

# **Promoting Organizational Citizenship Behavior**

## **Effects of online self-disclosure in the context of employee selection and virtual leadership**

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## PREFACE

*“Managers should try to focus on selecting employees with a propensity to engage in OCBs, and to create a work environment that encourages employees to exhibit these behaviors.”*

(Podsakoff, Whiting, Podsakoff, & Blume, 2009, p. 134)

Organizational citizenship behavior (OCB) describes employee behavior that supports the social and psychological environment in organizations such as helping behavior towards coworkers or loyalty behavior towards the organization (Organ, 1997). In their meta-analysis Podsakoff, Whiting, Podsakoff, and Blume (2009) showed that OCBs have significant relationships with companies' performance and success (e.g., productivity, customer satisfaction) which is why practitioners are highly interested in how to promote OCBs in the workplace. Researchers have been identifying several OCB-antecedents (e.g., employee personality, trust in one's leader) and Podsakoff et al. (2009) generally note that managers (1) should select employees with a propensity to engage in OCBs and (2) should create a work environment that encourages employees to exhibit OCBs. This dissertation offers a social media technology based approach of promoting OCBs as suggested by Podsakoff et al. (2009) and investigates the effects of social media mediated online self-disclosure (1) on screening decisions in the context of employee selection (*Study Series 1*) and (2) on creating trustful leader-follower-relationships in virtual work environments (*Study Series 2*).

Online self-disclosure describes the phenomenon of revealing personal information about oneself to others online and has been massively promoted by social media technologies such as social networking sites (e.g., Facebook). The impact a person's self-disclosure has on the impression formation of the recipient depends on a variety of variables such as the valence and the intimacy level of the disclosed information (Collins & Miller, 1994). *Study Series 1* examines the effects of the valence (positive vs. negative) of OCB-related information in the context of employee selection; *Study Series 2* researches the effects of the intimacy level (high vs. low) of leaders' self-disclosure in the context of virtual leadership.

More than 40% of personnel managers use social networking sites to screen job applicants to get personal information beyond what is in the cover letter or the résumé (e.g., Clark & Roberts, 2010). Such online reputation checks can provide valuable information about applicants' propensities to engage in OCBs which might be a promising

basis for promoting OCBs by identifying and selecting applicants with such a propensity and by sifting out applicants with an adverse propensity. However, it has not been investigated yet whether and how OCB-related online information affects recruiters and their selection decisions. Therefore, *Study Series 1* examines the impact of applicants' OCB-related online self-disclosure on recruiters' impression formations and decision making in the screening phase of employee selection.

Virtual work environments have brought great organizational advantages (e.g., low office and traveling costs, high flexibility), but low performance of OCBs (e.g., loyalty) have been reported for virtually led employees (Comteam, 2012). In a virtual work environment one major challenge seems to be building trustful leader-follower-relationships (Kaboli, Tabari, & Kaboli, 2006) which strongly affect employees' performances of OCBs (Dirks & Ferrin, 2002). Therefore, since research has viewed self-disclosure as central to the development of trusting relationships (Altman & Taylor, 1973), *Study Series 2* examines the impact of leaders' purposeful online self-disclosure on followers' impression formations and the development of trustful leader-follower-relationships in virtual work environments.

The formal structure of this dissertation will be as follows: First of all, a general theoretical background introduces the psychological concepts of organizational citizenship behavior and online self-disclosure. Afterwards, the research purposes regarding the OCB-promoting effects of online self-disclosure in the context of employee selection (*Study Series 1*) and in the context of virtual leadership (*Study Series 2*) are derived. Subsequently, experiments of each study series are presented in detail (theoretical background, method, results, and discussion) and a concluding discussion for each study series summarizes their main findings, limitations, and implications.

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## ABSTRACT

Organizational citizenship behavior (OCB) describes employee behavior which supports the social environment in organizations (e.g., conscientiousness, helping, and loyalty behavior) and which has a positive impact on organizational performance and success. Even though researchers have been identifying several important OCB-antecedents, there are almost no contemporary practical approaches utilizing these research findings for the promotion of OCBs in the workplace. In order to partly fill this gap in practical research, the present dissertation applied a social media technology approach based on the growing phenomenon of online self-disclosure on social networking sites (SNS). Two study series investigated the assumed OCB-promoting effects of utilized online self-disclosure in the organizational contexts of employee selection (*Study Series 1*) and virtual leadership (*Study Series 2*).

Employee selection research claims the importance of both examining the predictive validity of selection criteria and examining their effects on recruiters' decision-making processes. While previous research has provided preliminary evidence for the validity of OCB-related information on SNS-profiles, its effect on recruiters' selection decisions has not been systematically investigated yet. *Study Series 1* addressed this research gap for the screening phase of employee selection and examined the influence of applicants' OCB-related online self-disclosure on recruiters' impression formations and screening decisions in the course of five experiments. Taken together, the experimental findings suggest that (1) recruiters are naturally sensitive to information about applicants' OCB-propensities (*sensitivity*), (2) conscientiousness and helping behaviors, but not loyalty behaviors, are taken into account when making screening decisions (*selectivity*), and (3) applicants with adverse OCB-propensities are more likely to be rejected whereas applicants with high OCB-propensities are not more likely to be chosen (*negativity*).

Trust towards their leaders is an important antecedent of employees' OCB-performances, but the development of trustful leader-follower-relationships seems to be particularly difficult in virtual work environments. Since research has viewed self-disclosure as central to the development of trusting relationships, *Study Series 2* investigated the influence of virtual leaders' purposeful online self-disclosure on followers' initial trustworthiness impressions in the course of three experiments. Results indicate that (1) leaders' competence-related self-disclosure has positive effects on followers' cognition-based trustworthiness impressions (*ability*) and (2) leaders' privacy-related self-disclosure has positive effects on followers' affect-based trustworthiness impressions (*benevolence*). Theoretical and practical implications for both study series are discussed.

## BACKGROUND

The following chapter provides a detailed theoretical background of the two psychological concepts relevant for this dissertation: *Organizational citizenship behavior (OCB)* and *online self-disclosure*. The chapter concludes with a theoretical and practical derivation of the research purpose for each study series.

### 1. Organizational citizenship behavior

The following paragraphs introduce the construct of organizational citizenship behavior. The first part offers a definition of OCB and examines its multidimensionality. After introducing the aggregated OCB-framework underlying this dissertation, the beneficial consequences of OCBs are discussed. The last part presents different antecedents of OCBs and concludes with a derivation of those relevant for this dissertation project.

#### 1.1 Definition

Smith, Organ, and Near (1983) first introduced the term of organizational citizenship behavior in order to describe a category of organizationally beneficial employee behavior which is not formally rewarded and goes beyond formal job requirements. This included “day-to-day spontaneous prosocial gestures of individual accommodation to the work needs of others” (p. 653) (e.g., assisting someone with a heavy workload) and behavior representing “something akin to compliance with internalized norms defining what a ‘good employee ought to do’” (p. 657) (e.g., not wasting time). Organ (1988) defined OCB as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization” (p. 4). Since the introduction of this construct in the early part of the 1980s many concepts have been developed that overlap with OCB a great deal such as *prosocial organizational behavior* (Brief & Motowidlo, 1986; George, 1990, 1991; George & Bettenhausen, 1990), *organizational spontaneity* (George & Brief, 1992; George & Jones, 1997), *extra-role behavior* (Van Dyne, Cummings, & Parks, 1995), *voice behavior* (LePine & Van Dyne, 1998; Van Dyne, Ang, & Botero, 2003; Van Dyne & LePine, 1998), and *contextual performance* (Borman & Motowidlo, 1993, 1997). The latter concept has been of special interest to human resource management because selection scholars and practitioners have traditionally been focusing on *task performance* (i.e., behaviors or duties that are specified in a job description and that contribute to the organization’s technical core) while neglecting *contextual performance* (i.e., behaviors that support the

social and psychological context in which the organization's technical core is embedded) and consequently disregarding a significant portion of the job performance domain (Motowidlo, 2000). Therefore, in his reconceptualization Organ (1997) defined OCB much along the lines of Borman's and Motowidlo's (1993) concept of contextual performance as "performance that supports the social and psychological environment in which task performance takes place" (p. 95). Podsakoff et al. (2009) see the advantages of this revised definition to the effect that it

(a) maintains the distinction that has empirically been shown to exist between task performance and OCBs [...], (b) is more consistent with Borman and Motowidlo's (1993) definition of contextual performance, and (c) avoids some of the difficulty with viewing OCBs as discretionary behavior for which an individual might not receive formal rewards. (p. 122)

Moreover, Podsakoff, Whiting, Podsakoff, and Mishra (2011) state that "this definition makes it clear that OCBs can and should be assessed for the purpose of employee selection" (p. 311). Therefore, this dissertation refers to the definition of OCB by Organ (1997).

## **1.2 Dimensionality**

The first conceptualization of OCB (Smith et al., 1983) suggested two separate dimensions namely *altruism*, "behavior that is directly and intentionally aimed at helping a specific person" (p. 654), and *generalized compliance*, "a more impersonal sort of conscientiousness, more of a 'good soldier' or 'good citizen' syndrome of doing things that are 'right and proper' but for the sake of the system rather than for specific persons" (p. 662). Later, Organ (1988) proposed an expanded OCB-model with five dimensions consisting of *altruism*, *courtesy*, *conscientiousness*, *civic virtue*, and *sportsmanship*. The definition of *altruism* remained much as it was and describes behaviors that have the effect of helping a specific other person with an organizationally relevant task or problem. *Courtesy* comprises employee behaviors aimed at preventing work-related problems that would otherwise occur for coworkers. *Conscientiousness* describes behaviors that go well beyond the minimum role requirements indicating that employees accept and adhere to the rules and procedures of the organization. *Civic virtue* relates to behavior indicating that employees responsibly participate in, are involved in, or are concerned about the life of their organization. *Sportsmanship* is defined as an employee's willingness to tolerate less than ideal circumstances without complaining and making problems seem bigger than they actually are.

Other researchers have identified several different dimensions and behavioral elements of the citizenship behavior domain. A conceptualization of OCB by Williams and Anderson (1991) on the basis of the target or direction of the behavior narrows them all to two dimensions: OCB-I (behaviors directed toward *individuals*; e.g., Organ's (1988) altruism and courtesy) and OCB-O (behaviors directed toward the *organization*; e.g., Organ's, 1988, conscientiousness, civic virtue, and sportsmanship). Some scholars even suggest a unidimensional concept of OCB since the relationships among the dimensions are generally high and there seem to be no meaningful differences in relationships with predictors across dimensions (e.g., Hoffmann, Blair, Meriac, & Woehr, 2007; LePine, Erez, & Johnson, 2002).

Even though scholars hold different views with respect to the dimensionality of OCB, Organ's (1988) five dimension taxonomy has been the subject of the greatest amount of empirical research (LePine et al., 2002). Therefore, this dissertation refers to Organ's (1988) five-dimensional framework; however, some dimensions will be aggregated, on the one hand to not totally ignore the findings of Hoffman et al. (2007) and LePine et al. (2002). On the other hand, Podsakoff, Ahearne, and MacKenzie (1997) argue that managers often have difficulty with differentiating between altruism and courtesy and tend to view these two dimensions as part of a single helping behavior dimension. Therefore, this dissertation operationalizes altruism and courtesy by one overall helping dimension. Moreover, scholars suggest that Organ's (1988) sportsmanship and civic virtue overlap with the construct of organizational loyalty (Van Dyne, Graham, & Dienesch, 1994), which is particularly important in today's work environment, where commitment and loyalty seem to be in decline (Johnson, 2005). Therefore, employees' sportsmanship and civic virtue will be represented by loyalty behavior towards the organization. Organ's (1988) conscientiousness dimension remains as it is describing conscientious employee behaviors. Altogether, this thesis focuses on the three citizenship behaviors *helping*, *loyalty*, and *conscientiousness*. The following sections briefly describe and define these dimensions in the context of this dissertation.

### 1.2.1 Helping

Helping behavior is the most popular form of OCB and has been included in almost every conceptualization of this construct (Organ, Podsakoff, & MacKenzie, 2006). In the context of OCB helping behavior is defined as "voluntarily helping others with or preventing the occurrence of work-related problems" (Organ et al., 2006, p. 308). According to the OCB-scale of Podsakoff, MacKenzie, Moorman, and Fetter (1990) helping behaviors include for example, *helping orient new people even though it is not required*, *helping others who have been absent*, and *taking steps to try to prevent problems with other workers*. This

overall helping dimension is comprised of Organ's (1988) OCB-dimensions of altruism and courtesy (second-order latent construct; Podsakoff et al., 1997) which is why it will represent these two dimensions within the framework of this dissertation.

### 1.2.2 Loyalty

Organizational loyalty behavior can be found in several OCB-frameworks such as Borman and Motowidlo's (1993) contextual performance (*endorsing, supporting, and defending organizational objectives*) or Van Dyne et al.'s (1994) reconceptualization of OCB. The latter's loyalty dimension overlaps with Organ's (1988) sportsmanship and civic virtue, which is why it will represent these two OCB-dimensions within the framework of this dissertation. The underlying definition of Van Dyne et al.'s (1994) concept of organizational loyalty refers to Graham (1991):

Identification with and allegiance to organizational leaders and the organization as a whole, transcending the parochial interests of individuals, work groups, and departments. Representative behaviors include defending the organization against threats; contributing to its good reputation; and cooperating with others to serve the interests of the whole. (p. 122)

### 1.2.3 Conscientiousness

Conscientiousness (often called *compliance*) refers to employee behaviors indicating that they accept and adhere to the rules, regulations, and procedures of the organization. According to Podsakoff et al.'s (1990) OCB-scale, conscientiousness includes behaviors such as *obeying company rules and regulations even when no one is watching or not taking extra breaks*. The more general view *being one of the most conscientious employees* represents Organ's (1988) conscientiousness dimension within the framework of this dissertation.

## 1.3 Consequences

In their meta-analysis Podsakoff et al. (2009) examined the relationship between OCBs and a variety of individual- and organizational-level outcomes. They found that OCBs relate to important individual-level outcomes including a variety of withdrawal-related criteria (e.g., employee absenteeism, turnover), managerial ratings of employee performance, and reward allocation decisions. Moreover, OCBs relate to important organizational-level outcomes such as productivity, efficiency, reduced costs, and customer satisfaction. The idea of a causal relationship between OCBs and organizational

success has been supported by longitudinal studies, even though additional research is needed to further support these findings.

Nevertheless, there are several reasons why OCBs may increase organizational effectiveness (see Podsakoff, Mackenzie, Paine, & Bachrach, 2000); for example, *helping behavior* performed by experienced employees may enhance coworker productivity by showing them the ropes and teaching them best practices. Furthermore, employees who exhibit *conscientiousness* require less managerial supervision and consequently free up more of the manager's time. Also, employees who demonstrate *loyalty* to the organization enhance employee retention and the organization's ability to attract good talent. In their critical review Podsakoff et al. (2000) give an overview of how OCBs might influence organizational effectiveness by:

(a) enhancing coworker and managerial productivity; (b) freeing up resources so they can be used for more productive purposes; (c) reducing the need to devote scarce resources to purely maintenance functions; (d) helping to coordinate activities both within and across work groups; (e) strengthening the organization's ability to attract and retain the best employees; (f) increasing the stability of the organization's performance; and (g) enabling the organization to adapt more effectively to environmental changes. (pp. 543-546)

Understandably, practitioners have been highly interested in how to promote organizational citizenship behaviors in order to increase companies' success. Therefore, the following section introduces the most important antecedents of OCB.

#### **1.4 Antecedents**

Researchers have been trying to identify potential predictors of OCB and thereby have been focusing on four major categories of antecedents: *individual characteristics* (e.g., employee personality), *task characteristics* (e.g., feedback), *organizational characteristics* (e.g., spatial distance from leader), and *leadership behaviors* (e.g., leadership style). LePine et al. (2002) argue that the relationship between the antecedents and OCB does not depend on how OCB is behaviorally defined, and that there does not seem to be any evidence of differential relationships with predictors across dimensions of OCB. Therefore, the following section reports the most predictive relation of each antecedent as being representative for the relationship with the overall OCB-construct. All correlations reported here are significant (for a detailed overview, see Podsakoff et al., 2000).



#### 1.4.1 Individual characteristics

This category comprises (1) employee attitudes, (2) dispositional variables, (3) role perception, (4) demographic variables, and (5) abilities and individual differences (Podsakoff et al., 2000).

