stated some functions of VR, translatable to the clinical field, what?	Hoorn, Konijn and Van der Veer (2003) already stated some functions of VR, translatable to the clinical field: (1) VS can be helpful to explore dangerous or impossible events; (2) In VS people can explore personal truths to experience their own emotions and comprehend unclear aspects of them relative to context in which the emotions occur; (3) VS helps to re-experience or re-live the past as with family photographs and home videos; (4) Mediated persons (avatars) in VS fulfil a modeling function in that one learns how to behave in specific circumstances.
015.1.2	What's the impact of Setting Virtuality on the essentials for Psychotherapy defined by Korchin (1983)?	The inclusion of virtual environment does not alter anything of what Korchin (1983) considers essential for psychotherapy, that is: (1) The belief in the possibility of change; (2) The faith in the therapist as an expert; (3) The positive expectations toward therapy; (4) The motivation to change
015.1.3	What's the Safe Base Potential of Virtual Clinical Settings?	VS as Bowlby's "Safe Base", or Kelly's "as if", i.e., a place where is possible to act without feeling threatened neither by the external world nor by oneself. The virtual scenario is, actually, a "safe base" that the WEB offers to the subject and from which he/she can freely explore, experience, feel, live, revive feeling and/or thoughts being these either current or past. By means of this training, the person realises that the world and the self that he/she assumed as something absolutely fixed, given, ended, actually is not more than a simulation, an interpretation that can be altered (Tart, 1990).
015.1.4	What's the Role-Playing Potential of Virtual Clinical Settings?	A basic strategy used, likewise, in all therapy orientations is role-playing, e.g., Moreno's psychodrama, Wolpe and Lazarus' behavioural role-playing, Kelly's fixed role therapy.
015.1.5	What's the Grading Potential of Virtual Clinical Settings?	VS allows to Grade Experience - VS allows to grade the situation in such a way that the subject can move forward from the easiest performances to the most difficult ones.
015.1.6	What's the Potential Effectiveness of Virtual Clinical Settings to assess Personal Sefl Efficacy?	VS allows an effective assessment of all possible sources of personal efficacy that are contemplated by Bandura. VS is an excellent source of information concerning personal efficacy in the performance achivements ambit, since numerous contexts for practically assuring the success to the patient in each of his/her "virtual experiencies" can be designed and, moreover, difficulties, challenges or occasional

		failures to be overcomelater on by the patient can be planned. According to Bandura, once strong expectations of efficacy have been established through repeated succes, the probable negative impact of occasional failures will be reduced.
015.1.7	What's the Reality Simulation Principle?	Reality Simulation Principle - Simulation of the reality, through a process of experiencing and re-experiencing the same situation (even coming from a simple imaginary task conducted by chat or videoconference), permits gerating new internal models (or modifying existing and not-adaptive models) about the world, and about patient's possibilities in his/her interaction with that world
015.1.8	Nowadays the integration between "techno" e "psycho" is still far, nevertheless, more and more psychologists are using an will use technologies into their practice and research. According to Barak (1999), there are at least ten types of psychological Internet applications in the field of health care, what?	According to Barak (1999), there are at least ten types of psychological Internet applications in the field of health care: (1) Information resources on Psychological Concepts and Issues; (2) Self-Help Guidelines; (3) Psychological Testing and Assessments; (4) Help in deciding to go into Therapy; (5) Information about specific psychological services; (6) Single-Session Psychological advice through e-mail or forum; (7) Ongoing personal counseling and threapy through e-mail; (8) Real-time counseling through Chat, Web, Phone and Video conferencing; (9) Synchronous and Asynchronous support groups, Discussion groups, and Group counseling; (10) Psychological and Social research.
015.1.9	Among the real addedd value and advantage of using Internet-based tools in clinical psychology, according to Glueckauf et al. four main reasons can be reported, what?	Among the real addedd value and advantage of using Internet-based tools in clinical psychology, according to Glueckauf et al. four main reasons can be reported: (1) The possibility to provide health information and services across geographical distance for underserved population; (2) The possibility to increase the quality of health information and services in particular areas or for specific populations (e.g., clinical sub-populations); (3) The possibility to ensure a continuous (i.e., longitudinal) medical and psychological service overall for chronic disabilities reducing the cost of an extended traditional assistance; (5) The growing trend patients' preference towards accessing therapy via a home-based computer system. In general, new Internet-Based tools have already improved the relationship between patients and therapists and between practitioners who are taking charge of the same patient.
015.1.10	What's the potential importance of Virtual Reality fpr rehabilitation specialists?	The role of Virtual Reality, Settings and Environments (VS) in Cybertherapy - For clinical psychologists and rehabilitation specialists the VR is an opportunity to provide a new human-computer interaction paradigm, in which users are no longer simply external observers of images on a computer screen but are active participants within a computer-generated three (or four) dimensional virtual world (Riva, G., et. Al (1999); Rizzo, et al. (1998).)

