



Journal of Intercultural Management and Ethics

JIME

ISSN 2601 - 5749, ISSN-L 2601 - 5749

published by

Center for Socio-Economic Studies and Multiculturalism
Iasi, Romania
www.csesm.warter.ro

Special Editors

Drs. Huib Wursten,
Author and Consultant, Netherlands
E-mail: huibwursten@gmail.com

Beatrice Gabriela Ioan
"Grigore T Popa" University of Medicine and Pharmacy, Iași, Romania
Dept. of Forensic Medicine
E-mail: ioanbml@yahoo.com

TABLE OF CONTENT

Editorial	5
Huib Wursten, Beatrice Gabriela Ioan	
A Global Pandemic in India	7
Divya Susan Varkey	
The Fight against Corona from a Danish Cultural Perspective	23
Pernilla Rorso	
Corona Revisited	33
Huib Wursten, Christi Degen	
Pandemics & Culture: Could Historical Pathogenic Prevalence Reinforce Collectivism?.....	41
Paulo Finuras	
Forgiveness, Unforgiveness and Health	51
Adina Karner-Huțuleac	
How Can Plato Be Relevant for Contemporary Medicine?	59
Tudor-Ștefan Rotaru	
Confidentiality of the Medical Act - Between Patient Preferences and the Collective Risk .	67
Andreea-Luiza Palamaru, Ioana-Florina Mihai, Elena Toader	
Burnout Syndrome in Palliative Care	71
Ana-Roxana Gănceanu-Rusu, Elena Rezuș, Nicoleta Dima, Codruța Bădescu, Daniela Tănase, Anca Ouatu, Andreea Clim, Ana-Maria Pop, Minela Aida Mărânducă, Ciprian Rezuș	
Burnout Syndrome in Forensic Pathology - Current Stage of Knowledge, Approach Proposals	79
Silviu Morar, Lilioara-Alexandra Muja	
Managing the Migration of the Doctors in a Multicultural Context	85
Elena Toader	

A Century Old Dream That May Turn Into a Nightmare 91
Mircea Gelu Buta

Infertility and In Vitro Fertilization. Arguments to Support Proper Counseling 99
Mihail Adeodatus Ungureanu, Beatrice Gabriela Ioan

General Principles Regarding Ethical Evaluation of Projects Involving Laboratory Animals in
Scientific Research 105
Serban Morosan, Cristin Coman

The Utility of Respecting the Ethical Code in Student-Teacher University Relations 113
Elena Gologan, Oana Timofte

PANDEMICS & CULTURE: COULD HISTORICAL PATHOGENIC PREVALENCE REINFORCE COLLECTIVISM?

THE GROUP IMMUNITY PROTECTION HYPOTHESIS: CONTRIBUTION TO THE STUDY OF EVOLUTIONARY ORIGINS OF COLLECTIVISM IN HUMAN SOCIETIES AS A PROTECTION STRATEGY

Paulo Finuras, Ph.D.

Associate Partner Hofstede Insights - Portugal

Associate Professor at ISG Business & Economics School – Lisbon, Portugal

E-mail: paulo.finuras@isg.pt

Abstract

In this paper I will show that pathogenic transmission stress is one of the most important foundations for collectivism cultural values and has always been used to reinforce groups closure and collectivism feelings as a protection mechanism. The main reason is because same selection pressures on the social behavior of host populations are imposed by pathogenic diseases threats. As a consequence, in human societies several psychological aspects seem to be used as strategic antipathogen defense with deep effects on cultural differences, namely in human perception, behavior and cultural values in face of the prevalence of pathogens in the local environment.

Some researchers suggest that several specific behaviors of collectivist cultural values, like preference to ingroup belonging, ethnocentrism, conformity and loyalty to the ingroup can be used to inhibit the transmission of pathogens. This assumption posits that collectivism preferences will probably distinguish more often cultures in regions that from a historical point of view had higher prevalence of pathogens. This could mean that diseases and pathogenic stress and pressures are part of the variable nature of national cultures.

