

Social threats to human nature during the pandemic

Amenazas sociales a la naturaleza humana durante la pandemia



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Abstract

Social pain is discussed from different angles and is related to primal emotions, the experience of exclusion, unconscious response patterns, attachment, evolutionary psychology, interpersonal neurobiology, and social neuroscience. The internet and online solutions developed during the pandemic are problematized. Such discussion offers many useful solutions for problem solving and communication. However, they might cause new problems in the long run, not least reinforcing authoritarian solutions. It is concluded that social isolation and the accompanying pain of not being part of a Group is real and against human nature. Other aspects of human needs that are threatened during the pandemic are Rightmindedness, Autonomy, Status, and Security. They can be summarized in the acronym GRASS. To prevent health problems in the population all these needs, including human's dependency on experiencing greenery, must be taken into consideration.

Keywords

social pain, social neuroscience, online communication, social needs, pandemic

Resumen

Se trata el dolor social desde diferentes ángulos y se relaciona con las emociones primarias, la experiencia de la exclusión, los patrones de respuesta inconscientes, el apego, la psicología evolutiva, la neurobiología interpersonal y la neurociencia social. Internet y las soluciones en línea desarrolladas durante la pandemia son problemáticas. Estos foros de debate ofrecen muchas soluciones útiles para la resolución de problemas y la comunicación. Sin embargo, podrían causar nuevos problemas a largo plazo, sobre todo reforzando soluciones autoritarias. Se concluye que el aislamiento social y el dolor que conlleva no formar parte de un grupo es real y va en contra de la naturaleza humana. Otros aspectos de las necesidades humanas que se ven amenazados durante la pandemia son la Rectitud, la Autonomía, el Estatus y la Seguridad. Pueden resumirse en el acrónimo GRASS*. Para prevenir los problemas de salud de la población hay que tener en cuenta todas estas necesidades, incluida la dependencia del ser humano de experimentar la vegetación.

Palabras clave

dolor social, neurociencia social, comunicación en línea, necesidades sociales, pandemia

*Hierba en inglés

The future of professional group psychotherapy and group process work must rely on science. Our professions will be marginalised without high quality empirical research, be it quantitative or qualitative. To my surprise it seems that also neuroscience has important knowledge to contribute to our field.

All over the years I rejected the idea that brain research would have anything of value to contribute to psychology or social science. In my opinion neuroscience represented a completely different paradigm and I could not see how it would be possible for a biological reductionist approach to fertilize psychology and social science. However, science sometimes moves in unexpected directions. Not least due to the development of sophisticated research methods such as brain imaging, neuroscience is currently exploring similar questions as those we struggle with in psychology. Even such an unexpected thing as neuro-psychoanalysis has become an established branch of neuroscience. I have changed my mind. It seems to me that brain research can become a fruitful way to validate some findings from psychological and social research. And it is hard to argue that findings from neurosciences are social constructs. I prefer to see it as a reflection of human nature.

However, our interpretations of the findings belong to the world of socially shared conceptualizations. The brain is not equivalent to the mind.

Dr Catherina Mela, the initiator of the IAGP research symposia, herself a neuroscientist and a group analyst, has long since understood the value of combining the two perspectives. Thanks to her courage and persistence IAGP has now organized the third symposium of this kind. I find it hopeful that IAGP thereby is demonstrating that it puts empirical research at the front.

PLAY AND UNCONSCIOUS RESPONSE PATTERNS

The theme of my contribution is social pain. The pain associated with the feeling of being excluded belongs to human existence. We all know how it is. From my own childhood I have vivid memories of being scoffed at and ridiculed by my older brothers. They ganged up against me – at least that is what I felt. We often had fights. In fact, our father had instructed us in wrestling so that we would be able to defend ourselves in the schoolyard. The experience of wrestling and fighting with my brothers was not exclusively negative. It made me strong. I was not the typical fighter in school. However, if challenged, I could defend myself.

On the basis of “affective neuroscience”, a term coined by the Estonian/North American neuroscientist Jaak Panksepp, one could argue that my brothers and I were exploring one of the primal emotions, namely play, which serves the function of defending territory, establishing hierarchy, pecking order, in or out, status and such things (Panksepp & Davis, 2018). According to Panksepp the seven primal emotions are 1. Seeking (accompanying feeling: Enthusiastic), 2. Rage (“Pissed off”), 3. Fear (Anxious), 4. Lust (Horny), 5. Care (Tender & Loving), 6. Panic (Lonely, sad), 7. Play (Joyous).

