

Benessere corporeo

e situazione pandemica.

Criticità e risorse educative

Body well-being and pandemic situation.

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IL SÉ CORPOREO NELLA COMUNICAZIONE A DISTANZA VINCOLI E POSSIBILITÀ DELLA FORMAZIONE SOCIALE IN TEMPO DI PANDEMIA

THE BODY SELF IN DISTANCE COMMUNICATION CONSTRAINTS AND POSSIBILITIES OF SOCIAL FORMATION IN PANDEMICS TIMES

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Abstract

The restrictions brought about by the pandemic have led to the use of "distant" modalities of communication in the most diverse spheres of social life, from informal friendships to formal work and education. The entire community has been forced to adapt to social distancing, practising a radical reshaping of the forms of communication and the "forced" use of the communicative forms afforded by technology; This necessity has determined and is determining risks in the emergence of forms of social pain determined by the drastic modification of the boundaries of social living, intrinsically founded on the encounter in presence, on proximity, on corporeality, which is forced to give way to new ways of relating in which the body does not participate in the encounter with the other according to the natural prerogatives inscribed in it, which are fundamental prerogatives for the activation of the usual conditions of recognition, empathy and sharing that are defined as central aspects of being-in-relation.

The present contribution, starting from the criticalities outlined, highlights the need to enforce the communication tools mediated by technology, with a reconstructive potential of relational forms that make them intrinsically social experiences, oriented to training and well-being.

Le restrizioni determinate dalla pandemia hanno implicato il ricorso a modalità relazionali "a distanza" all'interno degli ambiti più disparati della vita sociale, da quelli informali delle relazioni amicali a quelli formali del lavoro e dell'istruzione. L'intera collettività ha dovuto adattarsi al distanziamento sociale, praticando una rimodulazione radicale delle forme di comunicazione e l'esercizio d'uso "forzato" delle forme comunicative consentite dalla tecnologia; tale necessità ha determinato e sta determinando dei rischi nell'emersione di forme di dolore sociale determinate dalla drastica modificazione dei confini del vivere sociale, intrinsecamente fondati sull'incontro in presenza, sulla prossimità, sulla corporeità, la quale è costretta a cedere il passo a nuove modalità di relazione in cui il corpo non partecipa all'incontro con l'altro secondo le naturali prerogative ad esso inscritte; prerogative fondamentali per l'attivazione delle consuete condizioni di riconoscimento, di empatia e di condivisione che si definiscono come aspetti centrali dell'essere-in-relazione.

Il presente contributo, a partire dalle criticità delineate, pone in rilievo la necessità di implementare gli strumenti di comunicazione mediati dalla tecnologia, di un potenziale ricostitutivo delle forme relazionali che le renda esperienze intrinsecamente sociali, orientate alla formazione e al benessere.

Keywords

Pandemic, interpersonal relationships, social distancing, bodily self, social media, education Pandemia, relazioni interpersonali, distanziamento sociale, sé corporeo, social media, educazione

Introduction

The impact of the Corona Virus on our society has led to a radical reshaping of forms of communication. The restrictions caused by the pandemic have entailed the use of 'distant' forms of communication in the most diverse spheres of social life, from informal friendships to formal work and education. The entire community has had to adapt to this condition of social distancing through a radical accentuation of the use of the forms of communication afforded by technology; This condition is generating critical effects, leading to a modification of the boundaries of social living, based on meeting in presence, on proximity, on corporeality, which is giving way to new ways of relating in which the body does not participate in the meeting with the other according to the natural prerogatives inscribed in it; prerogatives that activate those usual conditions of recognition, empathy, sharing that are defined as central aspects of *being-in-relation*.

It can be taken for granted that social media nowadays constitute an important context of experience in addition to "real" life. However, the necessary extension of their use has determined, among the many consequences, both a sudden redefinition of languages and codes (Rivoltella, 2006), and a different perception of the self in relation to social experience, which is translated into a substantial change in the ways of using the experience itself and, therefore, into a further important modification that concerns the formation of cognitive strategies, the development of models of knowledge, the reformulation of models of relationships, the reconstruction of visions of reality (Watzlawick, 1976).