Module 015.2 – Cybertherapy		
Id	Pay Off	Explanation
015.2.1	What's the role of technology in Psychotherapy according to Jerome and Zailor?	The Role of Technology in Psychotherapy - According to Jerome and Zailor, something in the cinical setting will be altered in the presence of emerging technologies, so "it is crucial to study and to exploit such an impact …". E-therapy should not modify theories, techniques and methods typical of each approach (e.g., psychoanalitic, systemic, cognitive, behavioural, interpersonal, strategic) but could affect the level of communication and so the possible relationship and alliance between the therapist and the patient.
015.2.2	What's the Psychological Condition which appears as the more treated with Virtual Setting?	VS Application in Psychotherapy The larger use in latest years of VS as an exposure tecnique, has been done for the treatment of anxiety disorders. Up to now the most common application of VS in clinical psychology is the treatment of phobias (Vincelli, 2003).
015.2.3	What's the general rational behind the VS approach to phobia?	In general the rationale behind the VS approach is the following: In VS the patient is intentionally confronted with the feared stimuli while allowing anxiety to attenuate. Because avoiding a dreaded situation reinforces all phobias, each exposure to it actually lessens the anxiety through the processes of habituation and extinction.
015.2.4	What kind of Phobia are currently treated using VS tecniques?	Acrophobia, Spider Phobia, Claustrophobia, Fear of Flying, Panic Disorder, Post-Traumatic Stress Disorder, Social Phobia, Driving Phobia.
015.2.5	What's the rational behind the adoptoin of VS for the treatyment of Eating Disorders?	Different authors are using the Experential Cognitive Therapy (ECT) an integrated approach ranging from cognitive-behavioural therapy to virtual reality sessions in the treatment of eating disorders and obesity. Rationale - Different studies show that body image dissatisfaction can be considered a form of cognitive bias (Williamson, 1996). The essence of this cognitive perspective is that the central psychopathological concerns of an individual bias the manner in which information is processed. Usually, this biased information processing occurs automatically. i.e., occurs almost outside the person's awareness unless the person consciously reflects upon his or her thought processes. Moreover, Body size overestimation can be considered as a complex judgment bias, strictly linked to attentional bias and memory biases for body related information: "If information related to body is selectively processed and recalled more easily, it is apparente how the self-schema becomes so higly associated with body-related information … if the memories related to body are also associated with negative emotion, activation of negative emotion should

		sensitize the person to body-related stimuli causing even greater body size overestimation (Williamson, 1996). The use of VS offers two key advantages: (1) It is possible to integrate all different methods (cognitive, behavioural and experential) commonly used in the treatment of body experience disturbances within a single virtual experience. (2) VR can be used to induce in the patient a controlled sensory rearrangements that unconsciously modifies his/her bodily awareness (body schema).

