Chapter 2
Overview

This part contributes to the scientific understanding of people and their behavior, specifically behavior in terms of smartphone usage. We address the research tasks related to research question A: the relationship between smartphone sensor and usage data and the user's personality. We give an overview about the related terms, showing the importance of the psychological concept of *personality*. We survey previous work and studies related to psychoinformatical research utilizing mobile crowdsensing in Chap. 3 (A-Task1). Based on our findings, we developed a mobile system that enables psychoinformatical research, TYDR (A-Task2). We present TYDR, as well as our privacy model PM-MoDaC for apps relating to the mobile collection of data (A-Task2), and evaluate our privacy model and what data users are willing to share with researchers in Chap. 4 (A-Task3). In Chap. 5, we analyze the relationship between personality traits and frequency and duration of smartphone usage based on data collected with TYDR (A-Task4).