The adaptive qualities of knowledge are thus coming to grips with a process of reformulation of models of sociality which, although already under development for several years now, has seen a radical acceleration in recent contingencies. Therefore, this circumstance represents a new challenge for the human condition, immersed in a constant attempt to rethink itself within the constraints given by the environment. However, like every evolutionary challenge, the present one also reveals perspectives marked by great uncertainty, opening up both new possible horizons and profound criticalities. The outcome of the massive use of social networks cannot yet be clearly foreseen. In this sense, the reflections produced by social research include both more pessimistic and alarmist positions, which tend to interpret the pervasiveness of digital technologies as the viaticum of an anthropological transformation with dangerous outcomes, and optimistic and possibilist points of view, which instead consider the use of technological devices as a possibility to transform the mind towards innovative models of knowledge that constitute the current evolutionary frontier of humanity (Benasayag, 2015). The pessimistic positions highlight "the risks linked to the temptation to surrender to the promise of technological over-power, which generates a "uomo diminuito" - a "lessened man" (Lancini, 2019, p. 21); while the optimistic ones "push towards an acceleration of the spread of technological devices, to the point of even promoting their integration into the human body, as prostheses capable of enhancing the natural biological endowment" (Ibid.).

A principle that should be assumed is that, in any case, it is not possible to speak of "an *essential human nature*, which would risk being undermined by technology" (Matera, 2020). The functioning of the human mind is the result of the relationship it has with the environment, understood as a set of variables, stimuli, pressures that are constituted by the cultural, social, historical conditions and the related codes, languages, symbols and systems of relations that characterise them. The way in which social relations are structured, therefore, also derives from the environment, i.e. from this ensemble, within which the use of social media as a communication system constitutes a further variable.

However, the drastic dimensions of change due to the pandemic imply an inevitable perception of a condition of crisis, which forces each individual to experience a sense of deprivation with respect to the natural needs of sociality: a *sense of emptiness* with respect to the subtraction of the proximity of bodies, understood as a natural need of the human species. The radical restrictions of sociality in presence have resulted in the disappearance of those fundamental socio-environmental stimulations that realise the experience of formation; an experience that is only fully developed in the direction of being through the other.

The sudden disappearance of bodies, of everyday encounters, in any case entails the risk of generating a trauma in the perception of the embodied self, which does not seem able to contain the dimensions of a dematerialisation of social life: if only we look at the psychological and social effects that could come from a childhood that has grown up too long in social distancing, from a didactic provided at a distance, from the fact that *smartworking* and *homeworking* have become standard, from a protection of the health of the elderly that puts them all in a dimension of domestic and non-domestic social confinement, from ways of being, ultimately, from which there is a risk of emerging a socially and *psychologically distanced* individual, therefore probably anaffective in the intimate and in the social sphere (Mazzarella, 2020).

In other words, the coercive condition of distancing and isolation, regardless of the possible positive evolutionary implications of the practice of long-distance communication, is in any case a dangerous circumstance for the individual and collective balance. A large number of studies in the neurological and psycho-social field have clearly demonstrated how prolonged periods of isolation are deeply damaging to mental health, to the point of determining dramatic consequences for the brain (Cristofori, 2016). Relatively recent research has given prominence to the concept of " social pain ", showing that it is much deeper and more permanent than physical pain (Karremans, Heslenfeld, van Dillen, Van Lange, 2011): " when dealing with physical pain, we have a number of regions such as the somatosensory cortex and the posterior insula, which are involved in processing the sensory aspects of pain, for example where we perceived pain and with what intensity. On the other hand, other regions, such as the anterior insula, anterior cingulate cortex and prefrontal cortex, are involved in processing the psychological and subjective aspects of pain, e.g. how difficult this pain was for an individual to bear" (Cristofori, 2016, p.2). This means that while physical pain may be more easily "forgotten", social pain on the other hand is somewhat "unforgettable", being embedded in the structure of the brain.