*Employee attitudes* have been the most frequently investigated antecedents of OCB and appear to be important determinants. Podsakoff, MacKenzie, and Bommer (1996) found that job satisfaction ( $r = .31$ ) and organizational commitment ( $r = .22$ ) relate to OCB. Organ and Ryan (1995) reported perceived fairness ( $r = .24$ ) to be a significant predictor and Podsakoff et al. (2000) found that trust in one's leader ( $r = .26$ ) causally relates to OCB as well.

Scholars have also been trying to examine the *dispositional variables* of OCB and mostly used the Big Five framework (Costa & McCrae, 1985) to explain the personological basis of OCB. According to Organ and Ryan (1995) conscientiousness ( $r = .22$ ) and agreeableness ( $r = .13$ ) have the strongest effects on OCB. Other frameworks such as the PA/NA typology of affective dispositions have been used to explain the dispositional sources of OCB. Results show that positive affectivity (PA) relates to OCB ( $r = .15$ ), whereas negative affectivity (NA) shows no significant relation to OCB. More recently, Allen, Fecteau, and Fecteau (2004) provided first evidence that one's propensity to exhibit OCBs can be measured by behavioral intentions and past organizational citizenship behavior and that it is a valid predictor of OCBs in the workplace ( $r = .31$ ).

*Employee role perceptions* have been found to have significant relationships with OCB. Both role ambiguity ( $r = -.12$ ) and role conflict ( $r = -.16$ ) are negatively related to OCB.

However, since both role ambiguity and role conflict are known to be related to employee satisfaction, and satisfaction is related to organizational citizenship behaviors, it is likely that at least a portion of the relationship between ambiguity and conflict and OCBs is mediated by satisfaction. (Podsakoff et al., 2000, p. 530)

*Demographic variables* such as organizational tenure and employee gender have not been found to be related to OCBs. The remaining employee characteristics include ability and knowledge, professional orientation, need for independence, and indifference to rewards. Only the latter was found to have a consistent relationship with OCB ( $r = -.25$ ).

#### 1.4.2 Task characteristics

This category of OCB-determinants comprises (1) task feedback, (2) task routinization, and (3) intrinsic task satisfaction. Task characteristics are important determinants of OCB

which show consistent relationships with OCB. According to Podsakoff et al. (1996) task feedback ( $r = .21$ ) and intrinsically satisfying tasks ( $r = .27$ ) are positively related to organizational citizenship behavior, while task routinization ( $r = -.30$ ) negatively relates to OCB.

#### 1.4.3 Organizational characteristics

This predictor category involves (1) organizational formalization, (2) organizational inflexibility, (3) advisory/staff support, (4) spatial distance from leader, (5) group cohesiveness, (6) perceived organizational support, and (7) rewards outside the leader's control. According to Podsakoff et al. (1996) there are no consistent relations of (1) - (4) with OCB, but group cohesiveness ( $r = .20$ ) and organizational support ( $r = .31$ ) were found to positively relate to OCB. Furthermore, Podsakoff et al. (2000) reported a negative relationship of rewards outside the leader's control ( $r = -.17$ ) with OCB.

#### 1.4.4 Leadership behaviors

According to Podsakoff et al.'s (2000) meta-analytical results leaders play a key role in influencing citizenship behaviors. Transformational leadership (Bass, 1985) and its behavioral pattern has consistent positive effects on OCB ( $r = .26$ ), which "should not be surprising, since the heart of transformational leadership is the ability to get employees to perform above and beyond expectations [...], and this extra effort may show up in the form of citizenship behavior" (Podsakoff et al., 2000, p. 532). The transactional leadership behavior *contingent reward* positively relates to OCB ( $r = .26$ ), while *non-contingent punishment behavior* has a negative relationship with OCB ( $r = -.26$ ). General supportive leader behavior ( $r = .28$ ) was found to be positively related to OCB.

#### 1.4.5 Antecedents explored in this dissertation

In order to promote the performance of OCB in the workplace, Podsakoff et al. (2009) suggest that organizations should select job candidates with a propensity to exhibit OCBs. Therefore, dispositional variables will be the relevant category of antecedents for *Study Series 1*. More precisely, the focus lies on personality traits and their behavioral patterns as well as OCB-related behavioral intentions and past organizational citizenship behavior (i.e., *OCB-propensity*; Allen et al., 2004).

Podsakoff et al. (2009) also suggest that managers should create a work environment that encourages employees to exhibit OCBs. Since leaders play a key role in creating such work environments (Podsakoff et al., 2000), this dissertation focuses on employees' attitudes towards their leader. More precisely, followers' trust in their leader will be the relevant antecedent for *Study Series 2*.

## **2. Online self-disclosure**

The following sections introduce the phenomenon of online self-disclosure and online impression formation. The first part defines and briefly describes online self-disclosure and its evaluation dimensions. The second part introduces the crucial role of social networking sites (SNSs) as mediators of online self-disclosure and discusses typical SNS-content and its accuracy. The third part deals with online impression formation and examines the reliability and validity of SNS-based interpersonal impressions. Further, the disclosure-liking hypothesis and its unique effect on impression formation will be discussed. All empirical findings regarding SNS are derived from research on the most popular SNS, Facebook, which totals more than 1.3 billion active users worldwide (Facebook, 2014), and has been subject of the greatest amount of SNS-related research.

### **2.1 Definition**

Self-disclosure is defined as revealing personal information about oneself to others (Cozby, 1973; Wheeless, 1976) which includes both descriptive information (e.g., one's duration of work experience) and evaluative information (e.g., how one feels about current events). Degree of self-disclosure is typically evaluated along the dimensions of *amount* and *intimacy*, but the nature of a person's self-disclosure is determined by additional dimensions such as *valence* (positive or negative) of the disclosed information, *selectiveness* (disclosure towards few or many), *appropriateness* of the self-disclosure, and the *accuracy* of the disclosed information (Collins & Miller, 1994). Depending on its nature, a person's self-disclosure can have varying effects on recipients' interpersonal impression formations, which will be examined in the following sections.

Online self-disclosure refers to the phenomenon of revealing personal information about oneself to others online, which has been massively promoted by social media technologies such as social networking sites (e.g., Facebook) and content communities (e.g., YouTube): "An evolving culture of transparency and disclosure has been noted and [...] the use of online platforms for intimate self-expression has become a key component of the overall social environment for many" (Stefanone, Lackaff, & Rosen, 2011, p. 41). Due to the recent proliferation in use of social networking sites (Nadkarni & Hofmann, 2012), this dissertation refers to online self-disclosure mediated by social networking sites.

### **2.2 Mediation, content, accuracy**

This section roughly describes the functionality of social networking sites and offers a social need based explanation of its unique role in mediating and promoting online self-

disclosure. Following, typical content of online self-disclosure on SNSs is presented and the accuracy of such information is discussed.

### 2.2.1 Mediation

Social networking sites (e.g., Facebook, Myspace, Google+) are:

[W]eb-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. (Boyd & Ellison, 2008, p. 211)

The central ideas of SNSs are connecting with others and sharing personal information with them, which is why SNSs have several technical features that encourage content contribution and enable users to easily share a range of personal information (Burke, Marlow, & Lento, 2010). For instance, the *wall* functions as a bulletin board and allows users to post and comment personal messages and pictures. The features *photos* and *videos* allow users to upload photos and videos in media albums which other users can comment on. Furthermore, the feature *status* allows users to post real-time updates of their current whereabouts, actions, thoughts, and relationships (Nadkarni & Hofmann, 2012). These different features and others (e.g., *events*, *messages*, *likes*) are implemented in SNSs in order to facilitate social data sharing. The average SNS-user contributes 90 pieces of content per month by posting comments, photos, and status updates (Wilson, Gosling, & Graham, 2012) often provided to be commented upon and discussed by friends and strangers.

But why do people use SNSs and disclose personal information on such sites? Nadkarni and Hofmann (2012) propose a dual-factor model which states that SNS-use and online self-disclosure are primarily motivated by two basic social needs: *the need to belong* and *the need for self-presentation*. “The *need to belong* refers to the intrinsic drive to affiliate with others and gain social acceptance, and the *need for self-presentation* to the continuous process of impression management” (p. 245). According to the authors, these two motivational factors can co-exist or can each be the single cause for SNS-use and online self-disclosure (for a detailed overview, see Nadkarni & Hofmann, 2012). This may explain the general finding that those who actively use SNSs are willing to provide large amounts of personal data (Gross & Acquisti, 2005). Even the lately increased awareness of privacy concerns has been shown to not negatively affect online self-disclosure and to not increase the use of privacy settings on SNSs (for an overview, see Wilson et al., 2012). Christofides, Muise, and Desmarais (2012) even disproved the

popular perception that adolescents disclose more online and care less about their privacy than adults. The authors found (after controlling for variables such as 'time spent on SNSs') that adolescents and adults are very similar in their disclosure behavior and privacy control on SNSs. Christofides et al. (2012) conclude that SNSs create an environment that encourages people to share personal information proactively, and Nadkarni and Hofmann (2012) speak of SNSs as 'avenues for self-disclosure'. Accordingly, social networking sites play a crucial role in mediating and promoting the phenomenon of online self-disclosure.

### 2.2.2 Content

Social networking sites have attracted millions of users of any age and class (for a demographic overview, see Apuzzo, 2014), many of whom have integrated SNSs into their everyday life (Back et al., 2010; Boyd & Ellison, 2007). Hence, online self-disclosure typically comprises information about one's daily life such as photos and reports about recent private or occupational events, one's opinions and likings, and so forth. According to Kluemper, Rosen, and Mossholder (2012), the content of personal information disclosed on SNS-profiles depends on one's personality. They argue (referring to Gosling, Ko, Mannarelli, & Morris, 2002) that individuals select and modify their social environment to be congruent with and to reinforce their dispositions through two mechanisms: *identity claims* and *behavioral residue*. "*Identity claims* consist of observable behaviors in which individuals engage to reinforce their personal preferences or to display their identities to others" (p. 1146). In the context of SNSs, they see users indicating favorite books, music, and movies as an example of reinforcing personal preferences, which are driven by particular personality traits. "*Behavioral residue* refers to the physical traces of activities conducted in the environment" (p. 1146). Accordingly, an "individual who is high on a particular personality trait will engage in more activities that are prototypical of that trait than will an individual low on the same trait" (p. 1146). In the context of SNSs, Kluemper et al. (2012) see these traces in form of comments on the wall, conversations with other users, or in form of posting certain photos, "each of which may provide telling information about underlying personality traits" (p. 1146). In fact, research has shown the relationship between personality traits and content disclosed on SNS-profiles (for an overview, see Nadkarni & Hofmann, 2012) which Kluemper et al. (2012) illustrate in terms of the Big Five personality traits as follows:

Individuals low in conscientiousness, for example, might be distinguished by a failure to demonstrate self-discipline and cautiousness in online conversations or postings. Individuals low in emotional stability might post content demonstrating a tendency toward large swings of personal or emotional

experiences. Those high in agreeableness are trusting and get along well with others, which may be represented in the extensiveness of personal information posted. Openness to experience is related to intellectual curiosity and creativity, which could be revealed by the variety of books, favorite quotations, or other posts showing the user engaged in new activities and creative endeavors. Extroverts more frequently interact with others, which could be represented by the number of SN[S] friends a user has. (pp. 1148-1149)

Accordingly SNS-profiles can provide information about one's OCB-propensity, for example, through comments about one's employer and supervisor or through comments from colleagues about one's work-related behavior. For instance, regarding the OCB-dimension *loyalty*, one might write loyal and employer defending comments on his wall, or one "is obviously being disloyal to his or her current employer by posting what appear to be trade secrets, unreasonably criticizing their supervisor, or engaging in practices that appear to violate a non-compete agreement" (Slovensky & Ross, 2012, p. 58). Furthermore, regarding the OCB-dimension *helping*, a colleague might write a thank you comment on one's wall for supporting him with a work-related problem, or a colleague might complain about a refused helping request. In fact, Bohnert and Ross (2010) report that 20% of their study participants discuss work-related matters on their SNS-profiles, and Peluchette and Karl (2010) found that 25% of wall comments involve (negative) comments about employers, and 40% involve (negative) comments about other people. This suggests that SNS-profiles do not only provide information about one's Big Five personality, but also about one's OCB-related personality, behaviors, and intentions.

### 2.2.3 Accuracy

How about the accuracy of content disclosed on SNS-profiles: Do users' profiles display their real and accurate selves or rather idealized selves? Back et al. (2010) examined this question and tested the widely held assumption that SNS-profiles are used to create and communicate idealized selves (*idealized virtual-identity hypothesis*) against the contrasting view that SNSs form an extended social context in which one's actual personality is expressed (*extended real-life hypothesis*). In a set of analyses, the researchers showed that the ratings of profile observers strongly correlated with profile owners' self-ratings and ratings by their offline friends (*accuracy criteria*), but correlated weakly with the ideal-self ratings of the profile owners. Back et al. (2010) conclude that "results suggest that people are not using their [SNS-] profiles to promote an idealized virtual identity. Instead, [SNSs] might be an efficient medium for expressing and communicating real personality" (p. 3). The results can be explained by two facts: (1) SNS-profiles provide features (e.g., wall posts, comments, photo tags) for others to

contribute content about the profile owner and his or her reputation that is difficult to control; (2) offline relationships tend to lead to SNS relationships, rather than the other way round. Hence, if people presented inaccurate and self-enhancing information on their profiles, their friends would know and give subtle feedback (Back et al., 2010; Wilson et al., 2012). “As a consequence of this offline-to-online sequence, statements about interests and values are likely to be authentic” (Wilson et al., 2012, p. 210).

Summarizing these three subsections, online self-disclosure can be described along the before mentioned evaluation dimensions as follows: Online self-disclosure is a socially accepted and desired (high *appropriateness*) act of revealing a large number (high *amount*) of personal and private information (high *intimacy*) with either positive or negative content (any *valence*), which is characterized by content correctness (high *accuracy*) and by availableness for many others (low *selectiveness*). The resulting consequences on interpersonal impression formation are discussed in the following section.

### **2.3 Online impression formation**

This section deals with online impression formation, also called *e-perception*, which is interpersonal impression formation based on online information (Vazire & Gosling, 2004). In the first part the reliability and validity of SNS-based personality impressions are examined. The second part introduces the disclosure-liking hypothesis and its unique effect on interpersonal impression formation.

#### **2.3.1 Reliability and validity**

A lot of research has been done on SNS-based impression formation, mostly comprising ratings of the Big Five personality traits (for a review, see Nadkarni & Hofmann, 2012, Table 1, p. 244). As presented above, SNSs provide a large amount of accurate personal information which is why Kluemper et al. (2012) suggest “that personality-related information available from social networking profiles may be of sufficient quantity and quality as to permit others viewing this information to draw reasoned inferences concerning target individuals’ Big Five personality traits” (p. 1146). This assumption is based on Funder’s (1995) realistic accuracy model (RAM), a theory of rating accuracy which postulates that observers intuitively assess others’ personality with a functional level of diagnostic accuracy, especially “when target information is conveyed in a rich, yet representative enough manner to project consistent behavioral tendencies and patterns [...] [and] an array of observable cues [is] available to the observer” (Kluemper et al., 2012, p. 1146). In fact, researchers report high agreement of observers’ SNS-based personality ratings (*interrater reliability*) suggesting that personality traits are reliably

inferred from SNS-profiles (e.g., Evans, Gosling, & Carroll, 2008; Gosling, Gaddis, & Vazire, 2007; Kluemper et al., 2012). Moreover, scholars (e.g., Evans et al., 2008; Gosling et al., 2007; Kluemper et al., 2012) found significant correlations between self- and observer ratings for all Big Five personality traits (*convergent validity*) and Kluemper et al. (2012) provide first evidence for significant correlations of SNS-based personality ratings and profile owners' OCB-performance in the workplace (*criterion-related validity*). Additionally, Ones, Dilchert, Viswesvaran, and Judge (2007) note that observer ratings of personality exhibit criterion-related and incremental validity beyond self-ratings because they are less vulnerable to faking and socially desirable responding especially in the context of employee selection. Kluemper et al. (2012) confirmed these findings for SNS-based personality ratings showing that observer ratings generally correlated larger with job-relevant criteria than self-ratings and "accounted for significant variance in the criterion measures beyond self-ratings of personality and cognitive ability" (p. 1143).

