

## POSUDEK OPONENTA HABILITAČNÍ PRÁCE

**Masarykova univerzita**

**Uchazeč**

Mgr. Martin Lang, Ph.D.

**Habilitační práce**

*Why do religious people trust each other? A synthesis of experimental cross-cultural research on religious beliefs and behaviors*

**Oponent**

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The habilitation thesis of Dr Lang represents a broad and fascinating contribution to the current literature on psychology of religion. Across 9 published studies thematically divided into 4 distinct clusters, the author, together with diverse international teams, tested more than 4,000 participants in 19 countries around the globe.

Generally, Dr Lang tries to find an answer to the question regarding the role of religion in facilitating interpersonal trust. Adopting an evolutionary perspective, he contends that the high level of cooperation among humans requires a high level of trust that transcends the boundaries of one's family or kin, thereby enabling effective cooperation with strangers. He theoretically argues and empirically tests to which extent religious practices such as collective rituals, belief in supernatural agents, and communication of commitment promote trustworthy interactions, benefiting the exchange between strangers. In four clusters of studies, Dr Lang proceeds from low to increasing levels of complexity when examining the predictors of trust.

The first cluster examines low-level behavioral mechanisms, not necessarily religious, namely *mirroring*—imitating another person's movements—and *synchrony*—purposeful matching of movements performed at a phaselocked rhythm—that facilitate trust. In three studies published in internationally recognized journals – *Group Processes & Intergroup Relations*, *Biological Psychology*, and *Frontiers*—the teams led by Dr Lang were able to show that increased pressure on cooperation increases the uptake of synchronous activities, which enhance interpersonal trust.

In the second cluster, Dr Lang and colleagues studied whether behavioral and perceptual mechanisms, often associated with religious rituals, facilitate interpersonal trust in the face of religious norms regulating interpersonal conduct. The first article reports six survey studies across three different populations that yielded a consistent finding about the link between frequent, rigid, and repetitive collective rituals and perception of objectively existing moral norms. The second study across three countries found that reminders of ritual performances that encode moral norms decrease cheating in religious (vs. secular) participants.

The third cluster presents research on the effect of belief in supernatural agents—a key component of religions—on trustworthiness. The first study of this cluster, sampling over 2 000 participants across 15 societies differing in their religious beliefs, subsistence, and location, found support for the theory on the evolution of moralizing gods (Norenzayan et al., 2016). Specifically, the more people believed that a god monitors how people treat each other and can punish maltreatment (vs. that a god is loving and rewarding), the more they extended cooperative intentions to same-belief but distant people. In the next study using the same but trimmed sample, Dr Lang and colleagues tested and found that identity fusion predicts meaningful variation in behaviour, namely collaborative intentions with same-belief strangers.

Finally, the fourth cluster gathers studies investigating how religious systems, in the form of visual markers of religious affiliation, facilitate the communication of trustworthiness, especially in risky cooperative dilemmas. The last study in the cluster and the thesis is based on the costly signaling theory and addresses the causal chain from cooperative intentions to costly signals that facilitate cooperation.

All the presented studies stand out due to their theoretical sophistication and methodological rigor. All manuscripts included in this habilitation have undergone an extensive and stringent review process in internationally acknowledged journals which attests to their scientific quality. In all presented studies, Dr Lang heavily relies on an interdisciplinary perspective, combining the theories and methods from psychology, anthropology, behavioral ecology, cultural evolution, economy, evolutionary biology, and religious studies. Dr Lang shows a remarkable level of acquaintance with the distinct disciplines, as far as I can judge, which results in insights transcending the boundaries of a singular theoretical approach or discipline. I was mesmerized by the rigor and width of Dr Lang's methodological toolkit—documented in the extensive supplementary sections behind each manuscript—that he applies to operationalize and measure the concepts of interest, including the design of new measures and procedures. In the listed studies, Dr Lang has been responsible for data analysis that aligns with cutting-edge advancements in statistical approaches to data treatment and analyses. Importantly, he addresses not only the main effects at stake but also their boundary conditions which can contribute to more reliable theory building. I also applaud the adoption of and strict adherence to open science practices that will enable other researchers to harness rich and valuable datasets gathered by the author and his collaborators. Another remarkable and valuable feature of Dr Lang's research is the adoption of a cross-cultural perspective, especially including non-WEIRD samples, that critically enhances generalizability of the research findings.