What, then, will be the real impact of the social deprivation at work on personal and collective identity? What are the implications that this radical change of *being-in-relation* will produce on the experience of thinking and feeling? What are the critical implications that the reduced confrontation with the *mirror of the other* will reverberate on the personal and collective paths of construction, maturation and sharing of that empathic condition necessary for social life?

In particular, young people, being de facto the most involved within this evolutionary process, represent the main subjects of this sort of "ecological change" (Baumann, 2011; Morin, 2012) that, in an increasingly evident way, shows the need to achieve a balance between *natural socio-affective needs* and *new forms of communication* as a key to interpreting and confronting the paradigmatic and systemic-cultural transition under way.

The problem that emerges, consequently, radically invests the educational institutions, which are called to the responsibility of analysing the quality and plurality of *multimedia forms* of communication and the innovative logic behind them, putting them in relation with the languages, tools and logic of the intrinsically socio-corporeal nature of being-in-relation. The fundamental task of education becomes, therefore, that of elaborating training paths capable of restoring the necessary conditions of symbolic, affective, empathic exchange that constitute the primary root of social interaction as a function of the construction of the self, understood as an entity determined by a thinking and feeling that finds its foundation and orientation in the mirror of the other.

The present paper, starting from the change in the conditions of *being-in-relation* accentuated by the pandemic, highlights the need to implement communication tools mediated by technology, with a reconstitutive potential of relational forms as intrinsically social experiences. This implies providing tools capable, on the one hand, of providing experiences of communication and interaction oriented by concrete exchange, recognition and self-experience and, on the other hand, of creating skills that are up to the evolutionary and cognitive-interpretative challenges produced by the profoundly innovative dimensions expressed by the rapid and continuous evolution of knowledge models, determined by the alteration of consolidated modes of social relations.

1. The socio-corporeal construction of knowledge

Each individual builds himself, in the course of life, through the relationships he has with the environment, understood as a whole that includes within it, in particular, the experience of the other: "from the symbiotic relationship with the mother to the interhuman one in society we witness] the progressive widening of the presence that unfolds its horizon from the mother's womb to the totality of the real" (Galimberti, 2005, p. 323). In this sense, the relationship with others constitutes the initial element for the construction of an image of oneself as a person and as a body: the *postulated model* of our body is coordinated with the *postulated model* of the body of others, the social correlation therefore appears crucial for the construction of the body image (Idem, p. 325). Each individual, therefore, within the experience of life in his or her own socio-cultural context, is brought into contact with other individuals with respect to whom he or she activates those processes of imitation, affiliation, identification, which constitute the basis of the sense of his or her own identity; the sense of the self and, in the same way, the personal body image cannot be constituted without the presence of the other and of the body image of others: human beings from an early age see themselves, first of all, in the mirror of the other (Cuzzolaro, 2004). The psychic, social and cultural life of individuals is founded, therefore, on the relationship with the otherness and its understanding requires an epistemology of the relationship *mind-body-environment*, in which the principle of a *transpersonal* ego is accepted, built in the constant relationship with the world (Lo Verso, 2002). In the same way, the relationship with the body images of others contributes, through processes of identification and/ or separation, to shaping our image and our identity which, as explained, appear inextricably linked. As a matter of fact, the construction of identity itself derives from the relationship we have with the social contexts present in our life experience.

The concept of self is therefore not separable from social reality. William James defines the self as an element of connection between the intra-psychic reality of the individual and external reality (James, 1901), considering that the idea that individuals have of themselves (*the known Me*) derives from the plurality of evaluations and information that individuals send back to each other: each person possesses, therefore, as many "social selves" as there are relationships that they entertain with other individuals.