These empirical findings are highly relevant for the purpose of promoting OCBs in the context of employee selection (*Study Series 1*). Given the vast number of information available on SNS-profiles, online reputation checks can provide valid information about applicants' OCB-propensity (e.g., helping behavior, loyalty behavior). Therefore, the effects of such valuable information on managers' impression formations and selection decisions need to be examined.

### 2.3.2 Disclosure-liking hypothesis

Research has found a unique effect of one's self-disclosure on others' impression formations: People tend to like and trust those who disclose personal information to them (for a meta-analytic review, see Collins & Miller, 1994). Researches argue that the act of revealing personal information about oneself to others leads to increased liking and trusting because (1) according to the *theory of social penetration* (Altman & Taylor, 1973), "disclosure is viewed as a rewarding or positive outcome for the recipient because it communicates the discloser's liking and desire to initiate a more intimate relationship" (Collins & Miller, 1994, p. 458); and (2) according to *information-processing model of attraction* (Ajzen, 1977), liking is determined by having positive beliefs about an individual. "According to this approach, the link between self-disclosure and liking is mediated by the formation of positive beliefs about the discloser. For example, people who disclose more intimately may be viewed by others as more trusting, friendly, and warm" (Collins & Miller, 1994, p. 459). Therefore, self-disclosure has been viewed as central to the development of trusting relationships (Altman & Taylor, 1973). In their meta-analytical review, Collins and Miller (1994) report that the relation between disclosure and liking is moderated by a number of situational and contextual variables suggesting that "under some conditions,



self-disclosure may not be viewed as personally rewarding by a recipient and may not lead to favorable impressions of a discloser” (p. 459). According to the evaluation dimensions presented above, the following moderating effects are reported: both high *intimacy* and high *amount* of disclosed information lead to stronger liking effects than low intimacy level and low amount of information, whereat the intimacy level of disclosure obtains stronger liking effects than the absolute amount of disclosed information. Furthermore, high *selectiveness* leads to a stronger disclosure-liking effect because “when people perceive that they have been personally selected for intimate disclosure, they feel trusted and liked and are more apt to evaluate the discloser favorably” (p. 459). Regarding the *valence* of the disclosed information, Dalto, Ajzen, and Kaplan (1979) found that, overall, people who disclose negative information are liked less than those who disclose positive information. Finally, no consistent patterns can be reported for the *appropriateness* of self-disclosure because this dimension depends on a bunch of variables such as the context of self-disclosure (e.g., private, public, or occupational setting), social norms, or the recipient’s general attitude towards self-disclosure. Therefore, the very same self-disclosure behavior can be evaluated as appropriate or inappropriate and can lead to favorable or unfavorable impressions of the discloser. But taken together, the meta-analytical results of Collins and Miller (1994) provide evidence for an overall causal positive relation between disclosure and liking.

These empirical findings are highly relevant for the purpose of promoting OCBs in the context of virtual leadership (*Study Series 2*). More precisely, research has shown the relation between trustful leader-follower-relationships and employees’ OCB-performances (Dirks & Ferrin, 2002; Zhu, Newman, Miao, & Hooke, 2013) which both are reported lacking in virtual work environments (Comteam, 2012; Kaboli et al., 2006). Therefore, since self-disclosure has been viewed as central to the development of trusting relationships, it needs to be examined whether virtual leaders’ purposeful online self-disclosure can help to create trustful leader-follower-relationships in order to promote OCBs in virtual work environments.

### 3. Research purpose

Organizational citizenship behavior causally relates to organizational performance and success, which is why practitioners and scholars have been highly interested in how to promote OCB. This dissertation project investigates whether the recent phenomenon of online self-disclosure and its effects on others' impression formations can be used to promote OCB in the organizational contexts suggested by Podsakoff et al. (2009): employee selection and work environment creation. More precisely, online self-disclosure can provide valuable information about applicants' propensities to engage in OCBs and therefore facilitate the OCB-promoting selection of employees with such a propensity (*Study Series 1*). Moreover, self-disclosure can lead to increased liking and trusting and accordingly facilitate the development of OCB-promoting trustful leader-follower-relationships in virtual work environments (*Study Series 2*). The following two sections specify the research purpose of each study series derived from theoretical and practical considerations.

#### 3.1 Study Series 1: Employee selection

Employee selection "is the process of choosing from a group of applicants the individual best suited for a particular position and the organization. Properly matching people with jobs and the organization is the goal of the selection process" (Mondy & Mondy, 2014, p. 160). The selection process varies from organization to organization and according to type of open position, however, the selection process usually starts with a *screening phase* followed by *employment interviews* and *selection tests*. This dissertation focuses on the screening phase of employee selection because, as Kanning and Woike (2015) state, the screening phase has a key function in the whole employee selection process and misjudgments at this early stage have far-reaching consequences (i.e., investing time and money in unsuitable applicants or losing suitable candidates). The primary goal of the screening phase is to eliminate those applicants who do not meet the minimum requirements concerning *occupational qualification* (e.g., education, skills) and *personal characteristics* (e.g., values, personality). While applicants' qualifications can be evaluated relatively easy by checking the résumés, a valid evaluation of applicants' personal characteristics based on cover letters and résumés is hardly possible. Therefore, more than 40% of human resources professionals (HR-professionals) are reported to use social networking sites to screen job applicants in order to get personal information beyond what is in the cover letters or the résumés (e.g., Caers & Castelyns, 2011; Careerbuilder, 2009; Clark & Roberts, 2010; Vault, 2009). This kind of online screening enjoys great popularity because, with a minimal investment of time and expense, HR-professionals are provided

with a large amount of personal information. Users' online self-disclosure on SNS-profiles provides accurate and valid information about personal characteristics and observers are able to form reliable impressions of these characteristics in only 10 minutes (Kluemper & Rosen, 2009). Moreover, personality ratings derived from SNS-profiles have been shown to significantly correlate with employees' job performance. Therefore, from a theoretical and practical point of view, screening applicants' SNS-profiles is a valuable method for obtaining unique information not found with other selection methods on this early stage of employee selection and accordingly for improving screening decisions (ethical and legal issues are broached in the concluding discussion).

However, it has not been investigated yet whether applicants' online self-disclosure can be used to promote the selection of employees with a propensity to engage in OCBs and to sift out those with an adverse OCB-propensity. This is surprising for several reasons: First of all, SNS-profiles can provide valid information about applicants' OCB-propensities through comments and postings about past organizational citizenship behaviors and behavioral intentions (Peluchette & Karl, 2010). Second, OCB-propensity better predicts one's OCB-performance than general personality traits do (Allen et al., 2004). Third, SNS-based evaluations of one's OCB-propensity will correlate higher with actual OCB-performance than one's answers to OCB-related questions in an employment interview or self-ratings in a selection test due to socially desirable responding and faking (Kluemper et al., 2012). Finally, Kluemper and Rosen (2009) provide preliminary evidence for the criterion-related validity of SNS-based ratings by showing significant correlations between others' SNS-based ratings and employees' actual OCB-performances. This clearly suggests that screening job applicants' SNS-profiles should allow forming valid impressions of others' OCB-propensities.

However, it remains unclear whether recruiters are sensitive to OCB-related information and accordingly form their impressions of the job applicants. This would be a vital prerequisite because OCBs are almost never specified and explicitly required in job descriptions since practitioners have traditionally been focusing on employees' qualifications and task performances while neglecting personal characteristics and behaviors that support the social and psychological environment in organizations (Motowidlo, 2000). Furthermore, it needs to be examined whether and how OCB-related information influences recruiters' decision making in the screening phase of employee selection. According to Podsakoff et al. (2011), in the context of employee selection research it is not only important to examine the validity of OCB-related information, but also to investigate their effects on recruiters' decision-making processes. Only if SNS-mediated information about applicants' OCB-propensities leads to stronger or weaker selection recommendations, online self-disclosure can effectively be used to promote

OCBs in the context of employee selection. Therefore, the purpose of the first study series of this dissertation is to answer the following research questions among others: Does positive and negative information on SNS-profiles about applicants' OCB-propensities lead to positive and negative personality impressions? How does such information affect recruiters' selection decisions? Do OCB-dimensions differ in their impact on selection decisions?

### **3.2 Study Series 2: Virtual leadership**

A globalized economy and rapid developments of advanced information technology (AIT) have created a *virtual work environment* (Cascio & Shurygailo, 2003): Employees are able to work from geographic and temporal distance, and virtual teams, that is, "groups of geographically, organizationally and/or time dispersed workers brought together by information and telecommunication technologies to accomplish one or more organizational tasks" (Powell, Piccoli, & Ives, 2004, p. 7), are globally assembled. Regarding to Cascio and Shurygailo (2003) "the number of teleworkers, many of whom are also members of virtual teams, has been growing rapidly" (p. 363), up to one fifth of employees in the U.S. Accordingly, a new form of leading has emerged: *Virtual leadership* also called *e-leadership*. Virtual leadership is the "social influence process mediated by AIT to produce a change in attitudes, feelings, thinking, behavior, and/or performance with individuals, groups, and/or organizations" (Avolio, Kahai, & Dodge, 2000, p. 617). One third of employees in Germany report that they lead or are led virtually and that leader-follower-interactions are mediated by AITs such as video- and audioconference, social media platforms, and email (Comteam, 2012).

Virtual work environments have brought great organizational advantages such as low office and traveling costs, high flexibility, and 24-hour work-days with global teams; however, considerable issues regarding the OCB-performances of virtually led employees have been reported (e.g., Comteam, 2012). Thatcher and Zhu (2006) argue that virtual work environments generally reduce leaders' direct supervision and feedback, and consequently weaken the mechanisms that sustain organization-related identification. Especially the use of lean media such as email, which is the most common and most frequently used communication tool within virtual work units (Lurey & Raisinghani, 2001), is likely to lessen the influence leaders have on followers' job attitudes such as commitment, identification, and trust (for an overview, see Hiller, DeChurch, Murase, & Doty, 2011). In line with this, Avolio et al. (2000) argue that in a virtual context lean media hinder the development of trustful relationships which consequently affects followers' OCB-performances (Dirks & Ferrin, 2002; Zhu, Newman, Miao, & Hooke, 2013).

Moreover, virtual cooperation is mostly task-related or project-related and therefore often short-lived (Jarvenpaa, Knoll, & Leidner, 1998) which makes developing deeper levels of trust through relationships of long duration (Lewicki & Bunker, 1996) nearly no option. All in all, building trustful relationships with their followers seems to be one major challenge for virtual leaders (e.g., Kaboli et al., 2006) and accordingly for the promotion of OCBs in virtual work environments.

Research has shown that during first encounters people tend to like and trust those who disclose personal information to them (Collins & Miller, 1994) and that self-disclosure is central to the development of trusting relationships (Altman & Taylor, 1973). However, it has not been investigated yet whether leaders' purposeful online self-disclosure can be used to facilitate the development of trustful leader-follower-relationships in virtual work environments. This should be a highly relevant and practical approach since more and more companies start to establish internal SNSs where employees can set up their personal profiles and can connect and communicate with each other (e.g., *ConNext* at Continental AG). Virtual leaders could use such platforms for disclosing personal information to their followers, for example, information about personal qualifications and outside interests. Accordingly, the purpose of the second study series is to investigate the impact of leaders' purposeful online self-disclosure on followers' trustworthiness impressions at the beginning of virtual leader-follower-relationships. The following research questions are addressed amongst others: Do followers form stronger trustworthiness impressions of leaders who disclose personal information on their company internal SNS-profiles? Does leaders' style of leadership have an influence on followers' formation of trustworthiness impressions? Does self-disclosure have different effects for male and female leaders?

## STUDY SERIES 1: EMPLOYEE SELECTION

The purpose of *Study Series 1* is to examine whether SNS-mediated online self-disclosure can be used to promote the selection of employees with a propensity to engage in OCBs and to sift out individuals with no such propensity. Therefore, it needs to be examined whether and how SNS-mediated information about applicants' organizational citizenship behaviors (i.e., *conscientiousness*, *helping*, and *loyalty*) affects recruiters' impression formations and selection decisions in the screening phase of employee selection. All five studies are presented in detail with theoretical backgrounds, methods, results and discussions. A concluding discussion summarizes and discusses all main findings, limitations, and implications. All materials used in this study series are compiled in a PDF document which is available upon request<sup>1</sup>. All calculations were performed with IBM SPSS Statistics 19 and the alpha level for all inference statistical tests was 5%.

### 4. Study 1.1

This study investigates the effects of SNS-mediated positive and negative information about applicants' *conscientiousness* on recruiters' *impression formations* and *screening decisions*. Furthermore, a potential interaction between applicants' *qualifications* and applicants' perceived *conscientiousness* is examined. This study is a partial replication of Bohnert and Ross' (2010) study on the influence of SNS-mediated content on the evaluation of job candidates.

#### 4.1 Background

The screening phase is the first stage of the employee selection process with the goal to identify applicants who fit and who do not fit regarding *occupational qualifications* (e.g., education, skills) and *personal characteristics* (e.g., values, personality). In the screening phase, recruiters' impressions and decisions are normally based on information derived from applicants' résumés and cover letters. While applicants' occupational qualifications can be steadily evaluated by checking résumés and cover letters, the evaluation of job applicants' personal characteristics on the basis of these sources is rather vague. Therefore, more than 40% of HR-professionals screen job applicants' social networking sites to get personal information beyond what is in the cover letters and the résumés in order to obtain a larger impression of applicants' personal characteristics. So far there are mostly qualitative self-reports of HR-professionals on how information from applicants'

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SNS-profiles affects HR-professionals' impression formations and selection decisions. Therefore, it needs to be experimentally investigated what kind of SNS-mediated information has an effect on recruiters' impression formations and whether and how it affects their screening decisions. The experimental paradigm (*employee selection scenario*) to investigate these effects can be described as follows: First, participants are told to assume the role of a hiring manager and to study the job description of an open position they have to select applicants for. After studying the position requirements, participants are provided with a job applicant's résumé, cover letter and with access to the applicant's SNS-profile or printouts of contents of the applicant's SNS-profile. After processing all the information, participants are asked to evaluate the applicant regarding qualification and personality and to make a selection decision. Using this paradigm, Bohnert and Ross (2010) provided preliminary evidence that in the screening phase of employee selection recruiters are sensitive to SNS-mediated information about applicants' conscientiousness. More precisely, information on a SNS-profile suggesting a high level of conscientiousness led to higher ratings of this trait, information suggesting a low level of conscientiousness led to lower ratings of this trait compared to a control group. These findings are encouraging in regards of promoting OCB in the context of employee selection because participants were not directly instructed by the experimenter or prompted by requirements written in the job description to evaluate applicants' conscientiousness, but were sensitive to this kind of information and formed according impressions. A possible explanation for recruiters' sensitivity to conscientiousness-related information could be that according to DeNisi, Cafferty, and Meglino (1984), raters who are faced with making judgments about individuals tend to search for distinctive behaviors. Therefore, it is very likely that information about an applicant's conscientiousness behavior is perceived as such distinctive behavior. The following hypotheses are formulated:

**H1: SNS-mediated information about job applicants' OCBs affects recruiters' impression formations.**

*H1a: Information suggesting a high level of conscientiousness leads to higher ratings of conscientiousness compared to a control group with no information.*

*H1b: Information suggesting a low level of conscientiousness leads to lower ratings of conscientiousness compared to a control group with no information.*

Since SNS-mediated information about applicants' conscientiousness has an effect on recruiters' impression formations, it is considered that such information influences their screening decisions as well. One obvious explanation is that applicants who are perceived as being generally conscientious are also perceived as being dutifully, dependable,

obeying to rules in the working place, and therefore being an attractive employee. On the contrary, applicants who are perceived as being generally unconscientious might also be perceived as being untrustworthy, not working beyond the minimum role requirements, causing trouble at work, and therefore being an unattractive employee. In fact, Larwood (1995) showed that individuals who are seen as causing their own problems (e.g., drunkenness) are viewed as less desirable employees. However, Bohnert and Ross (2010) found that only negative information about applicants' conscientiousness had a significant (negative) effect on recruiters' intentions to invite the applicant to a job interview, positive information did not affect recruiters' intentions. These findings are surprising, but the authors do not offer any explanation for these results. Moreover, according to HR-professionals' self-reports, screening applicants' SNS-profiles provides not only content that causes recruiters to dismiss the candidates, but also content that encourages them to invite and hire candidates (Careerbuilder, 2009). Therefore, the following hypotheses are formulated:

**H2: SNS-mediated information about job applicants' OCBs affects recruiters' screening decisions.**

*H2a: Information suggesting a high level of conscientiousness leads to higher intentions to invite the applicant to a job interview compared to a control group with no information.*

*H2b: Information suggesting a low level of conscientiousness leads to lower intentions to invite the applicant to a job interview compared to a control group with no information.*

Kristof-Brown (2000) showed that recruiters' selection decisions are a function of two types of evaluations: Evaluation of applicants' qualifications (i.e., knowledge, skill, ability) and evaluation of applicants' characteristics (i.e., personality, character). Both types of evaluation explain unique variance in hiring recommendations, however, it is not clear whether applicants' qualifications and characteristics separately affect recruiters' decisions or interact with each other. On the one hand, it can be argued that hard factors (i.e., applicants' qualifications) are the basis of selection decisions and that only in case of a good qualification soft factors (i.e., applicants' characteristics) are taken into account. Or soft factors may not play any role in case of a good qualification, but can make the difference in case of a marginal qualification. On the other hand, soft factors might be a discrete assessment criterion which affects screening decisions independent of applicants' qualification. In fact, Bohnert and Ross (2010) report main effects for applicants' qualifications (i.e., a good qualification led to higher hiring recommendations than a marginal qualification) and for applicants' conscientiousness (see above), but no



interaction effects between these two factors. However, both perspectives seem to be plausible and there is not enough empirical evidence to approve or dismiss any of the perspectives. Therefore, on an exploratory basis, this study investigates whether applicants' perceived qualifications and applicants' perceived conscientiousness separately affect recruiters' screening decisions or interact with each other. Therefore, the following exploratory research question is formulated:

**Does information about applicants' qualifications and information about applicants' conscientiousness have separate or interacting effects on recruiters' intentions to invite applicants to a job interview?**

## **4.2 Method**

The following section describes the design, materials, and the procedure of Study 1.1.