In our play my brothers and I learned our lessons, which developed into personal response patterns. In the language of Daniel Stern (1995) response patterns might be equated to “ways of being with the other”, i.e., a few typical response patterns to emotional activation. If we want to believe current neuroscience, these patterns become automatic and part of procedural long-term memory, that is, they become unconscious (Leuzinger-Bohleber et al., 2018) and will be repeated endlessly. If the ways of being which we have developed do not create problems, we have no reason to change. Unfortunately, they often do create problems in adult life, and we do not understand why, simply because of just that, i.e., the response patterns are unconscious. However, in psychotherapy we can learn to identify

what is causing the problems, find the meaning and try out alternative ways of being. Group psychotherapy with a here-and-now focus is ideal for this kind of work. Transference reactions are acted out and reacted to by the others. New response patterns can be gradually tested and worked through.

I have a memory from school where I was the bad guy, 12 years old. One of my friends had ganged up with somebody. They teased and laughed at me. It made me angry and I started to fight with one of my friends. When I was a child the rule was that the fight was over when one of the two combatants found himself on his back with shoulders on the ground. Then it was over. There was a winner, and the pecking order was re-established. I practiced what my brothers had taught me.

In this case I got him, Olle, easily on the ground with my knees on his shoulders. I was still upset and slapped him on his face. I did not play according to the rule. However, it helped me to reduce my primal emotion, rage. But he started to weep. In this case my anger was a threat to our friendship, and he “panicked”, another primal emotion, and felt lonely and sad when the attachment was broken. This came unexpectedly to me and it made me confused. I regretted what I had done, and suddenly I shifted from rage to the primal emotion “care”, but I did not say anything to Olle (my response pattern of keeping feelings to myself). I went away with some other boys who told me that he got what he deserved (back to “play”). I was part of the in-group and now he was on the margin. Our friendship was never repaired. Later, I heard that Olle, my old school friend, lived an isolated and lonely life and had all kinds of difficulties.

When I was a young psychologist, I told this story to my psychoanalyst. She suggested that I get in touch with him to apologise (an effort for me to develop new response patterns). We both realised that I was not the cause of his difficulties. However, she thought it would be good for me, and for him, to understand that I still was sorry, so many years later. And yes, I still am. Sadly, I never got in touch with him. Now, it is too late, since he is dead.

In this sense the psychoanalysis failed. However, I learned something else that is valuable. There is pain both in the process of being excluded and to belong to the excluding side. However, there is an important difference. The reactions to the experience of being excluded are immediate and strong. Often the feelings of sadness and loneliness are accompanied by shame, adding to the pain. Guilt, which is related to the primal emotion fear, gives rise to low intensity anxiety, and can only be resolved through reconciliation and penance.

Most of the time play is joyous, but sometimes it is not. Play is a serious thing. In adult life we experience exclusion and loss of status at work, in family life and other group settings. Unfortunately, I know many former and current members who have experienced such things within IAGP. Maybe, it is especially difficult to play with joy in international work, with its many cultural clashes. I have experienced it myself. In fact, I have not participated in the life of IAGP since shortly after the IAGP 1st research symposium six years ago. There was a crisis in 2015. It was a traumatic experience for all involved. Some of us, who were at the centre of the conflict, felt that we were made into scapegoats. According to the story from the Old Testament of the Bible/the Torah, the scapegoat is sent out in the desert to die. We did not die in the desert, but we left and made ourselves dead in relation to the organisation. Maybe this was the only solution then. I do not know.

Such things happen in all organisations, it is part of organisational life, and it is painful. Those of us who left then have coped with it differently. In my case I have had the belief that I carry a part of the IAGP organisational memory. One day, I have thought, when the organisation is ready, this missing piece of information will be integrated into its life.

It is painful to exclude and to feel excluded, but this pain is easier to endure if one can find meaning in it. This also applies to the Pandemic. The burden of social isolation is easier to carry when the reasons are understandable, for example not to risk others or one's own life and as an act of solidarity with hospital staff. When we feel connected to other people, human beings can suffer being separated from each other, but it comes at a cost.

GROUP EXPERIENCES

For those of us working with group psychotherapy and group processes, the importance of relationships is obvious and self-evident. I do not think we need to be convinced by arguments from neurobiology. However, when we approach the authorities for disease control and public health it might help. In a pandemic, we cannot focus only on suppressing the disease and short-term economic factors. Loneliness and poor relations have a high long-term price.