The self is assumed, therefore, as a social product: the construction of the individual is profoundly linked to the apparatus of knowledge that derives from the relationship entertained with relational contexts; according to this perspective, encounters with social reality shape people (Rosenberg, 1988). The self cannot, therefore, prescind from the other, since it is in interaction that it finds its foundation, as a constitutive part of a community: attitudes, gestures, the way of speaking, the way of moving constitute, therefore, the basic elements around which individuals build shared meanings, useful for organising systems of expectations and action, building knowledge. In this sense, since the social context is an expression of multiplicity and plurality, identity itself is "continually re-formed, re-directed in every sort of social relationship; it is not simply a reflection of what each of us thinks we are, but rather the product of social communication" (Mancini, 2001, p. 89).

The development of the self is, in this respect, determined by social interactions, understood as mediators of cultural macrosystems; it is the product of exchanges and negotiations and, therefore, can change in relation to them: the conception of the self "is constantly modified through a process in which the trust and responsibility accorded to one's social self are negotiated in relation to others" (Idem, p. 91). In these relationships there is a confrontation between a stable self-conception and the plurality of social identities returned by the context; this confrontation tends to define, confirm and preserve a constant image of one's own self, which can serve as a guide in choices and behaviour: the self-conception is formed within relationships oriented by the plurality of identity.

Outlining the profile of the dynamics of identity construction implies, hence, the need to attribute to the presence of *social relations* and belonging groups, in the background of the individual's life, the main function of *constructive element*: the social context and the dynamics of relations are, in other words, the constitutive, constructive and transformative elements of the knowledge models and interpretative categories of reality. Within this system of exchange of symbols and meanings, individuals practice, experience and share the theories about *things in the world* that have been given to them by social and cultural belonging; in this way, they acquire a position and a role in relation to the social environment itself, constructing a version of their own self in relation to others.

The perception of one's own bodily identity is, in this perspective, closely linked to belonging to an environment made up of relationships; the concept of self represents a sort of system of integration and organisation of the bodily experience produced within the social life. The concept of the self represents a kind of integration and organisation system of the bodily experience produced within social life. Social belonging then shapes personal life, through schemes and representations that, placed on a shared horizon, guide styles of behaviour and thought (Amerio, 1996): the experience of relating within social systems produces forms of thought and action that are directly related to the need for identification and conformity with the social context to which one tends; in this sense, the individual is formed in sociality, from which he or she extracts the ways and means through which to manage and guide his or her own experience, starting from an idea of self and other.

2. Changing forms of relationship and self formation

The sense of the self is, therefore, a cognitive structure that is built through the bodily experience of interaction with the other; we know through the body and through the body we shape the image of ourselves and of the other and the models of reality that allow us to live in our environment. The reduction of the experience of bodily proximity expresses, therefore, a version of reality that intervenes on the paths of self-construction and of knowledge, as well as on the same dynamics of relationships: the ways of thinking and interacting of an individual arise from the mental image that he or she possesses of himself or herself in relation to the environment.

The possible criticalities that the drastic reduction of social proximity determines in the life of subjects refer, therefore, to two orders of problems. The first concerns the need to adapt to the change in the environment, since there is an instrumental transformation with respect to one's ability to interact with the world: something has changed in the forms of mediation that influence the complex bio-sensory apparatus in orienting the relationship between self and reality. The second relates to the effect on self-image: the transformation of *being-in-relation* produces a transformation in the way one interacts with the world which, in turn, produces a transformation in the versions of one's identity. A drastic change in the everyday and prevailing ways of relating not only changes the way we represent ourselves, but also the way others relate to us. This transformation therefore leads to a 'traumatic' experience, i.e. an acute alteration of the horizon of everyday life. The central criticality concerns, therefore, the individual's ability to reconstruct this horizon, the ability to relocate oneself, one's own body, others and one's own life context within a scheme capable of restoring to the subject the sense of one's own mental and social being.

Specifically, induced social distancing may contribute to an increase in aggression and a corresponding decrease in the ability to control impulses. Some studies have shown how people who experience frequent isolation, compared to subjects with stable and continuous relationships, express a poor quality of sleep, a less effective immune system, a significant increase in the level of aggression, a state of health at overall risk of compromise (Cristofori, 2016; Eisenberger, Lieberman, Williams, 2003).