### *4.2.1 Participants and design*

Ninety students at the University of Regensburg (68 female and 22 male; age ranged from 18 to 31 years,  $M = 23.84$ ,  $SD = 2.35$ ) participated in the experiment, which was based on a two-factorial between-subjects design. The first independent variable (IV 1) *conscientiousness* had three conditions (low vs. high vs. control group) and the second independent variable (IV 2) *qualification* had two conditions (marginal vs. high). To demonstrate the validity of the experimental manipulations, all IV-materials were pretested with a total of 121 participants. All individuals participated in exchange for course credit or small gifts (e.g., chocolate bar) and were randomly and evenly assigned to the test conditions.

### *4.2.2 Materials*

#### *Scenario, role and job description*

The present study used a trainee *selection scenario* where participants were put in the role of a hiring manager and had to evaluate an applicant and make a screening decision. To put participants in the role of a hiring manager, they received two instruction sheets, one informing them about their roles and responsibilities as hiring managers, the other informing them about their company's products, values, and employee selection process. The job description of the advertised HR-trainee position provided the participants with all necessary information about the trainee program and the position requirements, but excluded information related to OCB-like behaviors. The HR-trainee position was chosen

for several reasons. First, trainee positions become more and more important for companies since almost 50% of graduates want to start their career in a trainee program (Kienbaum, 2015). Second, a HR-position was chosen because participants were mainly psychology and business students who are familiar with contents and requirements of HR-positions rather than of technical positions. Third, screening trainee applicants' SNS-profiles in order to get further personal information should be of special interest and relevance in the context of trainee recruitment: Only 32% of Germany's major enterprises use personality-oriented methods to measure trainee applicants' personalities (Hossiep, Schecke, & Weiß, 2015) and due to career starters' relative homogenous backgrounds in training and work experience there is little differentiation potential on basis of their application documents (Weuster, 2008). The company and the trainee program were fictitious, but all positional information was derived from a real company of the automotive supplier area. All materials were provided in a hard-copy format and were created by a subject matter expert with work experience in HR-business and application training.

#### *Application documents*

The fictitious applicant was a 22-years old female graduate with a bachelor degree in psychology. A female applicant was chosen for representativeness reasons since 80% of HR-employees in the age of 20-30 years are female (Demmer, 2012). To manipulate the applicant's qualification two résumés were generated; one suggesting that the applicant was highly qualified for the advertised trainee position, the other suggesting that the applicant was marginally qualified for the advertised trainee position. Both résumés comprised of two pages of information about the applicant's education, work experience, advanced training, language and computer skills, and hobbies. The content of the résumés was derived from the requirements of the advertised trainee position and showed that the applicant was either highly or marginally qualified for the position. The applicant's cover letter contained the most important but same information of the résumés in written form (e.g., information about the applicant's study and her internships). All application documents were generated by the above mentioned subject matter expert with work experience in HR-business and application training. To test whether the résumés had the intended effects on observers' impressions of the applicant's qualification, a pretest was conducted with 20 participants. All of them received a job description including job requirements of the advertised trainee position, one pretest group ( $n = 10$ ) with the résumé of the highly qualified applicant, the other pretest group ( $n = 10$ ) with the résumé of the marginally qualified applicant. Participants rated on a 7-point Likert scale (1 = *not at all*; 7 = *very much*) how qualified they perceived the applicant to be for the trainee position (single-item measure). A one sample *t*-test was conducted on the qualification scores for

each of the two résumés to evaluate whether their means were significantly different from 4, the *moderate qualification score*. This test was chosen to make sure that the two résumés were perceived as significantly different from the moderate qualification score, that is, being perceived as either *marginally qualified* or *highly qualified* for the trainee position. The sample mean of the high qualification résumé ( $M = 6.20$ ,  $SD = 0.63$ ) was significantly larger than 4,  $t(9) = 11.00$ ,  $p < .001$ , while the sample mean of the marginal qualification résumé ( $M = 2.60$ ,  $SD = 0.70$ ) was significantly lower than 4,  $t(9) = -6.33$ ,  $p < .001$ . Both résumés had the intended effect on observers' impressions of the applicant's qualification for the open trainee position.

### *SNS-profiles*

To manipulate the applicant's conscientiousness two Facebook profiles were generated; one suggesting that the profile owner was a conscientious person, the other suggesting that she was an unconscientious person. The relevant personal information were postings on the profile owner's wall and consisted of pictures and own and others' comments. The profile suggesting the applicant to be a conscientious person showed a well-organized, dedicated, and dutiful person (characteristics of the conscientiousness personality trait; Costa & McCrae, 1985) who organized a graduation ceremony, held a speech, and supported an event for leukemia patients. The profile suggesting the applicant being an unconscientious person showed the profile owner's clear party and alcohol orientation (e.g., pictures of the profile owner drinking alcohol and boasting comments about having no memory of parts of the previous night). This content was chosen for several reasons: First, low conscientiousness is in fact associated with alcohol and drug use (Walton & Roberts, 2004). Second, Peluchette and Karl (2010) analyzed the content of 200 student SNS-profiles and found that 42% had comments regarding alcohol, 53% had photos involving alcohol use, and 50% of comments that individuals post on each others' wall involved issues of partying. Third, Karl, Peluchette, and Schlaegel (2010) found that SNS-users' conscientiousness indeed negatively correlated with posting photos and comments about their use of alcohol and drugs. Finally, Bohnert and Ross (2010) showed that a Facebook profile emphasizing one's party and alcohol orientation affected observers' conscientiousness perceptions and led to significantly lower conscientiousness ratings. All in all, since mainly students in their final year or freshly qualified graduates apply for trainee programs (the advertised position in this study is a HR-trainee position), it is reasonable to choose this topic as a valid operationalization of applicants' unconscientiousness. To test whether the two profiles had the intended effects on observers' impression formations, a pretest was conducted with 80 participants. Participants rated how conscientious they perceived the profile owner to be on a 7-point

Likert scale (1 = *not at all*; 7 = *very much*). Conscientiousness was measured with two items ( $\alpha_{\text{conscientious profile}} = .87$ ;  $\alpha_{\text{unconscientious profile}} = .68$ ) derived from the conscientiousness-scale of the *Business-focused Inventory of Personality (BIP)* (Hossiep, Paschen, & Mühlhaus, 2003). The items from this business-focused inventory were chosen to make sure that impressions of the profile owner's private context conscientiousness were also perceived as meaningful and representative for profile owner's business context conscientiousness. A one sample *t*-test was conducted on the conscientiousness scores for each of the two profiles to evaluate whether their means were significantly different from 4, the *neutral score* of the conscientiousness-scale. This test was chosen because the goal of the experiment was to compare the effect of each profile with a *neutral profile* control group and a baseline group, but not to compare the effects of the profiles with each other. The sample mean of the conscientious profile ( $M = 5.39$ ,  $SD = 0.84$ ) was significantly higher than 4,  $t(39) = 10.50$ ,  $p < .001$ , while the sample mean of the unconscientious profile ( $M = 3.26$ ,  $SD = 1.12$ ) was significantly lower than 4,  $t(39) = -4.18$ ,  $p < .001$ . Both profiles had the intended effect on observers' impressions of the profile owner's conscientiousness. It was originally planned to create a neutral profile control group additionally to a baseline group; however, a pretest with 21 participants showed that it was not possible to create a neutral profile because observers' impressions were affected by apparent neutral information (e.g., a statement about a nice overlook during a hiking tour) in different and unsystematic ways. But this is not serious since the goal of the present and all following studies was to investigate whether and how recruiters who screen applicants' SNS-profiles are affected by additional positive or negative information compared to recruiters who do not screen applicants' SNS-profiles. Therefore, the control group of the present and all following studies was a baseline group which did not observe a SNS-profile. This further allowed providing the participants with a printout of the respective SNS-profiles instead of instructing them to use a computer to actually screen the applicant online (in case of a printout of a neutral profile, participants would have wondered why being provided with such meaningless information).

### *Measures*

Participants received an assessment sheet to systematically evaluate the applicant's documents in order to make well-founded decisions. The assessment sheet had four sections each with items to be answered on a 7-point Likert scale (1 = *not at all*; 7 = *very much*). The first two sections checked the quality of the application documents (3 items) and the applicant's qualification (4 items). These two sections were put on top of the list to make sure that the participants precisely analyzed the application documents, but were not part of further calculations. The third section dealt with participants' impressions of the

applicant's personality (total 30 items) and contained the first dependent variable (DV 1) which measured the applicant's perceived conscientiousness with the following two items ( $\alpha = .93$ ): "The applicant seems to be a conscientious person" and "The applicant seems to be a dutiful person". All other items were distractor items mainly derived from the BIP-dimension names with the intention to disguise the true purpose of the assessment sheet. In the study of Bohnert and Ross (2010) participants had to rate the applicant's conscientiousness *after* making important selection decisions (i.e., interview invitation, job offer, starting salary), which is why their impression formations might have been influenced by these previous decisions. Therefore, in the present study, recruiters' SNS-based impression formations were measured *before* making important selection decisions to show the direct effect of SNS-based information on recruiters' impression formations. The last section of the assessment sheet consisted of the second dependent variable (DV 2) measuring the screening decision with a single item ("How likely would you be to invite the applicant to a job interview?"). For exploratory reasons and because of other scholars using the following dependent variables, an additional list was presented to measure participants' potential hiring decisions (i.e., hiring recommendation, salary recommendation). However, on this early stage of the trainee recruiting process there are no hiring decisions or recommendations to be made because the screening phase is normally followed by at least one interview and mostly by assessment centers. Furthermore, all participants of the same trainee program earn a same program-specific salary which makes trainee salary recommendations obsolete. Therefore, for the present thesis the data of these variables was not further calculated. Demographic information was collected in a final questionnaire.

#### 4.2.3 Procedure

The experiment took approximately 40 minutes and was carried out in single sessions under constant conditions in a laboratory at the University of Regensburg. First, participants received the instruction sheet and all necessary information to assume the role of a hiring manager. After studying the job description and the requirements of the open HR-trainee position, participants received the application documents (cover letter and résumé) and a printout of parts of the applicant's Facebook profile (the control group did not receive a Facebook profile). In this employee selection scenario, the hiring manager received the documents as printouts of an email application from a colleague who added a printed excerpt of the applicant's Facebook profile in the two experimental conditions. After examining all information participants filled out the four-sectioned assessment sheet and were then fully debriefed and received their course credit or a small gift.

### 4.3 Results

#### 4.3.1 Impression formation

An univariate ANOVA was conducted to check for the hypothesized effects of the SNS-profile contents on recruiters' impression formations. The means and standard deviations of the conscientiousness impression scores by experimental conditions are reported in Table 1.1. The ANOVA revealed a significant effect of the conscientiousness manipulation on participants' conscientiousness ratings,  $F(2, 84) = 28.86$ ,  $p < .001$ ,  $\eta^2 = .41$ , and a significant effect of the qualification manipulation,  $F(1, 84) = 29.37$ ,  $p < .001$ ,  $\eta^2 = .26$ , indicating that the highly qualified applicant received higher conscientiousness ratings ( $M = 5.78$ ,  $SD = 1.05$ ) than the marginally qualified applicant ( $M = 4.56$ ,  $SD = 1.64$ ). No interaction effect was found,  $F(2, 84) = 2.05$ ,  $p = .14$ . To further analyze the main effect of the conscientiousness manipulation, a post hoc comparison using Fisher LSD test was conducted. Results were consistent with hypotheses 1a and 1b showing that the mean score for the conscientious profile ( $M = 6.03$ ,  $SD = 1.18$ ) was significantly higher than for the control group ( $M = 5.47$ ,  $SD = 1.10$ ,  $p = .04$ ) and that the mean score for the unconscientious profile was significantly lower than for the control group ( $M = 4.00$ ,  $SD = 1.43$ ,  $p < .001$ ).

Table 1.1

*Descriptive statistics of conscientiousness impressions and interview intentions by experimental conditions in Study 1.1*

Condition	Conscientiousness	Qualification	n	Conscientiousness impression		Interview intention	
				M	SD	M	SD
1	Low	Marginal	15	3.07	1.15	5.13	1.41
2	High	Marginal	15	5.57	1.44	3.93	1.16
3	CG	Marginal	15	5.03	1.17	4.50 <sup>a</sup>	1.29 <sup>a</sup>
4	Low	High	15	4.93	1.02	5.47	0.92
5	High	High	15	6.50	0.60	6.40	0.74
6	CG	High	15	5.90	0.85	6.13	0.83

Note. CG = Control group.

<sup>a</sup> n = 14; missing completely at random (MCAR).

#### 4.3.2 Screening decision

An univariate ANOVA was conducted to examine the hypothesized effects of the SNS-profile contents on recruiters' intentions to invite the applicant to a job interview. The means and standard deviations of the interview intention scores by experimental conditions are reported in Table 1.1. The ANOVA revealed a significant effect of the conscientiousness manipulation on participants' screening decision,  $F(2, 83) = 7.34$ ,  $p = .001$ ,  $\eta^2 = .15$ , and a significant effect of the qualification manipulation,  $F(1, 83) = 41.45$ ,  $p < .001$ ,  $\eta^2 = .33$ , indicating that the highly qualified applicant was more likely to be invited to a job interview ( $M = 6.00$ ,  $SD = 0.91$ ) than the marginally qualified applicant ( $M = 4.52$ ,  $SD = 1.36$ ). No interaction effect was found,  $F(2, 83) = 0.23$ ,  $p = .80$ . To further analyze the main effect of the conscientiousness manipulation post hoc comparisons using Fisher LSD test were conducted. Results showed that contrary to hypothesis 2a the interview intention score for the applicant with a conscientious profile ( $M = 5.77$ ,  $SD = 1.28$ ) was not significantly higher than for the control group applicant ( $M = 5.34$ ,  $SD = 1.34$ ,  $p = .14$ ). However, according to hypothesis 2b the interview intention score for the applicant with an unconscientious profile ( $M = 4.70$ ,  $SD = 1.29$ ) was significantly lower than for the control group applicant ( $p = .03$ ).

