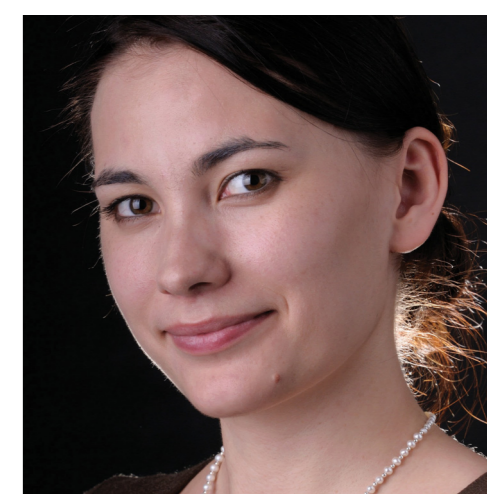
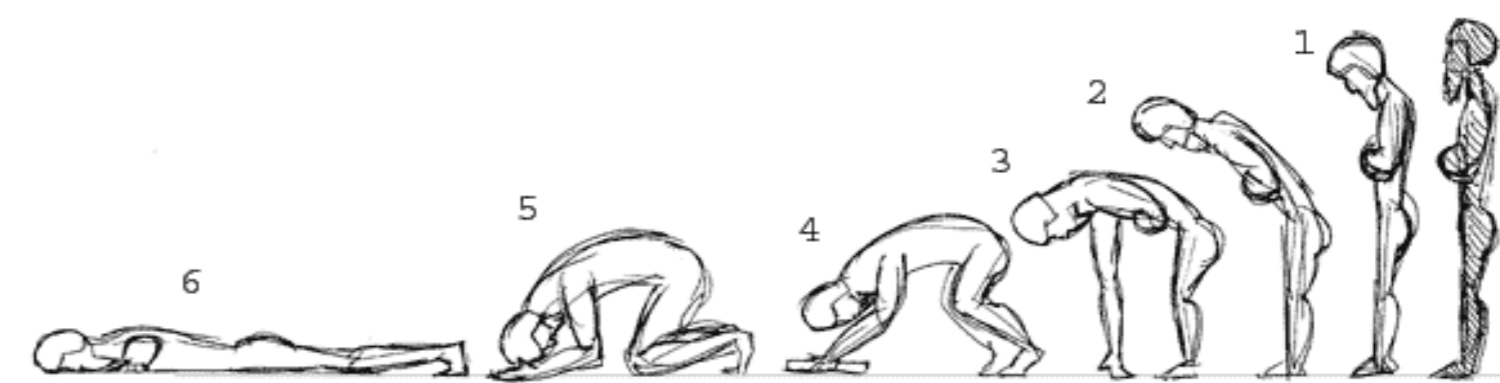


FEELING THE KNEELING: THE POWER OF THE BODY



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Theoretical goal of the project:

The main aim of this project is to show how bodily positions can influence human perceptions and emotional states. The experiment focuses on the bodily position of kneeling and subsequent emotional experience of this bodily setting.

In different religious rituals a variety of bodily postures is observed, some ritual-specific. When accentuating the importance of embodiedness and extendedness of the cognitive system, those postures have to be considered as crucial elements for understanding how participants perceive and process rituals and their own role in them.

One of those above mentioned postures is kneeling – socially and symbolically this position is associated with submission, respect, reverence and obeisance. In some religions, kneeling is explicitly used as a position for prayer – a position of submission to deity or other superhuman agent.



The maximum effect of the kneeling can be expected when connected to the social setting and context, this experiment focuses solely on the bodily posture.

Hypothesis:

Kneeling/prostrating positions induce a greater feeling of subordination compared with standing position.