The analyses produced in the last period in the field of psycho-social studies have also highlighted how the experience of the pandemic, experienced over the last year, has seen a considerable intensification of anxiety and depressive symptoms, of the risk of pathological dependencies, up to the assessment of an increased risk of suicide (Barlati S., Calzavara Pinton I., Savorelli A., Vita A. (2020); Talevi, Socci, Carai, et al. 2020).

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Changes in the experience of relationships, whether they occur suddenly or gradually, put us within new perspectives through which to observe reality. As the conditions that define life in a relationship change, the frames of reference through which we construct meanings about ourselves and experience change. Therefore, as the structure of communication changes, so does our way of experiencing relationships and, consequently, our way of seeing the world and relating to it; in short, our sense of our own self changes. Individuals change, as the conditions of relationship with the context change; it is the transformation itself that, as part of the experience, affects both equally in a recursive dynamic of mutual influence, in which certain events take on the weight of watersheds in the flow of our existence. Such events implicitly determine the awareness that after their occurrence nothing will be the same as before, we ourselves will not be the same as before.

Therefore, although growth and change are natural conditions of living given by the plasticity of the mind, at the same time, these conditions can assume an extremely complex and problematic weight and meaning when they interfere with needs perceived as necessary and natural in distinguishing and delimiting the human experience and its evolution. The times and ways in which change occurs (situational forces, socio-cultural determinants, contextual and relational conditions, space and time) represent the variables that confer on transition the meaning of a crisis or a natural evolution.

When the change is too drastic and unexpected, it expresses a critical dimension with serious margins of risk. This dimension bursts out in the difficulty of accepting the present reconfiguration of identity and of maturing a coherent and continuous sense of self. In such conditions, the consequence of change is a sense of loss, from which we do not perceive any benefit, but only discomfort, difficulty or suffering. The effect of this failure to elaborate the transition is that of remaining attached to the old image of ourselves and of rejecting the change which, being present in itself, leads us to 'suffering'; the subsequent effects may concern the emergence of problems in our relationship with ourselves, with others, with the experience of relationships themselves. The same interpretation of life can take on an adverse character; the inevitability of the passage of time and transformation as a condition of continuous loss of self within multiple passages - passages that erase and rewrite what we are each time - *unveils* in itself the awareness of the elusiveness of the experience of the present and the finiteness of one's own being.

In the current conditions, this sense of loss assumes a more drastic character, since it unpredictably undermines the need *to be* and *to be there*; it undermines the need, that is, to perceive oneself in harmony with oneself and one's environment, in a relationship that builds and protects one's sense of permanence and continuity, which is given by the presence of the system of relationships. It is not therefore a question of believing that the loss is not such, but rather of leveraging the *reconfiguring* capacity of individuals, which allows them to process the loss so as to give it a place within forms of communication that include the renewed self and others. This does not mean that the modification of the models of relationships can unequivocally become a conquest, but rather that the modification of such modalities can become one, building new spaces and new opportunities connected to the present condition; a representation of reality that is reconfigured in the direction of welcoming the new, through an adequate reorganisation of the system of hierarchies, values, priorities, in which the self finds its own space for action and gratification, as the creator of that same scheme: "rigour and imagination constitute the two great poles of the mental process, both lethal if taken alone. Rigour alone is death by paralysis, but imagination alone is madness' (Bateson, 1977).

3. The pedagogical design of online communication

In order to be able to intervene on the criticalities presented, a pedagogical action requires the translation of its own theoretical-methodological apparatus into a way of designing the tools of distance communication that takes into account the fundamental needs of interaction currently at risk. In other words, it is a question of constructing tools aimed at preserving the being-in-relationship as a pivotal variable in the formation of the self, facing the impact, accentuated by the sense of precariousness connected to the body image itself which, for biological reasons (the changes in the relationship between bodies) and cultural reasons (the rapid evolution of the body models themselves), is today, more than ever, fragile.