### 4.4 Discussion

#### 4.4.1 Findings

Results show that SNS-mediated information about an applicant's conscientiousness had the predicted effects on recruiters' impression formations (DV 1). Profile content suggesting the applicant to be a conscientious person led to higher conscientiousness impressions (H1a) whereas content suggesting the applicant to be an unconscientious person led to lower conscientiousness impressions (H1b) compared to the control group with no information about the applicant's conscientiousness. Furthermore, the applicant's qualification affected recruiters' impression formations insofar as the highly qualified applicant received higher conscientiousness ratings than the marginally qualified applicant. This might be explained by the facts that (1) recruiters take applicants' qualifications into account when making judgements about applicants' characteristics (Kristof-Brown, 2000) and (2) the two résumés not only differed in the applicant's qualification levels but also regarding her above the minimum engagement which have both been shown to relate to one's conscientiousness (Noftle & Robins, 2007; Organ, 1988). Moreover, this might further explain the finding that the conscientiousness ratings in the unconscientiousness condition were rather neutral than negative: The applicant's

qualification (even the marginally qualified applicant had a good education which just did not go well with the trainee position requirements) compensated for the SNS-mediated negative information. However, in both qualification conditions the unconscientious profile led to a significant decrease of the applicant's perceived conscientiousness compared to the control group which also affected participants' intentions to invite the applicant to a job interview (DV 2).

Interestingly, only in case of negative information the applicant's perceived conscientiousness affected DV 2, but not in case of positive information. More precisely, contrary to hypothesis 2a, profile content suggesting the applicant to be a conscientious person did not lead to higher intentions to invite the applicant to a job interview, but consistent with hypothesis 2b content suggesting the applicant to be an unconscientious person led to lower interview intentions compared to the control group. This *negativity bias* is known in the field of employee selection research, especially in the screening phase of employee selection, and describes the phenomenon that recruiters give greater weight to negative information than to positive information. Scholars (e.g., Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001) explain this phenomenon by the fact that it is more costly to hire a bad, undesirable employee (*false positive*) than to reject a good, desirable one (*false negative*) which is why recruiters are generally sensitive to negative information. However, in the present study, screening decisions had no consequences for the participants and high conscientiousness was not part of the position requirements in the job description. This suggests that even in fictitious employee selection scenarios, unconscientiousness seems to be a *no-go* even if not explicitly required in the job description. In comparison, high conscientiousness seems to be a *nice-to-have*, but not crucial for screening decisions. More precisely, Bolster and Springbett (1961) found that only 3.8 unfavorable bits of information lead to the rejection of an initially favored applicant, whereas 8.8 favorable pieces of information are necessary to accept an initially disfavored candidate. This means that single positive SNS-mediated information about applicants' conscientiousness might not be sufficient to make him or her appear as a more attractive employee to the recruiters, at least as long as the specific characteristic is not explicitly listed in the job description as a position requirement. These results support the preliminary findings of Bohnert and Ross (2010) suggesting that only negative information about applicants' conscientiousness is taken into account when making screening decisions.

Finally, the present study showed that highly qualified applicants were more likely to be invited to a job interview than marginally qualified applicants and that no interaction effect occurred with the applicant's perceived conscientiousness (*exploratory research question*).



All in all, the results of Study 1.1 provide preliminary evidence that those who have to make screening decisions have a *sensitivity* to SNS-mediated, conscientiousness-related information and that independent of applicants' qualifications perceived conscientiousness functions as a *rejection criterion* rather than as a *selection criterion*.

#### 4.4.2 Limitations

General limitations regarding the experimental paradigm and student participants are discussed in the concluding discussion; however, Study 1.1 had other limitations to be discussed. Conscientiousness was operationalized by two Facebook profiles each with non-work-related content. Even though there were good reasons for choosing these contents, future research should try to replicate the findings of Study 1.1 with work-related contents. For instance, conscientiousness behaviors could be derived from Podsakoff et al.'s (1990) OCB-scale such as *obeying company rules and regulations even when no one is watching* or *not taking extra breaks*. However, the pretest which used items from a business-focused conscientiousness-scale assured that impressions of the profile owner's private context conscientiousness were perceived as representative and meaningful for her business context conscientiousness. Therefore, a certain generalizability of the SNS-contents used to operationalize the applicant's high and low conscientiousness might be indicated.

In case of the highly qualified applicant, it cannot be ruled out that the negativity bias is based on a methodological artefact. Because of the applicant's perfect qualification regarding the trainee position requirements, participants of the control group showed a very high intention to invite her to a job interview. Since ratings were made on a 7-point Likert scale, it might be that the highly qualified applicant did not profit from positive SNS-mediated information due to a ceiling effect. However, the marginally qualified applicant neither profited from positive SNS-mediated information which would have been indicated by a significant interaction effect. These findings are in line with the results of Bohnert and Ross (2010) who used a 9-point Likert scale and who neither report beneficial effects of applicants' high conscientiousness compared to a control group nor an interaction effect with applicants' qualification on participants' interview intentions. However, Bohnert and Ross (2010) reported that when making hiring decisions participants took both positive and negative conscientiousness-related information into account independent of applicants' qualifications and were more likely to hire applicants with positive SNS-mediated information and were less likely to hire applicants with negative SNS-mediated information compared to a control group. This might suggest that the negativity bias regarding conscientiousness-related information is immanent to the screening phase of employee selection, but does not occur when making final hiring decisions.

#### 4.4.3 Implications

Hossiep et al. (2015) report that only 32% of Germany's major enterprises use personality tests to further determine trainee applicants' personalities with OCB-focused measures not even mentioned. Moreover, conscientiousness impressions formed on the basis of job interview impressions show low convergent validity with applicants' self-ratings ( $r = .16$ ; Barrick, Patton, & Haugland, 2000), and both personality tests and job interviews are susceptible to socially desirable responding and faking. These diagnostic gaps might partly be filled by the findings of Study 1.1 and the fact that conscientiousness impressions formed on the basis of SNS-mediated information show better convergent validity with applicants' self-ratings ( $r = .30$ ; Kluemper et al., 2012).

The findings of Study 1.1 are highly relevant in practice because they show recruiters' sensitivity to conscientiousness-related SNS-mediated information and their propensity to intuitively take this information into account when making screening decisions. Moreover, in the screening phase, conscientiousness impressions formed on basis of SNS-mediated information underlie a beneficial negativity bias which prevents high conscientiousness impressions from leading to undifferentiated overall positive personality impressions and to outshining insufficient qualifications. These findings suggest that no special SNS-screening training would be necessary to teach HR-professionals how to identify conscientiousness-related information and how to take it into account when making screening decisions.

Moreover, findings of Bohnert and Ross (2010) suggest that when making final hiring decisions, positive conscientiousness-related information is actually taken into account. This is not surprising because while the focus of the screening phase normally lies on dismissing unsuitable applicants (Mondy & Mondy, 2014), the purpose of the hiring phase lies on selecting between highly suitable finalists. Accordingly, recruiters try to find information which makes the difference and either supports or speaks against the selection of a certain finalist. Therefore, final decision makers should be provided with corresponding information from recruiters' SNS-screening work. Brown and Vaughn (2011) accordingly suggest that recruiters should document all information gathered in the online screening process and printed screen shots of relevant SNS-profile content should be included in each applicant's personnel file.

All in all, these experimental findings support the idea of a beneficial impact of online self-disclosure on promoting conscientiousness in the context of employee selection. Whether these findings are valid for other organizational citizenship behaviors will be examined in Study 1.2 which investigates the effects of SNS-mediated helping- and loyalty-related information on recruiters' impression formations and screening decisions.

## 5. Study 1.2

This study investigates the effects of SNS-mediated positive and negative information about applicants' *helping behavior* and *loyalty behavior* on recruiters' *impression formations* and *screening decisions*.

### 5.1 Background

Podsakoff et al. (2011) provided preliminary evidence that information about applicants' helping and loyalty behaviors can affect selection decisions in the context of employment interviews. In their study they developed videos that manipulated amongst others applicants' responses to OCB-related interview questions. Even though participants were not explicitly instructed to take the OCB-related information into account when making selection decisions, the candidates' responses to OCB-related questions influenced the participants' decision-making processes; applicants who exhibited high levels of helping and loyalty behaviors received higher hiring recommendations than those who exhibited low levels. Podsakoff et al. (2011) argue that recruiters are sensitive to this kind of OCB-related information and take it into account when making selection decisions for several reasons. However, not all of them seem to be plausible, especially not for student participants (e.g., recruiters are likely to prefer candidates with a high loyalty level because they are more likely to tell other candidates about the positive aspects of their job and the organization and therefore make the recruiting aspects of their jobs less difficult). Therefore, two main reasons for the sensitivity to helping-related and loyalty-related information and the intuition to take such information into account are proposed: *Relevance* and *recall*. Regarding to Podsakoff et al. (2011) helpfulness should have a high relevance for recruiters "because helping behaviors promote the social and psychological context of the work environment [and] are likely to be sought out by raters" (p. 313). Also, loyalty behaviors should have a high relevance for recruiters because individuals with a loyalty propensity will be perceived as future employees who are committed to the organization, support the organization against threats, and defend it to outsiders. Moreover, DeNisi et al. (1984) noted that when raters are faced with making judgments about individuals, they tend to search for distinctive and potentially relevant behaviors. All these effects should not be limited to the context of employment interviews, but also hold for SNS-mediated information in the screening phase of employee selection. Therefore, the following hypotheses are formulated:

**H1: SNS-mediated information about job applicants' OCBs affects recruiters' impression formations.**

*H1a: Information suggesting a high level of helpfulness and loyalty leads to higher ratings of helpfulness and loyalty compared to a control group with no information.*

*H1b: Information suggesting a low level of helpfulness and loyalty leads to lower ratings of helpfulness and loyalty compared to a control group with no information.*

On the basis of Podsakoff et al. (2011) it is further argued that especially prosocial behaviors such as helping and loyalty are likely to be viewed as rather discretionary and caused by one's stable characteristics than as formally expected and reward driven behaviors. Regarding to DeNisi et al. (1984) behaviors that are "attributed to stable, internal causes are more likely to be retained in memory, recalled, and considered in the final evaluation" (p. 376). Moreover, raters have a tendency to give a higher weight to those behaviors that they recall from memory the most easily. Therefore, it is self-evident to consider that positive and negative information about applicants' helpfulness and loyalty influences raters' screening decisions. The following hypotheses are formulated:

**H2: SNS-mediated information about job applicants' OCBs affects recruiters' screening decisions.**

*H2a: Information suggesting a high level of helpfulness and loyalty leads to higher intentions to invite the applicant to a job interview compared to a control group with no information.*

*H2b: Information suggesting a low level of helpfulness and loyalty leads to lower intentions to invite the applicant to a job interview compared to a control group with no information.*

As already argued in Study 1.1, it might be possible that recruiters' perceptions of applicants' qualifications, helpfulness and loyalty interact with each other when making screening decisions. Therefore, the same exploratory research question is formulated:

**Does information about applicants' qualifications and information about applicants' helpfulness and loyalty have separate or interacting effects on recruiters' intention to invite applicants to a job interview?**

## 5.2 Method

The following section describes the design, materials, and the procedure of Study 1.2.

### 5.2.1 Participants and design

Ninety students at the University of Regensburg (68 female and 22 male; age ranged from 18 to 52 years,  $M = 24.20$ ,  $SD = 5.33$ ) participated in the experiment which was based on a two-factorial between-subjects design. The first independent variable *prosociality* (an assembling of helpfulness and loyalty which will be explained in the SNS-profiles section) had three conditions (low vs. high vs. control group) and the second independent variable *qualification* had two conditions (marginal vs. high). To demonstrate the validity of the experimental manipulation of helpfulness and loyalty all materials of IV 1 were pretested with a total of 47 participants. All individuals participated in exchange for course credit or small gifts (e.g., chocolate bar) and were randomly and evenly assigned to the test conditions.

### 5.2.2 Materials

#### *Scenario, role and job description*

The present study used the same trainee selection scenario as Study 1.1 and provided participants with the same instruction sheets and the same trainee job description.

#### *Application documents*

To manipulate the applicant's qualification the two pretested résumés and cover letters from Study 1.1 were used.

#### *SNS-profiles*

To manipulate the applicant's prosociality (i.e., helpfulness and loyalty) two Facebook profiles were generated; one suggesting that the profile owner was a helpful and loyal person, the other suggesting that she was an unhelpful and disloyal person. The relevant personal information were postings on the profile owner's wall and consisted of pictures and own and others' comments. The profile suggesting a highly prosocial applicant showed a person that was praised for supporting and tutoring other students in a joint learning group (*helpful behavior*) and for verbally defending and advantageously presenting a student course she was a member of (*loyal behavior*). The profile suggesting a poorly prosocial applicant showed a person that was blamed for not helping and supporting other students of a joint learning group (*unhelpful behavior*) and for publicly talking bad about and disadvantageously presenting a student course she was a member

of (*disloyal behavior*). These contents were chosen because the applicant was a freshly qualified graduate and discussing university-related topics seemed to be plausible and a good and representative context for work-related and OCB-related behaviors. Helpfulness and loyalty were assembled in one profile because Podsakoff et al. (2011) reported relatively small effects of helping and loyalty behaviors (helping:  $\eta^2 = .05$ , loyalty:  $\eta^2 = .03$ ) on the evaluation of job applicants based on a total of 480 participants. Hence, due to a smaller number of participants and an accordingly lower statistical power, the present study assembled these two organizational citizenship behaviors to check for an overall prosocial effect in the first place. Assembling these two dimensions to an overall prosociality dimension is consistent with Brief and Motowidlo's (1986) concept of *prosocial organizational behaviors* which include both helping co-workers and organizational loyalty.

To test whether the two profiles had the intended effects on observers' impression formations, a pretest was conducted with a total of 47 participants. One pretest group ( $n = 24$ ) received the profile of the highly prosocial person, the other pretest group ( $n = 23$ ) received the profile of the poorly prosocial person; both rated how helpful and loyal they perceived the profile owner to be on a 7-point Likert scale (1 = *not at all*; 7 = *very much*). Helpfulness was measured with a single item asking how supporting they perceived the profile owner to be and loyalty was measured with a single item asking how loyal they perceived the profile owner to be. A one sample *t*-test was conducted on both the helpfulness scores and the loyalty scores for each of the two profiles to evaluate whether their means were significantly different from 4 (neutral score). Like in the first experiment, this test was chosen because the goal of the experiment was to compare the effect of each profile with a control group, but not to compare the effects of the profiles with each other. Both sample means of the highly prosocial profile (helpfulness:  $M = 6.29$ ,  $SD = 0.69$ ; loyalty:  $M = 6.00$ ,  $SD = 0.83$ ) were significantly higher than 4 (helpfulness:  $t[23] = 16.27$ ,  $p < .001$ ; loyalty:  $t[23] = 11.75$ ,  $p < .001$ ). As well, both sample means of the poorly prosocial profile (helpfulness:  $M = 2.30$ ,  $SD = 0.97$ ; loyalty:  $M = 2.17$ ,  $SD = 0.89$ ) were significantly lower than 4 (helpfulness:  $t[22] = -8.35$ ,  $p < .001$ ; loyalty:  $t[22] = -9.88$ ,  $p < .001$ ). Both profiles had the intended effects on observers' impressions of the profile owner's helpfulness and loyalty.

### Measures

Participants received the slightly modified version of the assessment sheet of Study 1.1 to systematically evaluate the applicant's documents on a 7-point Likert scale (1 = *not at all*; 7 = *very much*). The assessment sheet was complemented with items regarding the applicant's anticipated helpful and loyal working behavior. All other items were maintained from Study 1.1, but were organized in six instead of four sections. The first two sections

checked the quality of the application documents (3 items) and the applicant's qualification and job suitability (6 items). Section three dealt with participants' impressions of the applicant's business-focused personality (7 items) and section four dealt with participants' impressions of the applicant's social competence (13 items). All these items were distractor items to disguise the true purpose of the assessment sheet. Section five asked for participants' impressions of the applicant's work behavior (9 items) and contained the two relevant dependent variables measuring the applicant's perceived prosociality with one helpfulness item and one loyalty item. The last section consisted of the dependent variable measuring participants' screening decisions with one item. For exploratory reasons the same additional list as in Study 1.1 was presented to measure participants' potential hiring decisions. However, these measures were not further calculated. Demographic information was collected in a final questionnaire.

### 5.2.3 Procedure

The present study used the same procedure as applied in Study 1.1.