In the book "Why group therapy works and how to do it", Sandahl et al. (2021) we elaborate on the significance of the group for human beings, the social animal as already Aristotle expressed it. Findings from evolutionary psychology and attachment theory are discussed in the

book. It is concluded that the fundamental importance of groups for human beings is often denied in the world of today where either individualism or authoritarian collectivism rule. Traces from human beings' life as a flock on the savannah are imprinted in the genes. To be sent out in the desert back then and thereby losing the protection of the group was likely to end one's life shortly. Deep down we humans know that lone wolves live dangerously and that the group is essential for survival. The family is our first group. In the family, school and in groups of friends we create our identity as we receive support, comfort, and encouragement. The group provides experiences of relationships.

Dan Siegel, a clinical professor of psychiatry at UCLA School of Medicine, is a well-known researcher and educator within the field of interpersonal neurobiology (<https://www.drdansiegel.com/>). He argues that integration is the key to wellbeing, i.e., acknowledging differences and linking relationships inside oneself and in relation to others. He is only one among many who have demonstrated that the development of neural connections in the brain are influenced by children's attachment to caregivers. We know that difficult early relationships can result in problems with memory and emotional regulation. This is known from studies of child development. Some people find it even more convincing if this can be illustrated by neurobiological studies of the brain, which has been demonstrated in research (Siegel, 2012).

However, and perhaps more importantly, studies of adults are showing that relationships and time for reflection on relationships, - the kind of things we do in groups - stimulate the integration of cells in the pre-frontal cortex. Integration of cells means that they become more stable, and the connections more complex. Increased complexity in the brain is related to increased complexity of the mind which in turn increases the persons

- capacity to adapt to difficult situations,
- resilience,
- emotional competence
- compassion,
- ability to cope with stress,
- general health.

According to interpersonal neurobiology, relationships, time for inner world reflection, and verbalizing emotions promotes healing and integration as the mind continues to develop through life (Siegel, 2012). In the group psychotherapy world, there is nothing new about this. What is new is the amount of support we have, not only from our own discipline, but also from neuroscience.

SOCIAL DISTANCING

During the pandemic most of us have been instructed to avoid relationships outside the family as much as is possible. In the beginning I wanted to change the concept of “social distancing”. No, I said they mean physical distancing, not social, that would be a catastrophe. Now, I have realised that what is meant is not only physical distancing but also social. What is the price?

As always, those with less resources pay the highest price. To be stuck in a dark flat, no access to nature, worries about economy, having to risk security on one’s way to work, because one cannot work from home, or maybe one has lost work - etcetera. But we are all affected one way or the other. At the 3rd IAGP research symposium many examples were given of the social and personal suffering caused by the measures taken to suppress the pandemic, and suggestions as how to deal with it.

Has social neuroscience anything to say about the suffering in a pandemic? In the research group led by Dr Matthew Lieberman threats to social connectedness have been studied mainly with different methods for brain imaging (Lieberman, 2015). Is it more convincing to believe that there is real pain associated with threats to connectedness and exclusion, when it is demonstrated with activities in the brain, i.e. not only subjective reports?

Social neuroscientists have shown that the parts of the brain associated with social activities are on constant alert. The sensitivity to social cues is extremely high and sophisticated. It has been compared to the highly developed and sensitive smell organs in dogs. And the sensitivity to threats are several times larger than the sensitivity to rewards. Humans are constantly scanning the environment, other peoples’ movements, facial expressions etcetera, unless attention must be given to a cognitive problem. Then social activity of the brain decreases, and the part of the cortex that is needed for problem solving is activated. When the problem is solved, the normal state is returned. It is like a seesaw. When one is up the other is down.

A fascinating experiment illustrated some of the pain related to the experience of being excluded. The research subjects were put in an MRI scan. They were told that two other persons also participated in the experiment, and that the three of them were going to interact. However, there was only one research subject at a time. This person was instructed to play a video game with what this person believed were two other guys. On the screen one could see three cartoon type of figures

throwing a ball to each other. One of them was controlled by the subject, who could respond and throw the ball to the other two players. After a while, the figures were programmed to stop throwing the ball to the subject. They only played with each other. The subject was excluded from the game.

When this happened the brain-image showed an activation in the same part of the brain known to be activated by physical pain. When the subject rated the intensity of feelings during the experiment, there was a direct relationship between the subjective feeling and the degree of activation in the pain area of the brain. Furthermore, when the subjects were given a painkiller, Paracetamol, the activation in the “pain centre” decreased. Social pain and physical pain are experienced similarly by the brain.

