


**NEUROSCIENCE AS A TOOL FOR SELF-KNOWLEDGE AND DEVELOPMENT
OF COGNITIVE POTENTIAL FOR PEOPLE IN VULNERABLE SITUATIONS**

**NEUROCIÊNCIA COMO FERRAMENTA DE AUTOCONHECIMENTO E
DESENVOLVIMENTO DE POTENCIALIDADES COGNITIVAS PARA PESSOAS
EM SITUAÇÃO DE VULNERABILIDADE**

**LA NEUROCIENCIA COMO HERRAMIENTA PARA EL AUTOCONOCIMIENTO Y
DESARROLLO DEL POTENCIAL COGNITIVO DE PERSONAS EN SITUACIÓN
DE VULNERABILIDAD**

 <https://doi.org/10.56238/sevened2025.038-049>

Renata Godis da Silva¹

ABSTRACT

This work, conducted at the Institute for Socio-Emotional Development of the State of Rio de Janeiro, uses neuroscience as an analysis to understand mental obstacles that hinder the development of cognitive potential crucial for overcoming emotional barriers. These barriers often prevent vulnerable individuals from achieving the life they desire. To contribute to overcoming personal difficulties, this work aims to offer tools to enable a group of people in Rio de Janeiro to develop their self-awareness and move beyond their psychic comfort zones, encouraging reflection on paradigms created through lived experiences and motivating personal transformation. Neuroscience has provided vast insights into mental organization, and awakening minds to their full potential has never been more widely discussed than in the current decade. Thus, the possibilities for overcoming these challenges reaffirm the importance of rethinking proposals that foster a new perspective and new social outlook for this group of individuals.

Keywords: Neuroscience. Cognitive Potential. People in Vulnerable Situations.

RESUMO

Trabalho realizado no Instituto de Desenvolvimento Socioemocional do Estado do Rio de Janeiro, através de uma análise juntamente com a neurociência, na busca de compreender obstáculos mentais que impedem o desenvolvimento de potencialidades cognitivas importantes para o romper das travas emocionais, muitas das vezes responsáveis pelo impedimento de pessoas em situação de vulnerabilidade, em alcançar a vida que tanto deseja. De modo a contribuir na superação de dificuldades pessoais, este trabalho tem como principal objetivo oferecer ferramentas cabíveis para que o grupo de pessoas, situadas na cidade do Rio de Janeiro desenvolvam em seu potencial o autoconhecimento, bem como fazer com que estes indivíduos saiam de sua zona de conforto psíquica oferecendo reflexões sobre os paradigmas criados no decorrer das experiências vividas e motivá-las para a sua transformação pessoal. A neurociência tem trazido vastos esclarecimentos sobre as organizações mentais e despertar as mentes para o potencial máximo de sua existência nunca foi tão discutido como na década atual. Assim as possibilidades de superação reafirmam sobre a importância de repensar em propostas que favoreçam a construção de um novo olhar e novas perspectivas sociais para este grupo de indivíduos.

¹ Dr. in Educational Sciences. Universidad Columbia del Paraguay. E-mail: renatagodis.educ@gmail.com

Palavras-chave: Neurociência. Potencialidades Cognitivas. Pessoas em Situação de Vulnerabilidade.

RESUMEN

This work, conducted at the Institute for Socio-Emotional Development of the State of Rio de Janeiro, uses neuroscience as an analysis to understand mental obstacles that hinder the development of cognitive potential crucial for overcoming emotional barriers. These barriers often prevent vulnerable individuals from achieving the life they desire. To contribute to overcoming personal difficulties, this work aims to offer tools to enable a group of people in Rio de Janeiro to develop their self-awareness and move beyond their psychic comfort zones, encouraging reflection on paradigms created through lived experiences and motivating personal transformation. Neuroscience has provided vast insights into mental organization, and awakening minds to their full potential has never been more widely discussed than in the current decade. Thus, the possibilities for overcoming these challenges reaffirm the importance of rethinking proposals that foster a new perspective and new social outlook for this group of individuals.

Keywords: Neuroscience. Cognitive Potential. People in Vulnerable Situation.

1 INTRODUCTION

Government actions still manifest little in terms of the seriousness of people in vulnerable situations, marked by social indifference that keeps them excluding and marginalized. These people need to be seen and treated in the condition of human dignity by the State as well as by society in general.

