

# Disclosure of Disability by University Students: Development of a Study Protocol

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## Abstract

**Within the life course of a person with disability, higher education represents an important step, and the disclosure of a disability is one of the first and most important choices that the person with disability has to take. Based on a review of the literature, it is described how a research protocol for investigating the effects of Self Efficacy and Metacognition on the Disclosure of Disability by university students is developed. These data would provide information concerning the predictive effects of the metacognitive skills, social support and self-efficacy on the attitudes towards the disclosure of a disability.**

## Keywords

**Disability, Disclosure, Study Protocol**

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## 1. Introduction

In the most recent definition, disability is not intended as a condition that exclusively applies to a medically-impaired minority of people, but as a set of decrements in health that might concern every person, for instance throughout normal aging or during a disease [1]. This definition largely differs from the medical or biological model, and emphasizes the role that society barriers play [2]-[4]. Within the life course of a person with disability, higher education in university represents an important step. During the university career, people build their competences concerning personal, social and professional skills. The university years are an intermediate step between high school and adult work. Therefore, the student who just reached adulthood faces, potentially for the first time, a new environment which characteristics are different from high school and demands more in terms of personal, social and organizational skills. In a perspective that emphasizes the active participation of persons with disability, it is central to focus on the choices that the person takes, and on the internal and external motives that guide these choices.

The disclosure of a disability is one of the first and most important choices that people with disability have to take. Declaring oneself as a person with disability exposes to positive consequences, such as the chance to receive support or accommodations throughout the university career. However, it is well documented that negative consequences, such as stigma, are also associated to disclosure of disability [5]-[7]. Several studies investigated the factors which are associated to the disclosure of disability. It has been reliably shown that external factors, for instance related to the sociodemographic status, contribute to the decision of disclosing oneself. The disclosure of a disability is defined as the moment in which the student communicates any disability status or limitation that requires support or accommodation to be successfully carried out [8] [9]. As such, disclosing a disability is a process which comprises relational as well as psychological factors, and which can be modulated (for instance, anticipated or delayed) by contextual and personal factors.

Which factors influence the choice of disclosing a disability? It must be noted at the outset that disclosure may be a choice or not, depending on the visibility of the disability. When the disability is not visible, the students may choose whether or not to disclose their disability to their peers and university staff. On the other hand, for those students whose disability is highly visible, disclosure may be a forced choice. Nonetheless, both students with visible and non visible disabilities may vary in the degree to which they actively take part in the academic life, or prefer a more detached role. The present study protocol aims at investigating the factors which promoted a more positive attitude towards disclosure in those students who disclosed their disability. More specifically, the present protocol aims at investigating the effects of social support, self-efficacy and metacognitive skills on the attitudes towards disclosing a disability. Below, a rationale is provided for each of these three factors.

Social support plays a crucial role in the development of a disability. In the social model of disability, the way in which society (in this case, the university environment) responds to the person's needs determines whether the person's needs will turn into a disability [2]. In this regard, the academic environment may represent a special case for people with disabilities. For instance, it has been noted that few medical students disclose their disability, possibly because of the negative attitudes from the wider student body [10] [11]. More generally, the number of students who disclose a disability is higher in the social sciences, and lower in the hard sciences [12]-[14]. While the reasons of this inequality are not known, it must be acknowledged that this uneven distribution has consequences in terms of the social environment that the students encounter, and in the expertise that the professors and the staff develop concerning knowing and supporting different disabilities and needs.

Self-efficacy has been suggested as the most impacting factor that influences disclosure, with low self-efficacy acting as a barrier [15] [16]. Self-efficacy is a widely-accepted construct in personality psychology, and it has been shown to subtend a wealth of behaviors [17]. Self-efficacy has been defined as the beliefs that the motivation, cognitive resources, and courses of action needed to meet given situational demands can be mobilized. Depending on the domain in which self-efficacy is assessed, one can distinguish between a task-specific or state-like construct [18] [19] and a generalized self-efficacy. Generalized self-efficacy is defined as “one’s belief in one’s overall competence to effect requisite performances across a wide variety of achievement situations” [20].

Finally, the metacognitive skills are related to the constructs of “self determination” and “self-awareness”, which have been indicated as critical dimensions of the students who manage to conduct a successful academic life [21]-[24]. Good metacognitive skills may help people with disabilities both improving their academic performance, thus increasing their self-efficacy [25]; in addition, good metacognitive skills may help students with a disability to communicate their needs and expectations [26]. It is important to distinguish between metacognitive knowledge and skills. While the first refers to the declarative knowledge about how a process works, in general and for a particular person, the latter refers to how this knowledge may be used to monitor and supervise one's activity [27] [28].

## 2. Choice of Instruments

The present study protocol aims at investigating the effects of social support, self-efficacy and metacognitive skills on the attitudes towards disclosing a disability. Below, details about the instruments which will be used to measure each dimension are provided.