Other types of “painkillers” like drugs, alcohol and junk food obviously have the same effect. When humans feel isolated or excluded it is easy to use some sort of “painkiller” to reduce the suffering. We know that all kinds of public health problems have increased during the pandemic. Apart from the primal emotion panic, i.e. a threat to attachment and connectedness accompanied by feelings of loneliness and sadness, social pain is most certainly part of the explanation.

ONLINE COMMUNICATION

During the pandemic different online resources such as Zoom and Teams have come into frequent use. Many colleagues have come to practice online psychotherapy, in groups and individually. Families can meet online, even if they are not allowed to meet in person. One might wonder if the social isolation during the pandemic really is such a big problem.

It was mentioned above that the social parts of the human brain are always active when not more urgent problems need to be solved. It is like a radar scanning the environment. What is this radar especially sensitive to? The answer is: The area around the eyes and the mouth of other people. The reason for this is that there is where affects are expressed, in the facial muscles.

Affects are the physiological responses to stimulus in the environment, such as fear, rage, joy, sadness, shame etcetera. The same muscles in the face are activated for each basic affect, and it is the same muscles for all human beings. However, culture and upbringing can modify the intensity of the affects. It has been discussed how many they are, seven, nine or something else. However, it has been agreed upon since Darwin that affects

have had survival value in the evolution of the species. This topic will not be further developed here. However, the main point is that eye contact face to face, in person, is essential for humans to be able to read the affects of other people, which in turn is necessary for trust and cohesiveness to develop. In a group where we are present with our bodies in the room, we can take a quick look around and discover if somebody is sad, angry, absent minded, neutral or whatever.

The North American psychologist Victor Schermer discussed in a recent article four modalities of the experience of others in groups (Schermer, 2018). Based on philosophers like Kant, Merleau-Ponty, Foucault and Levinas he arrives at four aspects of human interaction and experiencing of each other: Mind, Body, Gaze and Face. Among other things he argues that the way we understand others is based on the embodied perceptions. The human body is used to attune to the feelings of others. Intuition and gut-feelings provide a lot of reliable information. Through sight, the Gaze, humans become aware that their behaviour is observed. When one experience this, it might be difficult to avoid pressure to conform. Through the Face humans become aware of others before they know anything about them, which according to Levinas presents us with a demand to take responsibility for them. "The destiny of the other lies in your hands" (Lögstrup, 1994). All these aspects of our experience of others are circumscribed in the online session, except possibly Gaze which might be more pronounced. There might be a risk that the conformity pressure is stronger online compared to encounters in the real world.

Online, we cannot have eye-contact. It is difficult to get an overview of the screen. The experience of seeing one's own image is also disturbing for relations to develop. Online encounters are certainly useful in many ways. Information can be shared, and discussions can develop, but dialogue in its deeper meaning is a real challenge online. Person to person meetings cannot be replaced by online meetings but can be a substitute in certain situations.

We need to learn more about when the internet can be used and when it cannot. Psychotherapy on the internet has a rather long history by now, not least among CBT therapists. Research show promising results for many patient categories. It is a less expensive alternative for many and if you live in part of the country where it is difficult to find a psychotherapist it can be an alternative to get help. If you are in pain it is a good thing that relief is available, even if it does not solve the underlying cause.

There is also quite a lot of experience from Online group therapy. Knowledge of this subject has been collected in a book co-edited by the Israeli/North American psychologists Haim Weinberg and Arnon Rolnick (2019). In a recent article Haim Weinberg (2020) describes the limited research on online group therapy and draws conclusions regarding challenges and possibilities during Covid 19. He concludes that a good enough quality of relationships is difficult to establish, that the absence of body-to-body interaction and absence of eye contact is problematic, and that presence is difficult to achieve. His recommendation is that therapists should be more active online and increase the degree of self-disclosure compared to ordinary group therapy. If these things are difficult to deal with for group psychotherapists, how will eye-contact be compensated for in social, often leaderless, online groups?

HUMAN NATURE

How can findings from social neuroscience about the human nature be summarized? As mentioned above, the social brain is constantly scanning the environment for cues of threat or reward, except when a cognitive problem is encountered and must be solved. If somebody tends to use a large part of the time for intellectual problem solving, the social and relational skills will be underdeveloped for the simple reason that one cannot use both functions of the brain at the same time. However, the suppression of feelings keeps the brain on alert and takes energy from thinking. And suppressed feelings constitute a threat for others because the affects expressed in the face, beyond conscious awareness, are picked up consciously or unconsciously.