Module 015.3 – The Affinity System		
Id	Pay Off	Explanation
015.3.1	What's the Affinity System?	Affinity is a computer-based assessment of sexual interest. It combines self-report measures with an unobtrusive viewing time (VT) validity scale. It has been developed by David V. Glasgow in 2001 and it's distributed by Pacific Psychological Assessment.
015.3.2	Affinity consists of two main modules, what?	Affinity consists of two main modules: (1) ARCHETYPE RANKING; (2) IMAGE RATING TASK.
015.3.3	Describe the rationale behind the Affinity Archetype Ranking Module.	ARCHETYPE RANKING - The idea of this procedure is to obtain a rank order of relative sexual preference from a range of "archetypes" (human figures drawn with simple lines) representing male and female subjects of different ages (children, pre-juveniles, juveniles and adults).
015.3.4	Describe the Affinity Image Rating Task.	IMAGE RATING TASK - It involves the sequential presentation of 56 images of people of different ages. Subjects are told instructed to rate the sexual attractiveness for each image by clicking on the rating scale (15 sections, seven representing the unattractive range, one neutral and seven the attractive range). For each images the secret viewing time (VT) is recorded. It's divided in two latencies: ON-TASK LATENCY - It is the time elapsed while the partecipant was making a rating. POST- TASK LATENCY - It is the time elapsed after the rating has been made, but before the participant clicks the 'Next image' button
015.3.5	What are the psychological basis behind the Affinity System Rationale?	The basis of the VT is that subjects look for a longer time at images they find sexually attractive rather than those they find sexually unattractive. OTL (on-task latency) - It seems to be strongly associated with pedophilic and non-pedophilic sexual preferences to allow its use as a convergent measure; more the subject conceals his attractions more the difference between rating task and OTL grows. PTL (post-task latency) - Relatively unstable, and vulnerable to bias from distraction and inattention; for example in use, it appeared that some individuals occasionally forget to click the button to proceed to the next image, which would significantly distort

		such latency data. Small, low-quality and non-pornographic images can constitute stimuli which generate significant and meaningful VT data relating to sexual interest; this suggests that VT does not necessarily relate to sexual arousal, but might reflect a more cognitive process,arising from the systematic appraisal. *Researchers demonstrated that VT effects depends on the attractiveness of the stimulus (based on age and gender of the showed individuals): sexually preferred targets elicit longer latencies than non-preferred targets under unrestricted conditions (Imhoff, Schmidt, Nordsiek, Luzar, Young & Banse, 2010)*
015.3.6	How research demonstrated that, According to the information processing model, pedophilic men were particularly prone to direct their attention toward child-related stimuli in an automatic and unconscious way?	According to the information processing model, it has been demonstrated that pedophilic men were particularly prone to direct their attention toward child-related stimuli in an automatic and unconscious way. To test the hypothesis that meaning of sexual stimuli is processed automatically, sexual and neutral slides are showed (such as target stimuli or priming stimuli) to individuals and their task was to indicate what type of stimulus it was, as quickly as possible (Janssen, Everaerd, Spiering and Janssen, 2000). Jiang et al. observed gender- and sexual orientation–specific differences in the spatial allocation of attention: Hetero- and homosexual male and female participants performed worse in a visual discrimination task in the presence of sexually relevant images, even though these images went unnoticed on a conscious level due to interocular suppression. Jiang et al. interpreted this discovery in terms of selective attention that would be affected by the sexual relevance of a visual stimulus in an automatic way. Interestingly, the effect vanished if the stimuli were presented supraliminally for 800 milliseconds so that the participants became aware of them (Jiang, Costello, Fang, Huang & He, 2005)
015.3.7	What’s the Distraction Conflict Theory based interpretation of the Affinity System Rationale?	The Distraction Conflitct Theory interpretation The distraction might lead, under some conditions, to improved performances due to an increase in the individual's general motivational or drive level: (1) distraction tended to facilitate the performances of simple tasks and significantly impaired performance on complex tasks (Baron & Sanders, 1975); (2) Sexually interesting stimuli may lead to a conscious allocation of cognitive resources that would impede with the performance in other simultaneous tasks: If there are two or more tasks involving sexual stimuli, there are latencies of longer responses .
015.3.8	What’s the Consciuos Inhibitory Control Hyphothesys behind the Affinity System Rationale?	Conscious Inhibitory Control In some contexts, in presence of sexual stimuli, mechanics of attention are activated and these are accompanied by a conscious inhibitory control (Baars, 1998; Fuster, 1997; Gross, 1998). Therefore an increase in cognitive monitoring leads to longer