### 2.1. Demographic Assessment and Sample Description

Participants will be contacted through the local Services for Students with Disabilities and Specific Learning

Disabilities. In higher education, highly different conditions such as autism, psychiatric disorders, learning disabilities, sensory deficits, motor deficits are commonly encountered. Therefore, the type, severity and duration of disability will be assessed, and data will be analyzed separately for different types of disability (e.g., motor vs. sensory vs. specific learning disability). Additionally, disabilities differ in visibility; for instance, motor disabilities are typically visible as they require visible aids, while cognitive impairments, such as learning disorders, may not be evident at first sight. As previous studies indicated differences between conditions which differ in visibility, the degree to which people perceive that their disability is visible to the academic people will be assessed.

## 2.2. Generalized Self-Efficacy

General Self-Efficacy (GSE) reflects people's perception of their ability to perform well in a variety of situations. GSE can be measured through a 10-item psychometric scale that is widely available in several languages [29]. This scale is designed to assess optimistic self-beliefs to cope with a variety of difficult demands in life and provides an overall score reflecting GSE.

## 2.3. Social Support

The perception of social support reflects the scanning of the resources which are provided by significant individuals or groups, in terms of the functional support that each can provide [30]. In terms of measures, the Interpersonal Support Evaluation List (ISEL) assesses the perceived availability of functional social support resources [30] [31]. The ISEL is a 40-item scale, which contains four subscales that measure appraisal of support, availability of tangible support, self-esteem items, and sense of belonging [31] [32].

## 2.4. Metacognitive Skills

Metacognition can be differentiated into knowledge and skills [33], with the first referring to the knowledge and understanding of one's own cognitive processes [27], and the latter to the voluntary control that people have over their own cognitive processes [34]. Metacognition can be assessed prospectively, retrospectively or concurrently to performances. In prospective methods, such as self-report questionnaires and hypothetical interview, students have to indicate whether a statement (e.g., "I have to mentally repeat the information I just read") well describes their behavior [35] [36]. In contrast, retrospective techniques aim at *post-hoc* reconstructing the cognitive processes that have taken place [37]. Finally, concurrent assessment can be carried out by asking people to verbalize their thoughts while they are carrying out a task. Here, concurrent assessment will be carried out as it allows one to monitor on-line the specific processes that students use and the thoughts they report about their performances. A text of intermediate length will be selected from an introductory textbook, and participants will be asked to study it and prepare themselves as if they had to summarize it as homework. During this task, participants will have to verbalize aloud their cognitive processes. The input of the interviewer will be set at a minimum level, on the one hand to avoid that the participants do not report anything (thus not complying with task demands), and on the other hand not to promote a deeper metacognitive processing. Data will be scored according to the criteria described in Meijer *et al.* [38], separately for planning, monitoring, and evaluation of performance.

## 2.5. Attitudes towards Disclosing a Disability

Based on previous qualitative research on the experiences of university students with disabilities, a questionnaire was recently developed which examines attitudes in four separate dimensions, namely academic integrity, disability disclosure, disability acceptance, and the accommodation process [39]-[42]. Not surprisingly given that the scale includes questions about disability disclosure, the questionnaire predicts differences in requesting accommodations [42]. More interestingly, it has been shown that similar scores are obtained when the questionnaire is filled online and in paper-and-pencil form, with the remarkable exception of students with visible disabilities, with more positive attitudes towards requesting accommodations are observed when the questionnaire is filled out online compared to in person [40]. High scores on these scales might signal the need for an intervention, for example by putting the student in contact with specialized tutors who can provide more information and facilitate the communication with the disability services staff.

### 3. Planned Analysis and Expected Results

The data will be analyzed through a hierarchical multiple regression, with scores on the attitudes questionnaire as dependent variables. Separate regressions will be carried out for the global attitude score, and for each of the subscales (academic integrity, disability disclosure, disability acceptance, and the accommodation process). Predictors will be added in successive steps, proceeding in a feed forward direction. Demographic variables (gender, age, academic age, school, type of disability, visibility of the disability) will be entered first. Then, scores for each of the scale concerning social support, metacognitive skills and generalized self-efficacy will be entered as predictors.

It is expected that the present design will provide information concerning the factors that modulate attitudes towards disclosing a disability and requesting accommodations. More specifically, it is expected that the effects of self-efficacy will be highly significant, as this factor has been shown to modulate a wide range of behaviors [17]. Concerning social support and metacognitive skills, it is possible that the effects of these factors are exerted only indirectly through a mediation by self-efficacy. If this is the case, then any significant effect of social support and metacognitive skills should be canceled out once self-efficacy is controlled for in the regression analysis.

Finally, a smaller variability in attitudes towards disclosing a disability and requesting accommodations might be observed in people with a visible disability compared to people with a non visible disability, as exposing their disability may be a forced option for them [40]. However, it is expected that for both groups (visible and not visible disabilities) a significant effect of self-efficacy will be observed.

### 4. Conclusions

It is expected that these data will provide information about the conditions which facilitate communication and disclosure, in a group of declared students with disability. This information may be of interest for professionals working with students with disabilities in the higher education setting, to promote conditions that facilitate the communication between those students who have chosen to disclose that they have a disability, and the academic world.

Additionally, these data may suggest which factors deterred disclosure in those students who did not communicate their disability. Although no data are collected from this “invisible” group, it is likely that similar factors modulate the attitudes towards requesting help or accommodation for a disability. This information can be used in wide-range programs (e.g., during introductory or orientation meetings) to promote these facilitating conditions for all students who are experiencing a difficulty or a disability.

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