Keywords: Behavioral immune system, cultural values, collectivism and individualism, group immunity, infectious diseases, pathogen prevalence, selective pressures.

Introduction

Culture as a behavioural immune system

As M. Schaller put it, (...) “immunological defense against pathogens is costly and human anti-pathogen defense is also characterized by proactive behavioral mechanisms that inhibit contact with pathogens in the first place”. And “this is what we can call behavioral immune system and involve several psychological processes that try to infer risk infection from perceptual cues, and that respond to these perceptual cues through the activation of aversive emotions, cognitions and behavioral impulses.”

We know that human universals (see Brown, 1991) are innate behavioural systems, whose function remains and acquired a universal value among all human societies. For example, the mimes and «emotional masks» that are not learned, reason why are identical

both in morphology as in function and can be found in all the linguistic and cultural or ethnic groups (see Ekman, 2003).¹

Also according to the work of Randy Thornhill and Corey L Fincher, the fathers of “the parasite-stress theory of values/sociality“, humans have two universal immune systems: the classical physiological, cellular, and tissue-based protection system and the behavioural immune system.

This last one, according to the authors, is comprised of two parts: (a) psychology and behavior for infectious-disease avoidance and (b) psychology and behavior for managing the fitness-reducing effects of parasitic infection. Both try to deal with selective pressures (Table 1).

Table 1. Differentiation and Immunity Group System Protection

Selective Pressures	Pathogenic diseases: infectious diseases impose selective pressures on the social behavior of the host populations.
Human immune systems	Physiological, cellular, and tissue-based defense
	Behavioural immune system (see Schaller, 2006) ²

Source: Author version

It is important to note that the human behavioral immune system also has consequences at a cultural and sociological level of collective life because under ecological circumstances and pressures in which diseases or infections are more prevalent, people also tend to display more restricted forms of behavior, and human cultures tend to show more conservative norms and also value systems, including the fear of outsiders or strangers. In a nutshell we can say that since the beginning of our species the fear of infectious diseases has promoted and reinforced the feeling of belonging as a defense and protection mechanism. Are we currently living this feeling and emotions again?

Discussion

There are evidences that the so-called Anatomically Modern Human (AMH) was born about 200.000 years but the forms of life and social organization that are in the genesis of all we know emerged only in the last 10.000 years, with the «agricultural domestication». This means that if we convert all this 200.000 year of the AMH in a 100 cm straight, our last 10.000 years correspond to less than a half a centimetre.

Behind is a whole hunter-gatherer past that for so long has contributed to the reproductive success of our ancestors and continue to integrate our repertoire of behaviours in current events, even in circumstances that are, sometimes, completely useless or inadequate (the «mismatch hypothesis»). Thus, we possess a mental program that continues to give us instructions about what to do and one of them is avoid contacts with strangers to prevent infectious diseases.

We believe that our ancestors lived, literally, hundreds of thousands of years in small bands increasing gradually until they reach the tribal dimension (around 1.500 people). It was within these communities that developed their entire social life. The group gives protection and support to the individual (the *benefit*), but these implies some kind of

¹ I am referring to «masks» that express 1) fury, 2) surprise, 3) fear, 4) sadness, 5) satisfaction, 6) disdain and 7) disgust. These «emotional masks» are in all peoples a real innate grammar and communication of universal emotions.

² Concept coined by the psychological scientist Mark Schaller to refer to a suite of psychological mechanisms that allow individual organisms to detect the potential presence of disease-causing parasites in their immediate environment, and to engage in behaviors that prevent contact with those objects and individuals.

acceptance of coordination and share meanings which means at the same time, accepting and expecting some kind of inequality that demands conformity and some form of submission, loyalty and therefore «power distance» (the *cost*). We may even wonder if this was the first power distance trigger. Probably, that's why, when there was great power asymmetry, the choices for those who are less powerful could be between open rebellion and conformity to a system in which they are disadvantaged. In this situation, we must admit, conformity could be the most rational «less bad option» and reinforced power distance (defined as Hofstede suggests as “the degree of emotional acceptance of inequality”).