		response latencies in the presence of sexual stimuli.

Module 016.1 – The New Role on the Web: a work in progress		
Id	Pay Off	Explanation
016.1.1	What's the definition of Flamer?	Flaming is a hostile and insulting interaction between persons over the Internet, often involving the use of profanity. It can also be the swapping of insults back and forth or with many people teaming up on a single victim. Flaming usually occurs in the social context of Internet forums, Internet Relay Chats (IRC), Usenet, e-mail, game servers such as Xbox Live or PlayStation Network, social media services, and video-sharing websites such as YouTube. It is frequently the result of the discussion of heated real-world issues such as politics, religion, and philosophy, or of issues that polarize sub-populations, but can also be provoked by seemingly trivial differences.Deliberate flaming, as opposed to flaming as a result of emotional discussions, is carried out by individuals known as flamers, who are specifically motivated to incite flaming. These users specialize in flaming and target specific aspects of a controversial conversation. In modern Internet parlance, this term has been almost entirely superseded by the term "trolling."
016.1.2	What the definition fo Cyberbully?	The Cyberbully - Cyberbullying or cyberharassment is a form of bullying or harassment using electronic means. Cyberbullying and Cyberharassment are also known as online bullying. It has become increasingly common, especially among teenagers. Cyberbullying is when someone, typically teens, bully or harass others on social media sites. Harmful bullying behavior can include posting rumors, threats, sexual remarks, a victims' personal information, or pejorative labels (i.e., hate speech). Bullying or harassment can be identified by repeated behavior and an intent to harm. Victims may have lower self-esteem, increased suicidal ideation, and a variety of emotional responses, including being scared, frustrated, angry, and depressed. Awareness in the United States has risen in the 2010s, due in part to high-profile cases. Several US states and other countries have laws specific to cyberbullying. Some are designed to specifically target teen cyberbullying, while others use laws extending from the scope of physical harassment. In cases of adult cyberharassment, these reports are usually filed beginning with local police. Research has demonstrated a number of serious consequences of cyberbullying victimization.
016.1.3	What's the definition of Troll?	In Internet slang, a troll, is a person who starts quarrels or upsets people on the Internet to distract and sow discord by posting inflammatory and digressive, extraneous, or off-topic messages in an

		online community (such as a newsgroup, forum, chat room, or blog) with the intent of provoking readers into displaying emotional responses and normalizing tangential discussion, whether for the troll's amusement or a specific gain.This sense of both the noun and the verb "troll" is associated with Internet discourse, but also has been used more widely. Media attention in recent years has equated trolling with online harassment. For example, the mass media have used "troll" to mean "a person who defaces Internet tribute sites with the aim of causing grief to families". In addition, depictions of trolling have been included in popular fictional works, such as the HBO television program The Newsroom, in which a main character encounters harassing persons online and tries to infiltrate their circles by posting negative sexual comments.
016.1.4	What's the definition of Griefer?	A griefer or bad faith player is a player in a multiplayer video game who deliberately irritates and harasses other players within the game. A griefer derives pleasure primarily or exclusively from the act of annoying other users, and as such is a particular nuisance in online gaming communities, since griefers often cannot be deterred by penalties related to in-game goals.This creates a strong division between griefing and cheating, since cheating is done with intent of winning the game and thus is discouraged by in-game penalties.
016.1.5	What's the definition of Lurker?	In Internet culture, a lurker is typically a member of an online community or PLN who observes, but does not participate. The exact definition depends on context. Lurkers make up a large proportion of all users in online communities. Lurking allows users to learn the conventions of an online community before they participate, improving their socialization when they eventually de-lurk. However, a lack of social contact while lurking sometimes causes loneliness or apathy among lurkers. Lurkers are referred to using many names, including browsers, read-only participants, non-public participants, legitimate peripheral participants, or vicarious learners.
016.1.6	What's the definition of Cheater?	Cheating is the receiving of a reward for ability or finding an easy way out of an unpleasant situation by dishonest means. It is generally used for the breaking of rules to gain unfair advantage in a competitive situation. This broad definition will necessarily include acts of bribery, cronyism, nepotism, sleaze and any situation where individuals are given preference using inappropriate criteria. The rules infringed may be explicit, or they may be from an unwritten code of conduct based on morality, ethics or custom, making the identification of cheating conduct a potentially subjective process. Cheating can refer specifically to infidelity. Someone who is known for cheating is