## 5.3 Results

### 5.3.1 Impression formation

Univariate ANOVAs were conducted on each of the two dependent variables to check for the hypothesized effects of the SNS-profiles on recruiters' impression formations regarding the applicant's helpfulness and loyalty. The means and standard deviations of the helpfulness and loyalty impression scores by experimental conditions are reported in Table 1.2. The first ANOVA revealed a significant effect of the prosociality manipulation on participants' helpfulness ratings,  $F(2, 84) = 107.88$ ,  $p < .001$ ,  $\eta^2 = .69$ . No effect of the qualification manipulation was found,  $F(1, 84) = 0.35$ ,  $p = .55$ , and no interaction effect was found,  $F(2, 84) = 0.21$ ,  $p = .81$ . To further analyze the effect post hoc comparisons using Fisher LSD test were conducted. Results showed that the mean helpfulness score for the highly prosocial profile ( $M = 6.50$ ,  $SD = 0.73$ ) was significantly higher than for the control group ( $M = 5.73$ ,  $SD = 1.11$ ,  $p = .007$ ) and that the mean helpfulness score for the poorly prosocial profile ( $M = 2.90$ ,  $SD = 1.24$ ) was significantly lower than for the control group ( $p < .001$ ). The second ANOVA revealed a significant effect of the prosociality manipulation on participants' loyalty ratings,  $F(2, 84) = 102.90$ ,  $p < .001$ ,  $\eta^2 = .71$ . No effect of the qualification manipulation was found,  $F(1, 84) = 1.25$ ,  $p = .27$ , and no interaction effect was found,  $F(2, 84) = 1.36$ ,  $p = .26$ . To further analyze the effect post hoc comparisons using Fisher LSD test were conducted. Results showed that the mean

loyalty score for the highly prosocial profile ( $M = 6.30$ ,  $SD = 0.88$ ) was marginally significantly higher than for the control group ( $M = 5.83$ ,  $SD = 0.95$ ,  $p = .06$ ) and that the mean loyalty score for the poorly prosocial profile ( $M = 3.07$ ,  $SD = 1.02$ ) was significantly lower than for the control group ( $p < .001$ ). All in all, both impression formation hypotheses (H1a and H1b) can be confirmed. Even though one of the effects reached only marginal significance, it can be argued that each of the two hypotheses was based on two impression effects (helpfulness and loyalty) which all but one were highly significant.

Table 1.2

*Descriptive statistics of helpfulness impressions and loyalty impressions by experimental conditions in Study 1.2*

Condition	Prosociality	Qualification	n	Helpfulness impression		Loyalty impression	
				M	SD	M	SD
1	Low	Marginal	15	2.73	1.34	2.93	0.80
2	High	Marginal	15	6.47	0.74	6.00	0.74
3	CG	Marginal	15	5.73	1.10	5.93	1.03
4	Low	High	15	3.07	1.16	3.20	1.21
5	High	High	15	6.53	0.74	6.60	0.74
6	CG	High	15	5.73	1.16	5.73	0.88

Note. CG = Control group.

### 5.3.2 Screening decision

An univariate ANOVA was conducted to examine the hypothesized effects of the SNS-profile contents on recruiters' intentions to invite the applicant to a job interview. The means and standard deviations of the interview intention scores by experimental conditions are reported in Table 1.3. The ANOVA revealed a significant effect of the prosociality manipulation on participants' screening decisions,  $F(2, 83) = 39.27$ ,  $p < .001$ ,  $\eta^2 = .49$ , and a significant effect of the qualification manipulation,  $F(1, 83) = 28.91$ ,  $p < .001$ ,  $\eta^2 = .26$ , indicating that the highly qualified applicant was more likely to be invited to a job interview ( $M = 6.05$ ,  $SD = 1.24$ ) than the marginally qualified applicant ( $M = 4.93$ ,  $SD = 1.36$ ). No interaction effect was found,  $F(2, 83) = 0.34$ ,  $p = .71$ . To further analyze the main effect of the prosociality manipulation post hoc comparisons using Fisher LSD test were conducted. Results showed that contrary to hypothesis 2a the



interview intention score for the applicant with a highly prosocial profile ( $M = 6.30$ ,  $SD = 0.84$ ) was not significantly higher than for the control group applicant ( $M = 5.90$ ,  $SD = 0.96$ ,  $p = .11$ ). However, according to hypothesis 2b the interview intention score for the applicant with a poorly prosocial profile ( $M = 4.21$ ,  $SD = 1.40$ ) was significantly lower than for the control group applicant ( $p < .001$ ).

Table 1.3

*Descriptive statistics of interview intentions by experimental conditions in Study 1.2*

Condition	Prosocialty	Qualification	<i>n</i>	Interview intention	
				<i>M</i>	<i>SD</i>
1	Low	Marginal	15	3.67	1.29
2	High	Marginal	15	5.67	0.72
3	CG	Marginal	15	5.47	0.99
4	Low	High	15	4.79 <sup>a</sup>	1.31 <sup>a</sup>
5	High	High	15	6.93	0.26
6	CG	High	15	6.33	0.72

Note. CG = Control group.

<sup>a</sup>  $n = 14$ ; missing completely at random (MCAR).

## 5.4 Discussion

### 5.4.1 Findings

Results show that SNS-mediated information about an applicant's helpfulness and loyalty had the predicted effects on recruiters' impression formations. Profile content suggesting the applicant to be a helpful and loyal person led to higher helpfulness and loyalty impressions (H1a) whereas content suggesting the applicant to be an unhelpful and disloyal person led to lower helpfulness and loyalty impressions (H1b) compared to the control group with no information about the applicant's helpfulness and loyalty. The applicant's qualification had no effect on participants' prosociality impressions and did not interact with the SNS-mediated information.

Interestingly, only negative information about the applicant's helpfulness and loyalty affected participants' intentions to invite the applicant to a job interview. More precisely, contrary to hypothesis 2a, profile content suggesting the applicant to be a helpful and loyal

person did not lead to higher intentions to invite the applicant to a job interview, but consistent with hypothesis 2b, content suggesting the applicant to be an unhelpful and disloyal person led to lower interview intentions compared to the control group. This negativity bias fits well with the findings of Study 1.1 and seems to be in line with qualitative results of Podsakoff et al.'s (2011) study on the effects of OCB-related information in the context of employment interviews. They summarize that "analysis of open-ended responses indicated that participants reported that low-level behavioral responses were substantially more important in their evaluation decisions than high-level behavioral responses (71% vs. 29%)" (p. 321).

Finally, the present study showed that highly qualified applicants are more likely to be invited to a job interview than marginally qualified applicants and that no interaction effect occurred with the applicant's perceived helpfulness and loyalty (*exploratory research question*).

All in all, the results of Study 1.2 show that those who have to make screening decisions have a general sensitivity to SNS-mediated helpfulness-related and loyalty-related information and that independent of applicants' qualifications, perceived helpfulness and loyalty function as rejection criteria rather than as selection criteria.

#### 5.4.2 Limitations

General limitations regarding the experimental paradigm and student participants are discussed in the concluding discussion; however, Study 1.2 has other limitations to be discussed. Helpfulness and loyalty were operationalized in one SNS-profile at the same time, both either high or low in form. This means the present findings cannot be interpreted separately for each of the two OCB-dimensions, but represent a combined effect of helpfulness and loyalty. Even though this operationalization was chosen for good reason (see section 5.2.2) and provides first evidence for the relevance of helpfulness-related and loyalty-related information in the screening phase, following studies need to separately manipulate these OCB-dimensions to allow more specific conclusions.

Again, it cannot be ruled out that in case of the highly qualified applicant the negativity bias is based on a methodological artefact because the same rating scale and the same application documents were used as in Study 1.1. However, the marginally qualified applicant neither profited from positive SNS-mediated information; furthermore, Podsakoff et al. (2011) provide preliminary evidence for a negativity biased effect of OCB-related information in the context of employment interviews. All this might suggest that impressions formed on SNS-mediated information regarding applicants' helpfulness and loyalty indeed lead to negativity biased screening decisions.

#### 5.4.3 Implications

As already argued in Study 1.1 these findings are practically highly relevant and might help to fill the above mentioned diagnostic gap reported for trainee selection (Hossiep et al., 2015). The findings of Study 1.2 show recruiters' sensitivity to helping-related and loyalty-related SNS-mediated information and their propensity to intuitively take this information into account when making screening decisions. The negativity bias which thereby occurs seems to be somehow functional because it prevents high prosociality impressions from leading to undifferentiated overall positive impressions, outshining insufficient qualifications, and selecting applicants who actually do not fit (*false positives*). This suggests that screening applicants' SNS-profiles could help to promote OCB in the context of employee selection, even without special SNS-screening trainings teaching recruiters how to identify helping- and loyalty-related information and how to take it into account when making screening decisions.

Even though there is no evidence yet which supports the idea that when making final hiring decisions positive helping-related and loyalty-related information is taken into account, it seems to be reasonable to generally follow the suggestion of Brown and Vaughn (2011). Recruiters should provide final decision makers with all information gathered in the online screening process and printed screen shots of relevant SNS-profile contents should be included in each applicant's personnel file. This gives final decision makers the opportunity to take positive helping-related and loyalty-related information into account when choosing between finalists.

All in all, the experimental findings of Study 1.2 provide first evidence for a beneficial impact of online self-disclosure on promoting helping and loyalty behavior in the context of employee selection. However, these findings need to be examined separately for each of the two OCB-dimensions which will be one of the purposes of Study 1.3.

## 6. Study 1.3

One purpose of this study is to examine whether information about unhelpful and disloyal behaviors have unique effects on recruiters' screening decisions. While Study 1.2 investigated the effect of such information assembled in one profile, the present study disassembled these two OCB-dimensions in order to examine the unique effect of each of the two dimensions. Furthermore, this study introduces a new dependent variable measuring recruiters' intentions to ask provocative questions during a subsequent employment interview. Therefore, since mainly well-qualified applicants get invited to job interviews and since no interacting effects of qualification and OCB-related information have been found in the two previous studies, this study concentrates on examining OCB-induced effects occurring with well-qualified applicants only. Moreover, since the negativity bias has been shown and replicated in the first two studies, the effect of only negative OCB-related information is examined in the present study. All in all, the present study investigates the effects of SNS-mediated *negative* information about applicants' *conscientiousness*, *helpfulness*, and *loyalty* on recruiters' *screening decisions* and their *intentions to ask provocative questions* in an employment interview.

### 6.1 Background

As already argued in Study 1.2, recruiters are very likely to be sensitive to SNS-mediated information about applicants' helping and loyalty behaviors and accordingly take this information into account when making screening decisions. Study 1.2 showed the assumed negative effect for a SNS-profile assembled of unhelpful and disloyal behavior and for a SNS-profile suggesting the applicant to be an unconscientious person. Building on these findings, Study 1.3 investigates the effects for each of the three OCB-dimensions separately. Therefore, the following hypotheses are formulated:

**H1: SNS-mediated negative information about job applicants' OCBs affects recruiters' screening decisions.**

*H1a: Information suggesting a low level of conscientiousness leads to lower intentions to invite the applicant to a job interview compared to a control group with no information.*

*H1b: Information suggesting a low level of helpfulness leads to lower intentions to invite the applicant to a job interview compared to a control group with no information.*

*H1c: Information suggesting a low level of loyalty leads to lower intentions to invite the applicant to a job interview compared to a control group with no information.*

In the screening phase HR-professionals traditionally rely on applicants' cover letters, and résumés, but "sometimes [use] interviews to initially screen job candidates" (Slovensky & Ross, 2012, p. 51). Interviews in the screening phase of employee selection (*screening interviews*) are often realized as telephone-based or web-based interviews and serve further preselection before inviting applicants to more cost-intensive selection procedures such as assessment centers (Weuster, 2008). In preparation of such interviews, recruiters screen candidates' application documents in order to become familiar with the applicant's qualification and characteristics and to prepare questions and topics to be discussed (Mondy & Mondy, 2014). Therefore, in case of applied SNS-screenings it is very likely that information from applicants' profiles is taken into account when preparing screening interviews. However, this should be true for the preparation of regular employment interviews as well, which is highly relevant since the employment interview is the most popular and the most widely used selection procedure (e.g., Judge, Higgins, & Cable, 2000). Therefore, Study 1.3 investigates not only the effects of SNS-mediated information on screening decisions, but also examines the influence such information may have on the preparation of interviews. More precisely, it will be investigated what kind of interview questions recruiters tend to ask depending on their preinterview impressions of applicants' OCB-propensities. This is especially relevant because most of the employment interviews are performed in an unstandardized and unstructured way (Dipboye, 1997; Terpstra & Rozell, 1997) and 34.5% of the interviewers are even free to ask whatever he or she likes (Van der Zee, Bakker, & Bakker, 2002). One well documented bias resulting from such unstructured interview techniques is that recruiters' preinterview impressions of an applicant lead to confirmatory questioning strategies. This phenomenon was first investigated by Snyder and Swann (1978) who found that individuals tend to seek for evidence to confirm preinteraction beliefs and suggest that the employment interview is one context in which this bias should occur. In fact, Binning, Goldstein, Garcia, and Scattaregia (1988) showed in their experimental study the assumed effects of preinterview impressions on questioning strategies. They instructed participants to review résumés, application blanks, and job descriptions which manipulated impressions of the applicants' job suitability. Afterwards participants had to generate questions they would use in a following employment interview. Results indicated that participants "adopted confirmatory questioning strategies in that they planned to ask a significantly greater number of questions seeking negative information of low-suitability applicants than of high-suitability applicants" (p. 30). Judice and Neuberg (1998) as well experimentally showed interviewers' desire to confirm negative preinterview impressions which is why Study 1.3 focuses on investigating the effects of negative SNS-mediated

information on recruiters' intentions to seek for negative information by asking provocative interview questions. The following hypotheses are formulated:

**H2: SNS-mediated negative information about job applicants' OCBs increases OCB-related confirmatory questioning.**

*H2a: Information suggesting a low level of conscientiousness leads to a higher intention to ask a conscientiousness-related provocative interview question compared to a control group with no information.*

*H2b: Information suggesting a low level of helpfulness leads to a higher intention to ask a helpfulness-related provocative interview question compared to a control group with no information.*

*H2c: Information suggesting a low level of loyalty leads to a higher intention to ask a loyalty-related provocative interview question compared to a control group with no information.*

## **6.2 Method**

The following section describes the design, materials, and the procedure of Study 1.3.

### *6.2.1 Participants and design*

Sixty students at the University of Regensburg (43 female and 17 male; age ranged from 18 to 31 years,  $M = 22.17$ ,  $SD = 2.85$ ) participated in the experiment which was based on a one-factorial between-subjects design. The independent variable OCB had four conditions (conscientiousness vs. helpfulness vs. loyalty vs. control group). To demonstrate the validity of the experimental manipulations and the newly introduced interview question measure all materials were pretested with a total of 63 participants. All individuals participated in exchange for course credit or small gifts (e.g., chocolate bar) and were randomly and evenly assigned to the test conditions.

### *6.2.2 Materials*

#### *Scenario, role and job description*

The present study used the same trainee selection scenario as Study 1.1 and Study 1.2 and provided participants with the same instruction sheets and the same trainee job description.

### *Application documents*

All participants received the pretested résumé and cover letter of the highly qualified applicant of Study 1.1.

### *SNS-profiles*

In order to increase generalizability, the SNS-profile contents of Study 1.1 and Study 1.2 were slightly modified and pretested for each profile. While the topics stayed the same the crucial comments were reformulated and posted on the wall as self-comments of the profile owner.

To manipulate the applicant's unconscientiousness, a Facebook profile was generated on basis of the Study 1.1 profile suggesting a clear party and alcohol orientation. The relevant personal information was postings on the wall and consisted of the same party pictures as in Study 1.1. To test whether the profile had the intended effect on observers' impression formations, a pretest was conducted with 13 participants. Participants rated how conscientious they perceived the profile owner to be on a 7-point Likert scale (1 = *not at all*; 7 = *very much*). Conscientiousness was measured with the same two BIP-items ( $\alpha = .84$ ) as in Study 1.1 to make sure that impressions of the profile owner's private context conscientiousness were also perceived as meaningful and representative for profile owner's business context conscientiousness. A one sample *t*-test was conducted on the conscientiousness score to evaluate whether the mean was significantly different from 4, the neutral score of the conscientiousness scale. The sample mean of the unconscientious profile ( $M = 2.38$ ,  $SD = 0.98$ ) was significantly lower than 4,  $t(12) = -5.93$ ,  $p < .001$ , showing that the profile content had the intended effect on observers' conscientiousness impressions of the applicant.