### **Dotazy oponenta k obhajobě habilitační práce**

Dr Lang's habilitation represents a very complex academic writing where most limitations of the studies have been considered. Still, when reading the habilitation as social psychologist, I have missed important psychological phenomena that have been shown to affect people's reactions across a number of domains, namely emotions. I was wondering whether the key outcome of interest, interpersonal as well as intergroup trust is, to a significant extent, a matter of emotions – both situational

and dispositional. In his complex approach, Dr Lang is explicitly naming “cognitive psychology, evolutionary/historical psychology, and cross-cultural psychology” (p.10) as sources for the predictors of trustworthiness that he chooses to test. We can trace back this overrelying on cognition in these and various other disciplines. In distinct research areas like psychology of intergroup relations, behavior change, or mass media studies, direct comparisons between the predictive power of different cognitive and affective processes showed that affective processes can similarly, if not better, predict behavior-related outcomes (e.g., the quality of intergroup relations; Tropp & Pettigrew, 2008; or health risk behaviors; Lawton et al., 2007) compared with cognitions. Put simply, feelings about a matter of stake can predict human actions towards this very matter better than facts that we know about the matter. Especially if the matter at stake involves other human beings, such as in the case of trust. From Dr Lang’s list of references, I gather that emotions are dealt with in the research on trustworthiness, too, e.g.:

Caulfield, F., Ewing, L., Bank, S., & Rhodes, G. (2016). Judging trustworthiness from faces: Emotion cues modulate trustworthiness judgments in young children. *British Journal of Psychology*, 107(3), 503–518. <https://doi.org/10.1111/bjop.12156>

In Study 1, measures on affective states/emotional responses are even part of the survey (pp. 109, 110, 114), however, their role in the experiment is not substantially explained.

In this context, I am wondering whether Dr Lang plans to employ emotions to explain trustworthiness and what role emotions could play in the presented body of research.

My next—less theoretically grounded—reservation relates to equating morality with interpersonal trust, or in the author’s words, with being trustworthy (p.11). Imagine a mafia member who can be characterized by low levels of morality (in both secular and religious sense), still is highly trusted by his close collaborators, other mafia members. Here, morality and trustworthiness cannot mean the same thing. Of course, morality depends on the particular group’s normative context and since people are simultaneously members of distinct groups (e.g., society at large vs. mafia) this can impose different moral expectations. Put simply, I am aware of the fact that morality of one group does not have to align with morality of a different group. Still, I was wondering how Dr Lang would reconcile these two synonymously employed terms that can have distinct implications across different contexts.

Lastly, on p. 14, Dr Lang concludes that: „However, an important qualifier of this effect (i.e., synchronous movements on trust) is that the effects of synchrony are bound to the community, possibly at the expense of trust toward outsiders. In other words, the effects are parochial and do not necessarily transfer beyond the performing group (c.f., Reddish et al., 2014, 2016).“

I was wondering whether this interpretation does not go too far, from interpersonal processes to an intergroup domain. Specifically, I was wondering what if an outgroup member was to perform synchronous behavior—would that increase trust on the expenses of non-synchronous ingroup members?

## Závěr

Habilitační práce Mgr. Martina Langa, Ph.D., *Why do religious people trust each other? A synthesis of experimental cross-cultural research on religious beliefs and behaviors* **splňuje** požadavky standardně kladené na habilitační práce v oboru psychologie.

Bern

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