The body, from being an instrument of action in the world, and therefore an expression of freedom of being, can be transformed into a "cage" if the consolidated conditions, which allow the realisation of an effective relationship between the self and the environment, are lacking; however, "in every transformation the old pattern remains in the background and a new one is built on it, capable of conferring greater freedom with respect to the heavy mass, or greater coherence with the situation that presents itself" (Galimberti, 2005, p. 326). This means that the cognitive structures of each individual express in themselves the potentiality of including change as an event connected to the very nature of the dynamics of knowledge; learning processes take place through a constructive dynamic of *assimilation* and *accommodation* (Piaget, 1936) of reality within schemes that are constantly reformed.

The possibility of mediating between socio-affective needs and the use of forms of communication that modify the space of expression of these needs can be expressed in the design of communicative contexts that, although mediated by the use of technological tools, deprive the proximity between the bodies, are also able to involve the self in those fundamental constructive-relational dynamics that substantiate and support its social nature.

The self-image and body image derive, as it has been clarified, from the social environment, therefore, it is in the re-construction of a social horizon of reference – made up of exchanges, comparisons, relationships oriented by affectivity and by the recognition of the other – that subjects can redefine an identity placement consistent with their needs of access to reality.

A possible way to cope with the discomfort produced by changes in the self/body is therefore linked to the construction of tools that activate *comparison* and *sharing*; in other words, it is a matter of assuming the criterion of the cooperative attitude in relation to experience: cooperating with the environment in a relationship of reciprocity, in order to learn the mutability of the environment itself; cooperating with others in order to acquire a sense of one's own role and place within an interactive social context. A cooperative dimension, understood in this way, expresses the most congenial constructive and re-adaptive condition to follow up the sudden void of sociality caused by the dematerialisation of the relationship.

Therefore, it is necessary to provide tools for online communication that can achieve and stimulate the necessary socio-affective involvement of the subject, which is the basis of social formation.

The core of these tools lays, in particular, in the modalities of active and direct involvement

of the subject. The possibilities offered by the use of distance communication systems are expressed, in other words, in making the underlying instances of an *interactionist* and *construc-tivist* pedagogical approach concrete. The virtual contexts represent places where the subject can concretely intervene, modifying and reconstructing the context itself starting from his direct contribution, from his structure of consciousness and knowledge that becomes, in this sense, instrument and object of the training process as a meta-cognitive process that works not only in order to communicate, but also to make communication a real viaticum of comparison and social sharing.

Achieving effective communication implies, therefore, the involvement of the subject as "co-author" of the communication project in a social constructivist environment. In this sense, online communication, having identified the critical aspects that delimit its risks and vulnerabilities, can assume and extend the principles of communication itself, enhancing them. It can be designed, as in real confrontation, to develop the social character of training; the fundamental role of collaboration and sharing of experiences; the value of differences as a resource of the learning community; the opportunity to use contexts of experience for learning; the condition of plurality of perspectives of knowledge; the possibility of reflecting on *one's own mind at work* (meta cognition).

As already pointed out, the educational technology sector constitutes a substantial front for experimentation and implementation; a frontier of educational development in which *participation* takes advantage of possible experiences that amplify the potential for action and interaction through the extension of the experience itself. In this respect, technologies offer a possible definition of action that redefines its limits; the mind never abandons the body and knowledge never ceases to be a product conveyed by corporeality (Iavarone, 2013), all the more so when the experience of action, interaction and playing are produced within a space that multiplies the possibilities. Even in the use of a smartphone or a tablet, it is always the bodily dimension that makes the experience concrete and meaningful and makes it a source of learning; indeed, in these areas, the body itself extends within the technological "prostheses" that mediate and multiply action and interaction, giving rise to forms of experience that can be oriented in the dimensions of being, acting, participating in an extended and complex form.

In this sense, the technologies should not, therefore, play a mere role of support to communication in a merely technical sense, but of "intelligent pivot" of *being-in-relation* (Iavarone, Lo Presti, 2015).