In my view, living within groups imply a necessary «bio economic price». The social group somehow provided a buffer between the individual (organism) and the demands of the environment for human evolution. Thus, seems that there were two kinds of requirements to survival that had operated at different levels and have generated different selection pressures. In fact, some studies suggest that the exigencies of the physical environment only exercise indirect selective pressures on human adaptation, and the «real» exigencies of social living and group living constitute the immediate selective environment (Brewer & Caporael, 1996; Haslam, McGarty, & Brown, 1996).³

Even today, survival and reproduction demand group circle belonging, and our chances of surviving are much higher within group protection.

For a social species like ours, interdependence at a group level was and still is mandatory. The consequences are that the individual chances of survival are not only dependent of individual skills or efforts, but also dependent on the group behavior and the capacity of understanding each other. Commitment to, and acceptance of, interdependence among all members of the first social units, was a critical requirement for group survival, reproduction and living chances. But, beyond this in-group living problems there were also the neighbouring societies, formed by «others» or «strangers» and they could represent a threat.

It is quite likely that identifying and perhaps avoiding contacts with «others» or «strangers» was very important, especially due to fear of infections because the members of a community share most of the bacteria and other parasites by the frequency of relations which made them won immunity. And we also know from research that pathogens, and antipathogen behavioural strategies, can affect several aspects of human behavior. In fact, research suggests that antipathogen strategies are related to political attitudes, with more ideologically conservative individuals reporting more disgust toward pathogen cues, and also with higher parasite stress nations being, on average, more conservative or right wing.

«Others» represented a threat, sometimes lethal, so recognizing who belonged to what group often meant the difference between life and death. How could people recognize others from other groups when living ingroup or tribe became what we can call the *modus operandi* (M.O) of our ancestors?

This M.O was part of the evolution of social life-form because life in social communities, social groups or social aggregates, are associated with six major advantages that were prevalent and decisive for our survival, namely, 1) decrease of the costs of joint protection; 2) reduction of predatory pressures; 3) more efficient and effective acquisition of food; 4) greater efficiency in coordination and defense of limited resources; 5) reduction of

³ In their book the authors develop and test an ecological and evolutionary theory of the causes of human values-the core beliefs that guide people's cognition and behavior-and their variation across time and space around the world. They call this theory “the parasite-stress theory of values or the parasite-stress theory of sociality”. The evidence they present suggest that both a wide span of human affairs and major aspects of human cultural diversity can be understood in light of variable parasite (or infectious disease) stress and the range of value systems evoked by variable parasite stress.

higher costs resulting from the dispersion, and 6) protection against pathogenic or infectious diseases.

We know already that evolution helps us developing a «face recognition module» in our brains (aka *pareidolia*) that allow us to recognize human faces (everywhere). For ease of recognition, probably signs and sounds as signaling symbols were also used. They allowed the characterization of belonging by appearance and by the transmitted code.

Naturally, according to the principles of evolutionary psychology, research on the human behavioral immune system is guided by considerations regarding specific forms of social behavior that are likely to have either amplified or reduced individuals' risk of pathogen infection in ancestral social environments. As an example, if we look at the association between Hofstede Individualism measure and language diversity, we will find a strong correlation which suggests that language difference was not only due to isolation but probably also as way of group differentiation and maybe a defence mechanism against outsiders risk of infections (table 2 and 3).