The care provided to individuals in vulnerable situations, through the development of this work, brought a significant result in terms of self-knowledge, based on the reports presented and on their follow-up observation. Through the brain's ability to undergo temporal or permanent modifications, whenever it is influenced by itself, by other brains or by the environment, it complements the positive results presented by this group of people.

The profile of these individuals indicates fewer possibilities of reintegration and social reintegration, which requires greater attention through more intensive and broader public policies that will add in an inclusive way, restructuring and expanding new possibilities for social development.

Considering the assumption that individuals in vulnerable situations can break mental paradigms by leaving their psychic comfort zone, it is essential not only to rethink, but also to seek actions that adopt practical actions in order to provide real changes in this scenario of social distancing

2 CONCLUSION

There are countless difficulties encountered by people in vulnerable situations, so reconstructing their identity and situating themselves in the world is the constant struggle of these citizens in the face of their object of anguish. If helplessness is a characteristic state of contemporary city life and is revealed in the lack of guarantee about the future, says Menezes, 2006, it can be said that helplessness leads to the height of an existential crisis and establishing a profile of homeless people is not something expressly simple.

Whether or not something happens in front of these groups is a doubt that is accentuated when social distancing makes this picture of inequality clear. Baumam (1998) delegates responsibility in relation to the other, as a moral behavior that arises from the condition of proximity. According to him, the strategies of maintaining social distancing curb the impulse to judge the suffering of the other as something that does not concern us. People in vulnerable situations are in constant need, as they are far from the social spectacle in the expectation of being treated in a way that makes them feel valued and accepted.

The Universal Declaration of Human Rights, 1948, has as its main basis the right of all people to participate freely in development and to contribute to this development by enjoying it in an active, free and meaningful way. Thus, the development of this work establishes the importance of serving people who are in a situation of vulnerability so that they can improve themselves with appropriate tools for their personal development in a significant and transformative way. The individual, according to Freire, 1998, is a being of mutual relationships and in his interaction with the environment promotes changes, because we respond to challenges by being able to create and recreate culture.

Therefore, mentioning the human being's ability to develop in society is an issue that cannot fail to be addressed without mentioning the incredible and dynamic capacity of the brain to change when receiving influences and information from the environment, including its internal microenvironment, which within the neuroscience approach is called neuroplasticity. Thus, neuroplasticity according to Lent, 2019, can be defined as the property that we all have of dynamically changing in interaction with the environment. In this way, offering interaction to these individuals, inducing them to establish mental contact through language, as well as sensory contact, is the tool found for a possible change in the mental paradigm, in order to stimulate cognitive potentialities, so important for the restructuring of the mind.

Based on this concept, the development of this work presupposes that offering tools of self-knowledge to these individuals considered marginalized can create in their minds new perspectives of life, where they can develop a new mental model of growth and real desire to change their lives.

REFERENCES

- Bauman, Z. (1998). *Modernidade e Holocausto*. Jorge Zahar Editor. (Original publicado em 1989)
- Brasil. Ministério do Desenvolvimento Social e Combate à Fome. Secretaria de Avaliação e Gestão da Informação & Secretaria de Assistência Social. (2009). *Rua: Aprendendo a contar – Pesquisa nacional sobre a população em situação de rua*. MDS. <https://www.gov.br/mds/pt-br/acentral-de-conteudos/publicacoes/pesquisa-nacional-sobre-a-populacao-em-situacao-de-rua-2008>
- Castel, R. (1998). *As metamorfoses da questão social: Uma crônica do salário*. Vozes. (Original publicado em 1995)
- Freire, P. (1967). *Educação como prática da liberdade*. Paz e Terra.

Instituto de Desenvolvimento e Assistência Social (IDAS). (s.d.). Início. Recuperado em 26 de novembro de 2025, de <https://www.idas.org.br/>

Lent, R. (2019). O cérebro aprendiz: Neuroplasticidade e educação. Atheneu.

Menezes, L. S. de. (2006). Pânico, efeito do desamparo na contemporaneidade: Um estudo psicanalítico. Casa do Psicólogo.

Paiva, J. S. (2012). Educação social de rua: Uma outra prática pedagógica. Revista Gestão Contemporânea, 1(1), 34–46.