In this regard, online communication should be structured as an enhanced and compound learning space, to be used constructively in interaction not only with the mind, but also with the body in its entirety and potential. Including corporeality more and more in relational processes is also supported by a large number of contributions from the neuroscientific field that underline the value of an increasingly *"embodied and embedded*" online communication (Iavarone, Iachini, 2012, 2013). The elements that "enhance" communication can be added through technological devices (tablets, smartphones, PCs equipped with webcams or other sensors), or other visual, listening and manipulation options that allow the expression of those socio-affective dimensions necessary for the formation of the self.

This option is supported and made possible, as mentioned above, within the horizon of neuroscience, in which a neuroeducational sector has been developed over the last few years that deals, in particular, with applying the results of research from neurological and cognitive sciences to education. In this way, a real field of interdisciplinary research is defined between Psychology, Education and Neuroscience (Sousa, 2010): the "*neurodidactics*" (Rivoltella, 2012) that, by analysing and deepening the mechanisms by which the mind and the nervous system build knowledge as an inter-personal event, provides guidance for the design of online communication tools appropriate to the time and social needs necessary for training (Frauenfelder, Santoianni, Striano, 2004).

In other words, neurodidactics adopts an "enactive" approach to communication (Rossi, 2011), which does not consider the separation between mind and body, but rather considers

the subject in continuous interaction with the surrounding reality, thus developing a notion of knowledge that is neither representational nor constructivist, but rather *simulative* (Berthoz, 2015) and therefore elaborative of meanings, choices, decisions that consider experiences, actions, relationships as an integral part of knowledge itself. According to this model, knowledge is therefore determined in the flow of sense-motor interactions between the brain, body and environment, and therefore the communicative approach that is inspired by it envisages a process of relationship as a system in which its elements (people, environment, technologies) interact, each contributing to the evolution of the system itself.

Neuroscience is constantly providing evidence of the close relationship not only between body and cognition but also between body and memory, reinforcing a very close link between body, emotions and evocative capacities. For example, in order to optimise memory processes in learning, it would appear to be very useful for the experience of learning to have an intense bodily and emotional relevance; recent studies would show precisely that experiences conducted "outside the body" are those most at risk of amnesia (Bergouignan, Nyberg, Ehrsson, 2014).

On the other hand, having an adequate perception of the body is increasingly beneficial for the mind to more effectively represent the experience of the body in space. In creating and defining the cycles of perception, cognition and action, a fundamental role is played, finally, not only by the body and emotions but also, as it has been repeatedly pointed out, by personal experience; all these elements, which are strongly interconnected, constitute indispensable aspects for cognition and learning (Gallese, 2005).

In the light of what has been stated, an adequate online communication to offer real training opportunities of relationship should provide for the integration of multiple ways of accessing the experience of confrontation with the other (bodily, emotional, factual, etc.) through multiple functionalities that allow subjects to acquire different configurations according to the needs, so as to restore value to the active type of relationship through a continuous interaction between body and environment, also technological.

Communication that takes advantage of the new technologies, in order to respond to the criticalities determined by the current scenarios, should follow this track; that is to say, express itself through important avenues of innovation that, through the dialogue between scientific disciplines within appropriate areas of implementation and development, can realise the "more natural " connotation of being in relation as a concrete socio-affective experience.

Therefore, the redefinition of the new boundaries of social relations can follow, through these projectual traces, an opening towards new formative possibilities, which place the limit at the centre of an evolution of the forms of social living oriented towards wellbeing: "the greater the range of possibilities, the greater the opening of horizons and the greater opportunities are created to achieve this aim, albeit inevitably partial and impermanent. [...] Obviously, not everything that is possible is good or necessary, and here the other complementary aspect of the *sense of the possible* intervenes: *the sense of limits*; from the constant confrontation between the sense of the possible and the sense of limits, open and dynamic learning is generated. The openness of the mind is the access to authentic possibility, which cannot occur without the perception of the limit" (Balzola, 2021, p. 6).