Table 2. Correlations Language Diversity and Collectivism (Hofstede)

		Geenbergen_Index	Hofstede_IDV_Index
Geenbergen_Index	Pearson Correlation	1	-,306**
	Sig. (2-tailed)		,001
	N	115	115
Hofstede_IDV_Index	Pearson Correlation	-,306**	1
	Sig. (2-tailed)	,001	
	N	115	115

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Finuras, P. (2020) Da Natureza das Causas. *Op. Cit.*

Table 3. Correlations *Language Diversity and Historical Prevalence of Infectious Diseases*

		Language Diversity Index (GDI)	Historical_Disease_Prevalence Index _for_158_countries__9_items	Historical_Disease_Prevalence Index _for_158_countries__7_items
Language Diversity Index (GDI)	Pearson Correlation	1	,442**	,403**
	Sig. (2-tailed)		,000	,000
	N	155	155	155
Historical_Disease Prevalence Index for_155_countries__9_items	Pearson Correlation	,442**	1	,963**
	Sig. (2-tailed)	,000		,000
	N	155	155	155
Historical_Disease Prevalence Index for_155_countries__7_items	Pearson Correlation	,403**	,963**	1
	Sig. (2-tailed)	,000	,000	
	N	155	155	155

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Finuras (2020) - Data about diseases were obtained from the Global Infectious Diseases and Epidemiology Online Network <http://www.gideononline.com/>

Infections, pandemics, and collectivism: could this be the biological foundation of a culture value?

The idea of an association between infection diseases and cultural values, specially collectivism, is not new. When debating cross-cultural differences between human societies we can make a distinction between individualism and collectivism as well as between mental images that living in different national cultures (see Hofstede, 2001; Huib Wursten, 2019).

A few words about collectivism and individualism are important and necessary here in order to understand what are we talking about.

One of the most distinctive and remarkable cultural characteristics of human cultures are the so-called cultural dimensions, commonly known as “individualism” and “collectivism”.⁴

In general, this dimension, because it is only one dimension, not two, and because it is an abstraction, it should be understood in a form of a spectrum ranging between 0 and a 100.

If a country scores closer to a hundred, that means that the culture is, on average, more individualistic. On the contrary, the closer to zero, the more collectivist is the culture.

And what does this mean? First, it means that human cultures tend to move towards individualism,⁵ i.e. the starting point of all cultures are the practices associated with the so-called collectivism, probably due to evolutionary reasons as the social tribal instinct, pathogenic avoidance strategies and consequent behaviors.

Second, it also means that most of the so-called “national” cultures are still dominantly collectivists in terms of cultural values and practices, and not “individualists”.

In fact, many people, and common sense in general, wrongly associate, individualism to selfishness and that’s why people usually confuse both concepts.

This is not only wrong. This is deeply wrong. I will give some examples of the differences between values, beliefs and practices in individualist and collectivist cultures.

In the first ones, which can be also called Universalists, people believe that all individuals, in general, are important. In the last ones, the importance of individuals is especially dependent on the group to which they belong. In individualistic cultures, people treat other people primarily based on what they are as individuals, while in collectivist cultures there is a cultural tendency to treat people based on their group of belonging, or other groups with whom they identify themselves. Therefore, in collectivist cultures, people exclude the others from the circle which the people in it deserve preferential treatment. In sum, individualist cultures are more inclusive and collectivist cultures more exclusive.

Now we can understand why common sense has difficulties in believing that “selfishness behaviors” has much more to do with what happens very frequently in collectivist cultures such as, for example, parking at second row or in the walkways, etc. The same happens with concern about public spaces. In an individualistic culture, what is public belongs to everyone while on the other hand, in a collectivist culture, what is public belongs to no one.

But how do cultures become more individualistic? Scientific research about this topic and the longitudinal compared studies suggest that the answer will be in the increase of income and widespread wealth in a society as also in the practice of law. This is something

⁴ It's wise to remember that we, humans, are unable to experience the true nature of the universe unfiltered including the true reality of our collective action. Therefore, the dimensions (cultural or any other), in fact, don't exist. Given that our brain can only process a very small fraction of the world we live in, we should use concepts such as the concept of «cultural dimensions», to grasp the true nature of reality, in this case, the cultural one.

⁵ And they will move to individualism as consequence of more wealth, income and Rule of Law.

that 'pushes' and promotes the so-called individualistic values. In short, “more wealth” tends to generate more “individualism”.