		referred to as a cheat in British English, and a cheater in American English. A person described as a "cheat" doesn't necessarily cheat all the time, but rather, relies on deceiving tactics to the point of acquiring a reputation for it.
016.1.7	What's the definition of Phisher?	Phishing is the fraudulent attempt to obtain sensitive information such as usernames, password and credit card details (and money), often for malicious reasons, by disguising as a trustworthy entity in an electronic communication. The word is a neologism created as a homophone of fishing due to the similarity of using a bait in an attempt to catch a victim. The annual worldwide impact of phishing could be as high as US$5 billion. Phishing is typically carried out by email spoofing or instant messaging, and it often directs users to enter personal information at a fake website, the look and feel of which are identical to the legitimate site, the only difference being the URL of the website in concern. Communications purporting to be from social web sites, auction sites, banks, online payment processors or IT administrators are often used to lure victims. Phishing emails may contain links to websites that distribute malware. Phishing is an example of social engineering techniques used to deceive users, and exploits weaknesses in current web security. Attempts to deal with the growing number of reported phishing incidents include legislation, user training, public awareness, and technical security measures.
016.1.8	What's the definition of Cyberstalker?	Cyberstalking is the use of the Internet or other electronic means to stalk or harass an individual, group, or organization. It may include false accusations, defamation, slander and libel. It may also include monitoring, identity theft, threats, vandalism, solicitation for sex, or gathering information that may be used to threaten, embarrass or harass.Cyberstalking is often accompanied by realtime or offline stalking. In many jurisdictions, such as California, both are criminal offenses. Both are motivated by a desire to control, intimidate or influence a victim. A stalker may be an online stranger or a person whom the target knows. He may be anonymous and solicit involvement of other people online who do not even know the target.Cyberstalking is a criminal offense under various state anti-stalking, slander and harassment laws. A conviction can result in a restraining order, probation, or criminal penalties against the assailant, including jail.
016.1.9	What's the definition of Boundary Spanner?	In social sciences research, boundary spanning is a term to describe individuals within a system who have, or adopt, the role of linking the community's internal networks with external sources of information. While the term was coined by Tushman, (1977), the concept was being developed by social

		scientists from the late 1950s onwards.
016.1.10	What’s the definition of Roamer?	In social sciences research, Roamers is a term to describe individuals within a system who have, or adopt, the role of go from place to place , creating or reinforcing an informal web of connections. Mainly the roamers play a fundamental role in the community's internal networks , but they can even interact with subjects outside its community.
016.1.11	What’s the definition of Out-Post?	In social sciences research, Out-Posts is a term to describe individuals within a system who have, or adopt, the role of bring back news from the front and explore new territories, creating or reinforcing connections mainly toward the external networks.
016.1.12	What’s the definition of Hater?	A person who often spreads their hate for a person, place, thing, movie, book, tv show, etc. on the internet. The are usually bored or just very negative.