References

Amerio P. (1996), Fondamenti teorici di psicologia sociale. Bologna: il Mulino.

- Balzola A. (2021), Edu-action. 70 tesi su come e perché cambiare i modelli educativi nell'era digitale. Milano: Meletemi.
- Barlati S., Calzavara Pinton I., Savorelli A., Vita A. (2020), L'impatto dell'emergenza COV-ID-19 sui servizi di salute mentale: tra clinica e organizzazione. Nòos. Aggiornamenti in psichiatria, 26 (1): 33-46.

Bateson G. (1977), Verso un'ecologia della mente. Milano: Adelphi.

Benasayag M. (2015), Oltre le passioni tristi. Milano: Feltrinelli.

- Cristofori I. (2016), Perché' fa cosi male? Le basi neurologiche del dolore sociale. AIRInforma: Il portale di divulgazione di AIRIcerca - http://informa.airicerca.org
- Cuzzolaro M. (2004), Anoressie e bulimie. Bologna: il Mulino
- Eisenberger N.I., Lieberman M.D., Williams K.D. (2003), Does rejection hurt? An FMRI study of social exclusion. Science, 302 5643: 290-292.
- Frauenfelder E., Santoianni F., Striano M. (2004). Introduzione alle scienze bioeducative. Roma: Laterza.
- Galimberti U. (2005), Il Corpo. Milano: Feltrinelli.
- James W. (1901), Principi di psicologia. Milano: Società Editrice Libraria.
- Karremans J.C., Heslenfeld D.J., van Dillen L.F., Van Lange P.A. (2011), Secure attachment partners attenuate neural responses to social exclusion: an fMRI investigation. International journal of psychophysiology: official journal of the International Organization of Psychophysiology 81 (1):44-50.
- Lancini M. (2019), Il ritiro sociale degli adolescenti. La solitudine di una generazione iperconnessa. Milano: Raffaello Cortina.
- Lo Verso G. (2002), Introduzione. In Dalal F., Prendere il gruppo sul serio. Verso una teoria gruppoanalitica postfoulkesiana. Milano: Raffaello Cortina.
- Mancini T. (2001), Sé e identità. Modelli, metodi e problemi in psicologia sociale. Firenze: Carocci.
- Manzanelli P. (2002), Le nuove teorie della mente e le Nuove Tecnologie: una promessa per migliorare i processi di insegnamento-apprendimento. http://www.edscuola.it/archivio/lre/ teorie_mente.htm
- Matera V, (2020), Il coronavirus come fatto sociale totale: l'impatto culturale dell'epidemia. http://www.parliamoneora.it/2020/05/13/il-distanziamento-ovvero-la-socialita-al-tempo-del-coronavirus/
- Mazzarella E. (2020), Dopo la pandemia: due riflessioni. L'ecumene che ci serve. Salvare la 'presenza'. In Caporale C., Pirni A. (a cura di), Pandemia e resilienza. Persona, comunità e modelli di sviluppo dopo la Covid-19. Roma: Cnr Edizioni.
- Piaget J. (1936), La construction du réel chez l'enfant. Neuchâtel: Delachaux et Niestlé.
- Rivoltella P.C. (2006), Screen generation. Gli adolescenti e le prospettive dell'educazione nell'età dei media digitali. Milano: Vita e pensiero.
- Rosenberg M. (1988), Self and others: studies in social personality and autobiography. In Berkowitz L., Advances in experimental and social psychology. New York: Academic Press.
- Talevi D., Socci V., Carai M., et al. (2020), Mental health outcomes of the CoViD-19 pandemic. Riv Psichiatr, 55: 137-44.
- Turner R. H. (1983), La concezione di sé nell'interazione sociale. In Sciolla L. (a cura di), Identità. Percorsi di analisi in sociologia. Torino: Rosenberg & Sellier.
- Watzlawick P. (1976), La realtà della realtà. Comunicazione, disinformazione, confusione. Roma: Astrolabio.