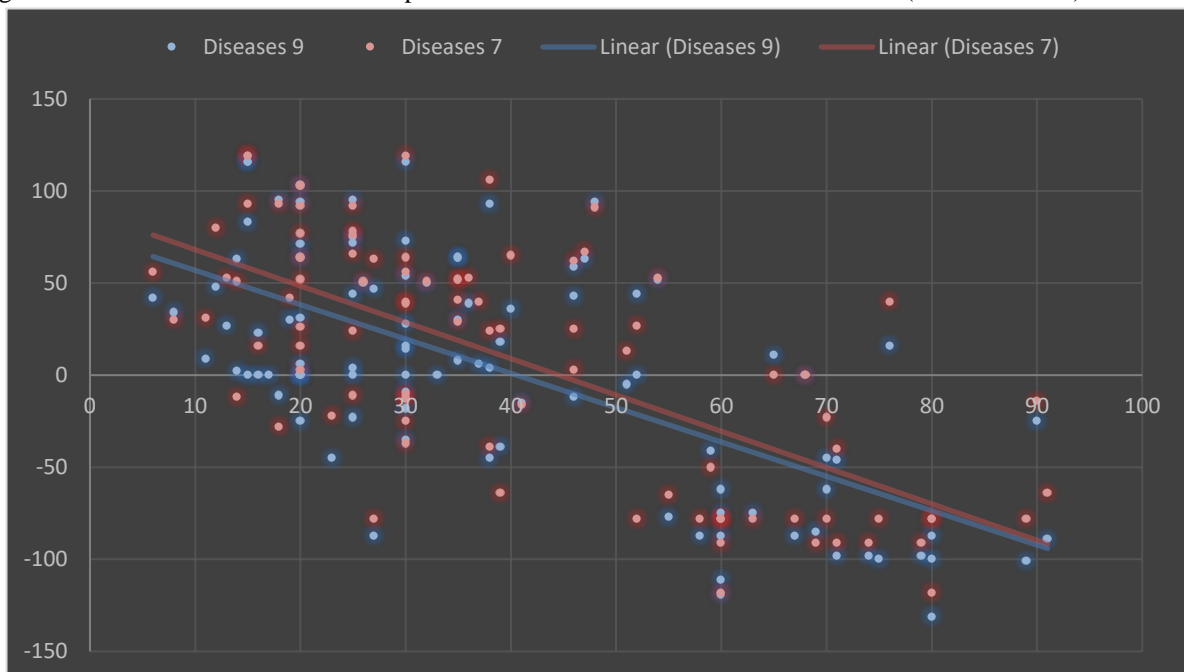
The rationale behind this is that as individuals 'enrich', this allows them to 'cut out' ties of dependence and submission in relation to groups, increasing their autonomy and independence in relation to its restricted groups by another way, where the rule of law prevails problems are solved by impersonal laws and institutions instead of interpersonal and group connections.

Moreover, several researchers have suggested that the ease of interaction with strangers is one of the most characteristic aspects of individualistic cultures, which is why citizens in these societies tend to consider most people as “trustworthy”. The reason why in individualistic cultures, the type of common interaction between individuals tends to vary less is because the “others” are generally seen in a less categorized type, may we say.

On the contrary, in collectivist cultures, the behavior tends to be clearly warmer when the interaction is between members of the group itself, and more suspicious and far with those who belong to other groups or are strangers. Maybe there is a legacy in this from our evolutionary history as previously mentioned.

In collectivist societies (which, by the way, are the majority⁶) research has also suggested that the idea of community or group belonging exists to defend against infectious diseases (Thornhill & Fincher, 2014, p. 59-63). Therefore, cultures that have a higher rate of infections will be more likely to become or remain unconsciously more collectivist as a protection mechanism. In fact, this has been referred by number of observations namely, the work of Fincher, Thornhill, Murray, and Schaller (2008) which suggests that pathogen prevalence would correlate negatively with measures of Hofstede individualism and positively with measures of collectivism (see Figure 1).