To manipulate the applicant's unhelpfulness a Facebook profile was generated which consisted of a posting in which the applicant responded to a friend's question regarding her student job workday with a new temporary employee. The applicant stated that she did not help the new colleague because it would take too much time, it would keep her from doing her own work, and that the new colleague should teach herself or ask the manager (content derived from Podsakoff et al.'s (1990) OCB-scale item regarding *helping orient new people even though it is not required*). To test whether the profile had the intended effect on observers' impression formations, a pretest was conducted with 15 participants. Participants rated how helpful they perceived the profile owner to be on a 7-point Likert scale (1 = *not at all*; 7 = *very much*). Helpfulness was measured with a single item asking how helpful participants perceived the profile owner to be. A one sample *t*-test was conducted on the helpfulness score to evaluate whether the mean was significantly different from 4 (neutral score). The sample mean of the unhelpful profile ( $M = 1.10$ ,

$SD = 0.41$ ) was significantly lower than 4,  $t(14) = -26.19$ ,  $p < .001$ , showing that the profile content had the intended effect on observers' helpfulness impressions of the applicant.

To manipulate the applicant's disloyalty, a Facebook profile was generated on basis of the Study 1.2 profile which consisted of a posting of the applicant. In this posting she unreasonably criticized and disadvantageously talked about the members of a current student project which she was a part of and which did not go well. To test whether the profile had the intended effect on observers' impression formations, a pretest was conducted with 15 participants. Participants rated how loyal they perceived the profile owner to be on a 7-point Likert scale (1 = *not at all*; 7 = *very much*). Loyalty was measured with the same single item as in Study 1.2 asking how loyal participants perceived the profile owner to be. A one sample  $t$ -test was conducted on the loyalty score to evaluate whether the mean was significantly different from 4 (neutral score). The sample mean of the disloyal profile ( $M = 2.20$ ,  $SD = 1.21$ ) was significantly lower than 4,  $t(14) = -5.78$ ,  $p < .001$ , showing that the profile content had the intended effect on observers' loyalty impressions.

### Measures

Participants received the almost same assessment sheet as used in Study 1.2 to systematically evaluate the applicant's documents and personality impressions, to make screening decisions (DV 1), and to choose job interview questions out of a set of 16 questions (DV 2). However, the order of the different sections was changed due to the introduction of the new dependent variable (which will be further explained below) and due to the fact that measuring recruiters' impression formations was no main DV anymore, but used as a manipulation check. The first two sections checked the quality of the application documents (3 items) and the applicant's qualification and job suitability (6 items). Section three dealt with participants' impressions of the applicant's business-focused personality (6 items) and section four consisted of DV 1 measuring participants' screening decisions with one item. Section five was a catalogue with job interview questions which measured for each question to which extent participants would pose the question to the applicant in a job interview (DV 2). Section six dealt with participants' impressions of the applicant's social competence (10 items) and section seven asked for participants' impressions of the applicant's work behavior (8 items) and contained the three manipulation check items. Demographic information was collected in a final questionnaire. All ratings were made on a 7-point Likert scale (1 = *not at all*; 7 = *very much*).

To measure recruiters' confirmatory questioning (DV 2) participants were provided with the above mentioned list of questions. This operationalization was based on the *list methodology* of Sackett (1982) who first used it to investigate recruiters' confirmatory



questioning strategies in the context of employment interviews. In his study, Sackett (1982) provided participants with a list of questions, one half having the *intent to seek negative information about the applicant* and the other half having the *intent to seek positive/neutral information about the applicant*, and measured recruiters' confirmatory questioning based on the mean number of chosen positive/neutral and negative/provocative questions. For the present study, Sackett's (1982) list methodology was modified to that effect that participants did not have to choose between different questions, but had to indicate their intentions for each question to pose it to the applicant during an employment interview. This modification was chosen because in own previous studies which used the original list methodology participants reported about intentions to choose both positive/neutral and negative/provocative questions, but due to social desirability had dared to actually choose the negative/provocative questions. Therefore, to measure participants' confirmatory questioning intentions a 7-point Likert scale (1 = *not at all*; 7 = *very much*) was applied to every of the 16 questions on the list. The creation of the list with the 16 interview questions followed two steps. First, an initial pool of questions was developed by checking current application guidebooks (Hesse & Schrader, 2008; Püttjer & Schnierda, 2008, 2012) for typical positive/neutral and negative/provocative interview questions. These questions were then sorted into thematic categories and partly thematically adapted. In total, eight categories were defined including the following topics: (1) *Stress at work*, (2) *Helping colleagues*, (3) *Relationship with colleagues*, (4) *Organizational loyalty*, (5) *Conscientiousness at work*, (6) *Dealing with change*, (7) *Vocational future*, (8) *Reason for hiring*. Each category was assigned with two questions, one being positive/neutral, the other being negative/provocative. It is important to note that, since the focus of the present study lied on investigating the effects of low conscientiousness, low helpfulness, and low loyalty preinterview impressions, only the negative/provocative questions of category (2) ("You do not seem to be a helpful person. Is this correct?"), category (4) ("When it comes to the crunch, your own reputation is more important to you than the reputation of your working team, right?"), and category (5) ("You do not seem to be very reliable and conscientious. Having fun is most important for you, right?"), were relevant for examining the hypothesized confirmatory questioning effect. All other categories and questions functioned as distractors to disguise the true purpose of the interview question catalogue and were not included in the main calculations. Nevertheless, all of the 16 interview questions were preliminary rated regarding their negativity/provocativeness by graduate students in Business Psychology and by the before mentioned HR subject matter expert, in order to make sure that any of the eight categories consistently contained a positive/neutral and a negative/provocative interview question. Pretest participants (N = 20) rated on a 7-point Likert scale (1 = *not at all*;

7 = *very much*) the provocative character of each question. One sample *t*-tests were conducted on the provocation scores for each of the 16 questions to evaluate whether their means were significantly different from 4 (moderately provocative). In fact, sample means of all positive/neutral questions (all *M*s < 2.66, *SD*s < 1.57) were significantly lower than 4 (all *t*s < -3.85, all *p*s < .002) and sample means of all negative/provocative questions (all *M*s > 4.84, *SD*s < 2.06) were significantly higher than 4 (all *t*s > 2.33, all *p*s < .04). Accordingly, all questions were perceived as intended if being asked during an employment interview.<sup>2</sup>

### 6.2.3 Procedure

The present study used the same procedure as applied in Study 1.1 and Study 1.2. As described above the assessment sheet was added with a new section in order to measure participants' confirmatory questioning (DV 2). This section consisted of four pages including the eight question categories and a short instruction. The instruction explained that the applicant had been invited to a telephone interview and that it was the participant's task to prepare the interview by indicating for each of the following 16 interview questions his or her intention to pose the question to the applicant during the telephone interview. After filling out all six sections of the assessment sheet, participants were fully debriefed and received their course credit or a small gift.

## 6.3 Results

### 6.3.1 Manipulation check

To check whether the contents of the three SNS-profiles had the intended effects on participants' impressions of applicants' personalities, an ANOVA for each of the three single manipulation check items was conducted. The first ANOVA revealed a significant effect of the factor *OCB* on participants' conscientiousness ratings,  $F(3, 56) = 5.04$ ,  $p = .004$ ,  $\eta^2 = .21$ , and the subsequently conducted post hoc comparisons using Fisher LSD test showed that the unconscientious applicant was rated as significantly less conscientious ( $M = 4.67$ ,  $SD = 1.35$ ) than the control group applicant ( $M = 6.20$ ,  $SD = 0.86$ ,  $p = .001$ ).<sup>3</sup> The second ANOVA revealed a significant effect of the factor *OCB* on participants' helpfulness ratings,  $F(3, 56) = 14.22$ ,  $p < .001$ ,  $\eta^2 = .43$ , and the subsequently conducted post hoc comparisons using Fisher LSD test showed that the unhelpful applicant was rated as significantly less helpful ( $M = 2.27$ ,  $SD = 1.49$ ) than the

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<sup>2</sup> Descriptive statistics of the three relevant negative/provocative questions: *helpfulness* ( $M = 5.65$ ,  $SD = 2.06$ ), *loyalty* ( $M = 5.90$ ,  $SD = 1.07$ ), *conscientiousness* ( $M = 6.69$ ,  $SD = 0.63$ ).

<sup>3</sup> Descriptive statistics and results of remaining post hoc control group comparisons: *unhelpful profile* ( $M = 4.93$ ,  $SD = 1.62$ ,  $p = .006$ ), *disloyal profile* ( $M = 5.73$ ,  $SD = 0.88$ ,  $p = .30$ ).

control group applicant ( $M = 4.60$ ,  $SD = 1.12$ ,  $p < .001$ ).<sup>4</sup> The third ANOVA revealed a significant effect of the factor OCB on participants' loyalty ratings,  $F(3, 56) = 13.37$ ,  $p < .001$ ,  $\eta^2 = .42$ , and the subsequently conducted post hoc comparisons using Fisher LSD test showed that the disloyal applicant was rated as significantly less loyal ( $M = 3.93$ ,  $SD = 0.96$ ) than the control group applicant ( $M = 5.33$ ,  $SD = 0.90$ ,  $p = .001$ ).<sup>5</sup>

### 6.3.2 Screening decision

An univariate ANOVA was conducted to examine the hypothesized effects of the SNS-profiles on recruiters' intentions to invite the applicant to a job interview. The ANOVA revealed a significant main effect of the OCB-manipulation on participants' screening decisions,  $F(3, 56) = 4.73$ ,  $p = .005$ ,  $\eta^2 = .20$ . To further analyze the main effect post hoc comparisons using Fisher LSD test were conducted. Results showed that according to hypothesis 1a and hypothesis 1b the mean interview intention scores for applicants with an unconscientious profile ( $M = 5.07$ ,  $SD = 1.28$ ) and the applicant with an unhelpful profile ( $M = 4.80$ ,  $SD = 1.90$ ) were significantly lower than for the control group ( $M = 6.40$ ,  $SD = 0.63$ ,  $ps < .007$ ). However, contrary to hypothesis 1c the mean interview intention score for the applicant with a disloyal profile ( $M = 5.80$ ,  $SD = 1.01$ ) was not significantly different from the mean score of the control group ( $p = .21$ ).

### 6.3.3 Confirmatory questioning

Three ANOVAs were conducted to investigate the hypothesized effects of the contents of each SNS-profile on recruiters' intentions to choose the themed provocative question to be posed to the applicant in the telephone interview. The first ANOVA revealed a significant main effect of the OCB-manipulation on participants' intentions to choose the conscientiousness-related provocative question,  $F(3, 56) = 5.56$ ,  $p = .002$ ,  $\eta^2 = .23$ . To further analyze the main effect, post hoc comparisons using Fisher LSD test were conducted. Results showed that according to hypothesis 2a recruiters who observed the unconscientious profile showed higher intentions to pose the conscientiousness-related provocative question to the applicant ( $M = 3.53$ ,  $SD = 2.45$ ) than the control group ( $M = 1.67$ ,  $SD = 1.30$ ,  $p = .002$ ).<sup>6</sup> The second ANOVA revealed no significant main effect of the OCB-manipulation on participants' intentions to choose the helpfulness-related provocative question,  $F(3, 56) = 1.90$ ,  $p = .14$ , indicating that none of the four groups were significantly different from each other (unconscientious profile:  $M = 2.47$ ,  $SD = 1.60$ ; unhelpful profile:  $M = 4.07$ ,  $SD = 2.55$ ; disloyal profile:  $M = 2.60$ ,  $SD = 2.03$ ; control group:

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<sup>4</sup> Descriptive statistics and results of remaining post hoc control group comparisons: *unconscientious profile* ( $M = 5.00$ ,  $SD = 1.25$ ,  $p = .41$ ), *disloyal profile* ( $M = 3.07$ ,  $SD = 1.39$ ,  $p = .002$ ).

<sup>5</sup> Descriptive statistics and results of remaining post hoc control group comparisons: *unconscientious profile* ( $M = 4.67$ ,  $SD = 1.23$ ,  $p = .10$ ), *unhelpful profile* ( $M = 2.93$ ,  $SD = 1.22$ ,  $p < .001$ ).

<sup>6</sup> Descriptive statistics and results of remaining post hoc control group comparisons: *unhelpful profile* ( $M = 1.53$ ,  $SD = 1.13$ ,  $p = .82$ ), *disloyal profile* ( $M = 1.73$ ,  $SD = 0.88$ ,  $p = .91$ ).

$M = 2.73$ ,  $SD = 2.05$ ). The third ANOVA neither revealed a significant main effect of the OCB-manipulation on participants' intentions to choose the loyalty-related provocative question,  $F(3, 56) = 0.23$ ,  $p = .88$ , indicating that none of the four groups were significantly different from each other (unconscientious profile:  $M = 2.40$ ,  $SD = 1.60$ ; unhelpful profile:  $M = 2.53$ ,  $SD = 1.64$ ; disloyal profile:  $M = 2.80$ ,  $SD = 1.74$ ; control group:  $M = 2.33$ ,  $SD = 1.68$ ). Accordingly, hypothesis 2b and hypothesis 2c must be rejected.

## **6.4 Discussion**

### **6.4.1 Findings**

The results of the present study partially replicated and expanded the results of Study 1.1 and Study 1.2 investigating the effects of SNS-mediated information on recruiters' screening decisions. According to hypothesis 1a and the findings of Study 1.1 applicants with a profile showing unconscientious behaviors were less likely to be invited to a job interview than the applicant of the control group with no SNS-mediated information. The same results were found in Study 1.2 for a non-prosocial profile assembled of unhelpful and disloyal behaviors. Study 1.3 disassembled these two OCB-dimensions in order to examine the unique effect of each of the dimensions. Results showed that consistent with hypothesis 1b applicants with a profile showing unhelpful behaviors were less likely to be invited to a job interview; however, contrary to hypothesis 1c applicants with a profile showing disloyal behavior were not less likely to be invited to a job interview compared to the control group. This is surprising because especially in times where companies struggle with high turnover rates and employees' commitment to the organization seems to be on the decline (Johnson, 2005), recruiters are supposed to be especially sensitive to this kind of information when making screening decisions. However, participants were university students who might not be aware of these trends and of the importance of such information and therefore did not give the same weight to such information as HR-professionals might have done. Moreover, research on generation-specific values and attitudes suggests that the so called *Generation Y* (a demographic cohort with the birth years ranging from the early 1980s to the early 2000s) does not have and value organizational loyalty as much as older generations do (Bruch, Kunze, & Böhm, 2010). Therefore, since the applicant was a member of Generation Y, participants might not have expected and required high loyalty from her. Or, since study participants themselves were members of Generation Y they did not attach great importance to the loyalty-related information and did not draw any significant inferences. Accordingly, loyalty might have been a characteristic not underlying the implicit personality theory bias in contrast to

helping (as a sub-trait of agreeableness) and conscientiousness (Passini & Norman, 1966). In fact, the manipulation check results showed that in the context of the employee selection scenario, participants gave considerably higher ratings regarding the applicant's loyalty than participants in the pretest of the SNS-profile. All in all, this goes well with findings of Podsakoff et al. (2011) who also used student participants to investigate among others the effects of loyalty-related information on selection decisions in the context of employment interviews. They found that information indicating a low level of loyalty had a very small effect on recruiters' impression formations and selection decisions. Their argument might further explain the present finding that the moderate conscientiousness score of the manipulation check had an effect on participants' screening decisions, while the moderate loyalty score did not: "[L]ow levels of [other organizational citizenship] behaviors are viewed as stronger signals of potential problems a job candidate may cause if he or she is hired than [...] low levels of [...] organizational loyalty" (p. 321). For example, an unconscientious employee who does not complete his tasks reliably or does not follow common procedures and company rules is more likely to negatively affect others directly in their day-to-day work life than an employee who at some point does not act loyally towards a project group or leaves the company unexpectedly. Therefore, those who make selection decisions might have a clear idea of what it means to work with an unconscientious person and how hiring such a person would affect them. All in all, the present findings suggest unique and strong effects for information regarding applicants' low conscientiousness and low helpfulness, but information regarding applicants' low loyalty seems to be less relevant and seems to have no effect on recruiters' screening decisions.