The social cues that the brain is sensitive have been categorised into five factors by Dr David Rock and his team at the NeuroLeadership institute (<https://neuroleadership.com/>) in New York. They are: Status, Certainty, Autonomy, Relatedness, and Fairness (SCARF). In a current project at the Swedish Royal Academy of Engineering Sciences (IVA), a group, of which I am part, of researchers and former CEOs have modified the model somewhat. We arrived at basically the same five social rewards or threats, depending on their presence or absence, that are fundamental to the brain, and added one environmental factor that is often overlooked.

- *Group belonging* is an expansion of the factor Relatedness in the SCARF model. Individual relations can certainly give rise to both threat and reward responses. However, we argue that group belonging is the main social factor

of which individual relationships are a part. People need a group to belong to, be it family, at work or in other settings. When the group is functioning well it implies reward responses in the brain, and the system arrives in a kind of homeostasis. If not, threat responses result in an increase of stress hormones. Similarly, if one feels excluded from a group, pain is activated. During the pandemic people need a group more than ever. We can promote online groups, but we need to learn more about how to compensate for their problematic sides. People can meet in parks and exercise together keeping the distance, they can walk and talk etcetera. There is plenty of room for creativity.

- *Rightmindedness* (or Fairness). Its presence triggers reward responses in the brain and stress if absent. The measures taken in any situation must be fair and just. It is not fair that the pandemic hits hardest those who already have a difficult life situation. How can they be compensated? Also, for those of us who are privileged it is important that other people are not exploited. Guilt and shame undermine health.
- *Autonomy*. From stress research it has been known for a long time that lack of control or limited decisional latitude at work give rise to stress reactions in the brain. Adult people perceive it as a social threat when they are treated as children. Human beings want to be in control of their lives, and they do not want to feel stupid. In authoritarian environments it is surprising to experience how some people with power tend to treat other people in a way that they would never accept to be treated themselves. During a pandemic we need to create a situation where people feel they can oversee things they have to cope with. That would be rewarding and relax the stress system and thereby contribute to health. Loss of autonomy has the opposite effect.
- *Status*. It is important for humans to know their place in society and at work. Anything that is experienced as an indication that there might be a negative change of status will result in a threat response. Being publicly criticized by a person in authority might be such a situation, or not being greeted by somebody. It also has to do with role and task clarity, to know who has the power and to be able to establish one's own authority. In the end it is about personal dignity. During the pandemic there are several serious threats to status, not least

the risk of becoming seriously ill, but also loss of or reduction in income. During online meetings, which tend to become heavily focused on task and provide few opportunities to explore relational issues, there is also an implicit threat to status.

- *Security* (or Certainty). If there is a perceived threat the survival systems fight, flight, freeze will be activated, which in turn affect perception and cognition. Humans need to feel safe to think clearly and to be able to express their opinion. Personal safety is the highest priority and is taken very seriously by sincere politicians and health authorities. That is good. However, one must also include social, economic, and psychological safety.

Instead of SCARF, we have now arrived at another acronym: GRASS. These are the five most important social factors which can become both a reward and a threat for the brain. Naturally, we want to avoid the threat response.

The acronym GRASS is also to remind of the sixth factor: Grass is part of Nature. There is a lot of research evidence for the positive impact of nature on mental and physical health (e.g. Grahn & Stigsdotter, 2003; Lottrup et al. 2012). The human eye can see green better than any other colour. On the savanna it was obviously an advantage to be able to identify different shades of green which served survival. Exposure to nature has been shown to increase length of life expectancy, decrease physical and psychological health risks, reduce stress level, recover concentration, motivate physical activities (which has positive health effects), increase work capacity, and contribute to higher job satisfaction and compassion. Finally having a view of nature, instead of a blank wall, after surgery, has positive impact for recovery.

Nature is an important resource for health among the population. Is it possible to combine social restrictions during the pandemic with instructions on how to get out into natural surroundings?

In summary, I argue that social isolation and the pain of not being part of a group is real and contrary to human nature. Other aspects of human needs that are threatened during the pandemic are fairness, autonomy, safety, and status. If these human needs are not considered during the pandemic, they will most likely contribute to health problems. The internet and online discussion fora offer many useful solutions for problem solving and communication. However, they might cause new problems in the long run, not least reinforcing

authoritarian solutions.

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