Figure 1. Individualism Hofstede Index plotted with Prevalence of Infectious Diseases (n=94 countries)



Source: Author adaption : Fincher, Thornhill, Murray, & Schaller (2008) and Hofstede Individualism Index (2010) - Data about diseases were obtained from the *Global Infectious Diseases and Epidemiology Online Network* <http://www.gideononline.com/>

⁶ According to the Hofstede Insights research and database published for 101 nations, more than 70% of the nation’s score low on Individualism which mean the prevalence of collectivist cultural values.

And why does this strong association between pathogen prevalence and collectivism happens? I believe this is because of two main factors.

First, collectivists cultures place a lot of emphasis and priority on their in-group, caring for one another and hence protecting each other from the negative effects of contagion by outsiders. This is probably due to the fact that one's immune system works to defend the body from local parasites. Therefore, ensuring that those in the in-group are not affected by a new disease will subsequently result in a reduced risk of encountering a new parasite from an exposed person in close proximity with.

Second, collectivist societies are more untrusting of those outside of their in-group, which may serve as a protective strategy and practice against interactions with those in groups that may harbor new diseases.

As I mentioned before, a group immune system could be well adapted to local parasites and will be completely ineffective to protect against unfamiliar pathogens. As consequence, avoidance outsider of one's inner circle will prevent being exposed to new and dangerous pathogens that the immune system is unable to defend against (Fincher & Thornhill, 2008).

Maybe this is why, as Richerson and Boyd put it, “in regions characterized by high pathogen frequency, individuals may make deliberate efforts to encourage others to adopt conformity or collectivistic behaviors, rather individualistic tendencies” (Richerson & Boyd, 2005).

I believe that, because of the substantial social and economic changes that have occurred around the world in last fifty years, like demographic shifts, increasing airline travels, wealth, income, tourism, migrations, advances in technology and public health infrastructure and health care, there are many reasons to assume that some of the old behavioral strategies that once functioned as effective defenses and mechanism against pathogen infection may no longer do so in our new environment.

However, the association between pathogenic infections prevalence and collectivist values still is a legacy of our old world and maybe suggests that when this kind of risk emerge or come back we tend to return to closure and shutdown frontiers as we did in the past and as we are doing now.

In fact, the irony of the new social, economic and technological environment where we live these days is that the biggest the proximity and easy of personal contacts due to new ways of fast traveling around the world make all people more connected than ever and this could represent a completely surprising new threat because more easily any pathogen infection agent could also use the same human global network to travel and certainly find new hosts in order to survive and replicate.

This could make “frontiers groups rational” emerge again as a protective strategy to fight any infection threat or parasite-stress situation as has been done in the past.

Conclusion

In this paper I have argued that protection against pathogen threats might provide a reasonable «key» to understand why people close and reinforce frontiers between “groups” as an old defensive strategic behavior mechanism, special in pandemic crisis situations.

Of course, that the regional differences in disease prevalence and cultural values associated are much more complex and remain relatively under explored. But now we start to understand that cultural values have also biological roots too, and why by “default” human societies are collectivist as a protection mechanism.

It is true that we have left the «stone age» and we're now in the «information and digital age» but that does not mean that the «stone age mental software» left us or that our stone age brain has stopped working.

However, let's be optimistic and believe that for the first time in our evolutionary collective history as a species we are closing frontiers but simultaneously we've never been so socially and technologically connected as we are today and by that same reason, share the possibility to be so solidary with each other to solve again a species survival problem.

The truth is that humanity has never been so better prepared technologically to deal with a pandemic crisis.