Methods:

Participants:

	Standing	Kneeling	Prostration	total
n	22 (14 females)	17 (12 females)	20 (10 females)	59 (36 females)
Mean age (years)	21,8	22,0	23,1	22,3
Mean height (cm)	176,1	175,4	177,3	176,3

Manipulation:

Randomly assigned - one of three positions:

- * standing (control)
- * kneeling
- * prostrating

assumed for 3 minutes, without social interaction or control (alone in the experimental room)

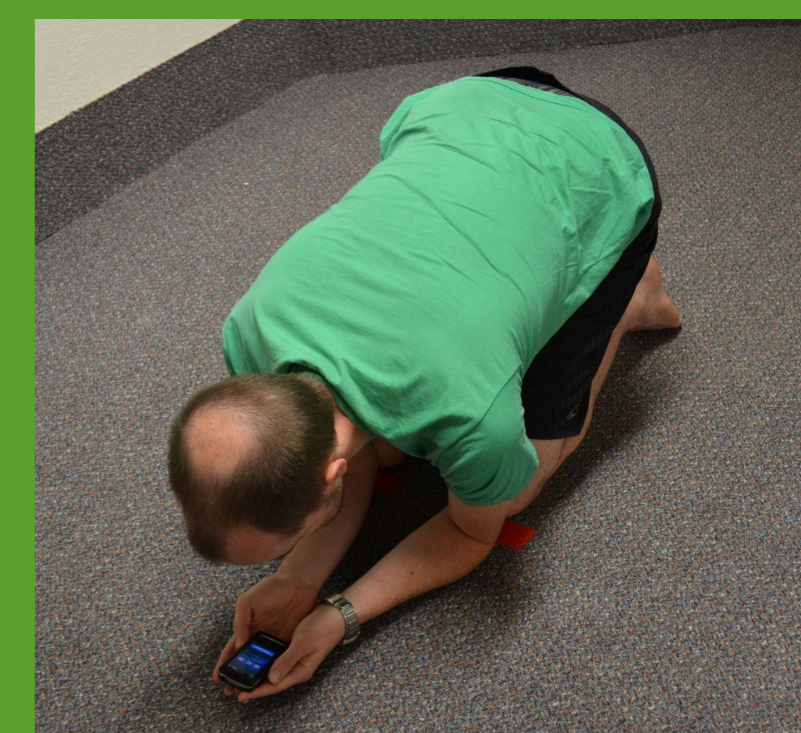


Figure 1. The prostration position: participant observing and silently counting down with an alarm-clock.

Measurements:

Levels of testosterone and cortisol - pre and post task, detracted from saliva samples

Dual-hormone hypothesis suggests that the neuroendocrine reproductive (HPG) and stress (HPA) axes interact to regulate dominance - the interaction of testosterone and cortisol is key component of dominant and submissive behavior (Mehta & Josephs, 2010).

Estimation of body height - marked in the projection on the wall, compared with real height

Dominant and powerful people tend to over-estimate their own height (Duguid & Goncalo, 2012). The divergence in estimation of body height is thus seen as possible proxy of feelings of dominance and submission.

Mood questionnaire - adjectives describing momentary mood, visual analog scale, pre and post

Adapted from Matthews, Jones & Chamberlain, 1990.

Results:

Testosterone & Cortisol levels



Hypothesis:
H1: Prostration and kneeling position condition will show decrease in the testosterone level and increase in cortisol level, while staying unchanged for the control condition.
H2: Decrease in testosterone level and increase in cortisol level will be bigger in the prostration position.

The saliva samples are currently being analyzed in an endocrinology laboratory - the results are not available yet.

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Estimation of body height

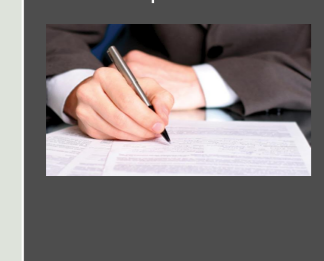


Hypothesis:
H3: Participants in prostration and kneeling condition will underestimate their height in comparison with the standing position.

p=.04

Figure II.: Mean perceived height difference by condition. Error bars are +/- Standard error.

Mood questionnaire



Hypothesis:
H4: Participants in prostration and kneeling condition will score higher on subordination scale and lower on dominance scale after manipulation.



Possible conclusions:

- the main measurement data still missing (only partial conclusions possible)

- the effect is probably quite subtle

- the subtlety could be a reason for non-significant results of the questionnaire - the effect too small to be cognitively captured



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Planned future research:

- Subordination induced by bodily position in social context – kneeling alone vs. kneeling before someone (human/superhuman agent) or something
- Hierarchy and religious priming – are religious primes perceived differently by dominant and submissive people?
- Dominance/submission and conformity – can bodily induced subordination lead to higher conformity?