References

1. Brewer, M. & Caporael, L. (1996). Reviving Evolutionary Psychology: Biology Meets Society. *Journal of Social Issues*, 47(3), 187–195,
2. Brown, D. (1991). *Human Universals*. Boston, Mass: McGraw-Hill.
3. Ekman, P. (2003). *Emotions Revealed*. London: Times Books
4. Fincher, C., & Thornhill, R. (2008). A parasite-driven wedge: Infectious diseases may explain language and other biodiversity. *Oikos*, 117 (9), 1289–1297. doi:10.1111/j.0030-1299.2008.16684.x.
5. Fincher, C., Thornhill, R., Murray, D., & Schaller, M. (2008). Pathogen prevalence predicts human cross-cultural variability in individualism/collectivism. *Proceedings of the Royal Society B*, 275(1640), 1279–85. doi:10.1098/rspb.2008.0094.
6. Finuras, P. (2020). *Da Natureza das Causas – Psicologia Evolutiva e Biopolítica*. Lisboa: Ed. Silabo
7. Haslam, S., McGarty, C., & Brown, P. (1996). The Search for Differentiated Meaning is a Precursor to Illusory Correlation. *Personality and Social Psychology Bulletin*, 22(6), 611–619. <https://doi.org/10.1177/0146167296226006>
8. Hofstede, G. (2001). *Culture and Organizations. Comparing Values, Behaviors, Institutions, and Organizations Across Nations*. Thousand Oaks, CA.: Sage Publications
9. Richerson, P. J. & Boyd, R. (2005). *Not by genes alone: how culture transformed human evolution*. Chicago, IL: University of Chicago Press.
10. Schaller, M. (2006). Parasites, behavioral defenses, and the social psychological mechanisms through which cultures are evoked. *Psychological Inquiry*, 17 (2): 96–101. doi:10.1207/s15327965pli1702_2
11. Thornhill, R., & Fincher, C. (2014). *The Parasite-Stress Theory of Values & Sociality*. New York: Springer
12. Wursten, H. (2019). *The 7 Mental Images of National Culture: Leading and Managing in a Globalized World*. Helsinki: Hofstede Insights

Suggested readings

1. Barkow, J., Cosmides, L., & Tooby, J. (1992). *The adapted mind: Evolutionary psychology and the generation of culture*. New York, NY: Oxford University Press.
2. Brewer, M. (1999). The psychology of prejudice: In-group love or out-group hate? *J. Social Issues*, 55, 429-444.
3. Buss, D. (2005). *Evolutionary Psychology: The New Science of the Mind*. New Jersey: Wiley & Sons, Inc.
4. Dunbar, R. (2014). *Human Evolution*. London: Penguin Books
5. Ehrlich, P. (2000). *Human Natures: genes, cultures and the human prospect*. Washington: Shearwater Books
6. Finuras, P. (2015). *Primates Culturais – Evolução e Comportamento Humano*. Lisboa: Ed. Sílabo
7. Greene, J. (2013). *Moral Tribes: Emotion, Reason, and the Gap Between Us & Them*. NY: Penguin Book

8. Hofstede, G., Hofstede, G. J. & Minkov, M. (2010). *Cultures and organizations; Software of the mind. Intercultural cooperation and its importance for survival*. London: McGraw Hill.
9. Murray, D., & Schaller, M. (2016). The behavioral immune system: implications for social cognition, social interaction and social influence. *Advances in Experimental Social Psychology*, 53, 75-2129
10. Plomin, R., & McGuffin, P. (1994). The genetic basis of complex human behaviors. *Science*, 264, 1733-1739.
11. Schaller, M., & Duncan, L.A. (2007). The behavioral immune system: Its evolution and social psychological implications. In J.P. Forgas, M.G. Haselton & W. von Hippel (Eds.), *Evolution and the social mind: Evolutionary psychology and social cognition* (pp. 293–307). New York: Psychology Press.
12. Schaller, M., & Murray, D. (2010). *Evolution, Culture, and the Human Mind*. NY: Psychology Press.
13. Schaller, M., & Murray, D. (2009). Historical Prevalence of Infectious Diseases within 230 Geopolitical Regions: *Journal of Cross-Cultural Psychology*, 41(1), 99 –108
14. Triandis, H. C. (1995). *Individualism & collectivism*. Boulder, CO: Westview Press.
15. Trivers, R. (2002). *Natural Selection and Social Theory*. Oxford: University Press.
16. Trivers, R. (2011). *Deceit. Fooling yourself the better to fool others*. London: Penguin Books