Almost the same pattern of results can be found for DV 2 which measured participants' intentions to ask themed provocative questions during a telephone interview. In line with hypothesis 2a, recruiters who observed the unconscientious profile showed a higher intention to pose the conscientiousness-related provocative question to the applicant than the control group. Even though the ANOVA results regarding the helpfulness-related provocative question did not reach statistical significance, there are several reasons to believe that recruiters who observe an unhelpful profile should have higher intentions to ask a helpfulness-related provocative question. First of all, it is rather unlikely that information which led to the strongest negative OCB-related impressions and the lowest intentions to invite the applicants to an interview would not have the predicted confirmatory questioning effect. Second of all, the ANOVA results showed a  $p$ -value close to marginal significance and a medium and almost large effect size ( $\eta^2 = .09$ ) which indicates a meaningful practical relevance that should not be ignored. Third of all, results of the later Study 1.5 indeed show the hypothesized effect. Therefore, driven by scientific

interest the present data was used beyond the regular calculations in a planned contrast analysis to examine the already directed hypothesis regarding participants' intentions to ask the helpfulness-related provocative interview question. In fact, the difference between the intention scores of the control group and the intention scores of the group with an unhelpful profile reached marginal significance.<sup>7</sup> No confirmatory questioning was found for participants who received information regarding the applicant's disloyalty. As argued above participants did not form very strong disloyalty impressions and probably gave low weight to this characteristic when making selection decisions which resulted in the same low intentions to ask the loyalty-related provocative question as for the control group.

#### 6.4.2 Limitations

Caution should be given to the generalizability of the loyalty-related results because as argued above, participants were members of the so-called Generation Y which is supposed to value organizational loyalty less than other generations. Furthermore, since participants were students with almost no organizational work experience, they might have been unaware of the economical relevance of employees' organizational loyalty and commitment. Therefore, these findings need to be replicated with a non-student sample of HR-participants before it can be generally concluded that SNS-mediated loyalty-related information is not taken into account when making screening decisions or preparing interview questions. Furthermore, one could argue that the operationalization of the disloyal profile might have been too weak or perceived as not representative or relevant in regards of the applicant's loyalty because the manipulation check indicates that participants perceived the applicant as moderately loyal rather than disloyal. However, these ratings were made at the very end of the assessment sheet and therefore were probably influenced by previous ratings and decisions. Moreover, pretest results showed that student participants indeed perceived the profile owner as disloyal, at least out of the employee selection scenario. All in all, the present findings should be replicated best with a sample of HR-participants to further examine whether SNS-mediated loyalty-related information affects recruiters' decision making and accordingly helps to promote OCB already in the employee selection process (see Study 1.4).

One could argue that participants' intentions to ask the provocative conscientiousness-related question or the provocative helpfulness-related question were moderate, but may not be strong enough to actually pose the inconvenient questions to an applicant. However, one must consider that student participants might have had the idea that recruiters should not ask such questions or they had own experiences with provocative questioning and therefore indicated reduced intentions to ask negative

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<sup>7</sup> Contrast analysis result:  $t(56) = 1.75, p = .085$ .

questions. Moreover, maybe participants put themselves in the applicant's position because of own upcoming application phases and might have felt compassion with the peer applicant and therefore gave rather moderate than strong intention ratings. However, since HR-professionals are not likely to feel this way and the use of provocative and offensive questions during employment interviews is common practice (Weuster, 2008), HR-professionals might have stronger intentions to actually pose provocative questions to applicants, especially when underlying the confirmatory questioning bias. In fact, Dougherty, Turban, and Callender (1994) showed in a field study that HR-professionals underlie this confirmatory bias and tend to confirm first impressions in employment interviews. Moreover, research has shown the confirmatory questioning bias to be especially strong when interviewers generate their own interview questions (e.g., Binning et al., 1988) which is particularly pertinent considering that most of the employment interviews are performed in an unstandardized way (Dipboye, 1997; Terpstra & Rozell, 1997) and more than one third of the interviewers are free to ask whatever they like (Van der Zee et al., 2002). This even rules out the methodological criticism coming along with Sackett's (1982) *list methodology* compared to the *free question generation methodology* (e.g., provocative questions are probably not part of an official catalogue of pre-specified interview questions; or, despite actually high intentions to ask a provocative question, participants may for some reason not like the wording of the pre-formulated question and therefore indicate lower intentions than actually present). All in all, even though the intentional ratings of the student participants were only moderate, it is very likely that in natural settings interviewers will pose OCB-related provocative questions to the applicants in case of negative preinterview OCB-impressions. However, the present findings need to be replicated with a sample of HR-participants which will be one of the purposes of Study 1.4.

#### 6.4.3 Implications

The findings of the present study regarding recruiters' screening decisions and confirmatory questioning are highly relevant in practice. First of all, the results of Study 1.1 were replicated and accordingly allow for a certain generalizability regarding recruiters' sensitivity to conscientiousness-related SNS-mediated information and their intuition to take such information into account when making screening decisions. The very same findings can be reported for SNS-mediated information regarding applicants' helping behaviors. Recruiters seem to be sensitive to problematic information and intuitively take this information into account when making screening decisions. Even though this sensitivity and intuition was not found for loyalty-related information, the present results support the idea of a beneficial impact of using applicants' online self-disclosure in order

to promote certain OCBs in the context of employee selection. More precisely, performing online screenings seems to reduce the risk that unconscientious or unhelpful applicants remain in the employee selection process after the screening phase (*promoting by rejecting*). Moreover, it might increase the probability that final decision makers are provided with positive OCB-related information which has been shown to be taken into account when making final hiring decisions (e.g., Bohnert & Ross, 2010) and accordingly might increase the probability of employing people with a propensity to exhibit OCBs (*promoting by selecting*).

However, the present findings regarding recruiters' use of provocative interview questions provide cause for concern, especially in the light of the above mentioned findings of a generally low interview standardization and the common interviewer practice to generate own interview questions. These findings are aggravated by the fact that 63.6% of the interviewers prepare the employment interview only shortly before the interview and 20.0% do not even make any preparations (Van der Zee et al., 2002) which very likely promotes the spontaneous formulation of biased questions. Not only that provocative confirmatory questioning should have no added diagnostic value for the selection process (with exception for positions which include being exposed to provocative questions and statements of others, for example, in service centers for customer complaints), it even can adversely affect the whole recruiting process. In case of negative preconceptions, confirmatory questioning strategies lead to asking provocative, inconvenient, and offensive interview questions which is perceived as very unpleasant, annoying, and disappointing by the applicants since interviewees want to be treated fairly and with respect (Mondy & Mondy, 2014). Study results of the research field of *Candidate Experience* suggest that 80% of the applicants share their application experiences with friends, student colleagues, or in online forums, and therefore unpleasant selection procedures negatively affect employer images and lead to lower application rates (e.g., Athanas & Wald, 2014). Moreover, 90% of applicants state that they use their employment interview impressions as a basis of deciding whether to accept a job offer or not; furthermore, 60% of applicants already refused a job offer because of interview experiences (Weitzel, 2013). Therefore, recruiters should absolutely avoid confirmatory questioning strategies, for example by performing employment interviews in a standardized and structured way. Campion, Palmer, and Campion (1997) define structure as "any enhancement of the interview that is intended to increase psychometric properties by increasing standardization or otherwise assisting the interviewer in determining what questions to ask or how to evaluate responses" (p. 656), which has been empirically shown to result in higher predictive validity and accordingly better selection decisions (unstructured interviews:  $r = .38$ ; structured interviews:  $r = .51$ ; Schmidt & Hunter, 1998).



However, it is important to note that this confirmatory bias is not limited to SNS-mediated information, but occurs with all other sources of preinterview information as well. Therefore, the present results underscore the importance and the general demand of implementing structured interviews as scientifically sound tools in the employee selection process.

## 7. Study 1.4

The main purpose of the present study is to see whether the examined effects of Study 1.3 also occur with a sample of HR-professionals. Therefore, it will be investigated whether and how SNS-mediated *negative* information about applicants' *conscientiousness*, *helpfulness*, and *loyalty* affects recruiters' *screening decisions* and their *intentions to ask themed provocative questions* in an employment interview.

### 7.1 Background

As argued in the course of this study series, recruiters are very likely to be sensitive to SNS-mediated negative information about applicants' conscientiousness, helping, and loyalty behavior and accordingly take this information into account when making screening decisions. Even though Study 1.3 did not show the expected effects of information regarding the applicant's disloyalty, it is still supposed that HR-professionals will take this information into account when making screening decisions. As already argued HR-professionals are very likely to be aware of companies' struggles with high turnover rates and the decline of employees' commitment to the organization (Johnson, 2005) and therefore will give greater weight to such information when making screening decisions. Following Podsakoff et al.'s (2011) argumentation, information suggesting an applicant to be a disloyal person should have a negative effect on recruiters' screening decisions because such employees are more likely to turnover and less likely to tell other candidates about the positive aspects of their job and the organization, and therefore make recruiters' jobs unnecessary difficult. All in all, the following hypotheses are formulated:

**H1: SNS-mediated negative information about job applicants' OCBs affects recruiters' screening decisions.**

*H1a: Information suggesting a low level of conscientiousness leads to lower intentions to invite the applicant to a job interview compared to a control group with no information.*

*H1b: Information suggesting a low level of helpfulness leads to lower intentions to invite the applicant to a job interview compared to a control group with no information.*

*H1c: Information suggesting a low level of loyalty leads to lower intentions to invite the applicant to a job interview compared to a control group with no information.*

Furthermore, research has shown that HR-professionals' preinterview impressions lead to confirmatory questioning strategies (Dougherty et al., 1994) and that the use of provocative and offensive questions during employment interviews is common practice (Weuster, 2008). Therefore, HR-professionals are supposed to apply confirmatory questioning and the following hypotheses are accordingly formulated:

**H2: SNS-mediated negative information about job applicants' OCBs increases OCB-related confirmatory questioning.**

*H2a: Information suggesting a low level of conscientiousness leads to a higher intention to ask a conscientiousness-related provocative interview question compared to a control group with no information.*

*H2b: Information suggesting a low level of helpfulness leads to a higher intention to ask a helpfulness-related provocative interview question compared to a control group with no information.*

*H2c: Information suggesting a low level of loyalty leads to a higher intention to ask a loyalty-related provocative interview question compared to a control group with no information.*

## **7.2 Method**

The following section describes the design, materials, and the procedure of Study 1.4.

### **7.2.1 Participants and design**

Thirty-two HR-professionals of a German automotive industry company (24 female and 8 male; age ranged from 24 to 49 years,  $M = 33.28$ ,  $SD = 6.83$ ; work experience ranged from 1 to 20 years,  $M = 6.52$ ,  $SD = 5.11$ ) participated in the online study. Thirty-seven participants started the online survey and 32 participants completed the online survey. The pool of participants was provided by three HR-managers. The online study was based on a one-factorial between-subjects design with the independent variable OCB having three conditions (helpfulness vs. loyalty vs. control group)<sup>8</sup>. All individuals participated on voluntary basis and were randomly and evenly assigned to the test conditions.

### **7.2.2 Materials**

#### *Scenario, role and job description*

The present study used the almost same trainee selection scenario as Study 1.3 which was adapted to the company's HR-trainee program and the company's corporate design.

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<sup>8</sup> Due to a low participation rate the experimental group "unconscientiousness" had to be canceled.

Participants were provided with the accordingly adapted versions of the instruction sheets and the trainee job description and additionally received an overview about the trainee recruiting process of the company: (1) Application screening, (2) Telephone interview, (3) Assessment center, (4) Personal interview.

#### *Application documents*

All participants received the pretested résumé and cover letter of the highly qualified applicant of Study 1.1.

#### *SNS-profiles*

The same pretested SNS-profiles of Study 1.3 were used to manipulate the applicant's helpfulness and loyalty.

#### *Measures*

Participants received the same assessment sheet as used in Study 1.3 to systematically evaluate the applicant's documents and personality impressions, to make screening decisions (DV 1), and to choose job interview questions out of a set of 16 questions (DV 2). Recruiters' OCB-related impression formations were measured at the end as a manipulation check. All ratings were made on a 7-point Likert scale (1 = *not at all*; 7 = *very much*). A final text field was added for participants' comments. Demographic information was collected in a final questionnaire.

#### *7.2.3 Procedure*

The present study was conducted as an online study because HR-professionals participated from all over Germany and laboratory testing was not applicable. All participants received an email with a link to an online survey (online platform: *LimeSurvey*) which led participants with a step-by-step procedure through the study. The information presented during each step corresponded in order and content with the information presented on the sheets and printouts of Study 1.3. After working through the scenario and filling out all assessment sections (approx. 20 min), participants were fully debriefed and thanked for their participation.

### **7.3 Results**

Due to a low participation rate all inference statistical tests were additionally performed with non-parametric tests and produced the same results as parametric tests. Therefore, only results of parametric tests are reported in the following section.

### 7.3.1 Manipulation check

To check whether the contents of the SNS-profiles had the intended effects on participants' impressions of the applicants' personalities, an ANOVA for each of the two single manipulation check items was conducted. The first ANOVA revealed a significant effect of the factor *OCB* on participants' helpfulness ratings,  $F(2, 29) = 16.44$ ,  $p < .001$ ,  $\eta^2 = .53$ , and the subsequently conducted post hoc comparisons using Fisher LSD test showed that the unhelpful applicant was rated as significantly less helpful ( $M = 2.09$ ,  $SD = 0.83$ ) than the control group applicant ( $M = 4.90$ ,  $SD = 1.29$ ,  $p < .001$ ).<sup>9</sup> The second ANOVA revealed a significant effect of the factor *OCB* on participants' loyalty ratings,  $F(2, 29) = 4.32$ ,  $p = .02$ ,  $\eta^2 = .23$ , and the subsequently conducted post hoc comparisons using Fisher LSD test showed that the disloyal applicant was rated as marginally significant less loyal ( $M = 3.27$ ,  $SD = 1.42$ ) than the control group applicant ( $M = 4.40$ ,  $SD = 1.08$ ,  $p = .06$ ).<sup>10</sup>

### 7.3.2 Screening decision

An univariate ANOVA was conducted to examine the hypothesized effects of the SNS-profiles on recruiters' intentions to invite the applicant to a job interview. The ANOVA revealed a significant main effect of the *OCB*-manipulation on participants' screening decisions,  $F(2, 29) = 5.33$ ,  $p = .01$ ,  $\eta^2 = .27$ . To further analyze the main effect post hoc comparisons using Fisher LSD test were conducted. Results showed that according to hypothesis 1b, the mean interview intention score for the applicant with an unhelpful profile ( $M = 4.18$ ,  $SD = 1.83$ ) was significantly lower than for the control group applicant ( $M = 6.00$ ,  $SD = 1.05$ ,  $p = .004$ ). Contrary to hypothesis 1c, the mean interview intention score for the applicant with a disloyal profile ( $M = 5.45$ ,  $SD = 0.82$ ) was not significantly different from the mean score for the control group applicant ( $p = .35$ ).

### 7.3.3 Confirmatory questioning

Two ANOVAs were conducted to investigate the hypothesized effects of each SNS-profile on recruiters' intentions to choose the themed provocative question to be posed to the applicant in a telephone interview. The first ANOVA revealed no significant main effect of the *OCB*-manipulation on participants' intentions to choose the helpfulness-related provocative question,  $F(2, 29) = 1.22$ ,  $p = .31$ , indicating that none of the three groups were significantly different from each other (unhelpful profile:  $M = 1.00$ ,  $SD = 0.00$ ; disloyal profile:  $M = 1.27$ ,  $SD = 0.47$ ; control group:  $M = 1.40$ ,  $SD = 0.97$ ). Therefore, hypothesis 2b must be rejected. The second ANOVA neither revealed a significant main

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<sup>9</sup> Descriptive statistics and results of the remaining post hoc control group comparison: *disloyal profile* ( $M = 3.55$ ,  $SD = 1.21$ ,  $p = .01$ ).

<sup>10</sup> Descriptive statistics and results of the remaining post hoc control group comparison: *unhelpful profile* ( $M = 2.73$ ,  $SD = 1.42$ ,  $p = .007$ ).

effect of the OCB-manipulation on participants' intentions to choose the disloyalty-related provocative question,  $F(2, 29) = 1.74$ ,  $p = .19$ , indicating that none of the three groups were significantly different from each other (unhelpful profile:  $M = 1.09$ ,  $SD = 0.30$ ; disloyal profile:  $M = 2.27$ ,  $SD = 1.79$ ; control group:  $M = 1.80$ ,  $SD = 1.87$ ).

## **7.4 Discussion**

### **7.4.1 Findings**

In the present study, the screening decision results (DV 1) of Study 1.3 were replicated with a sample of HR-professionals. In accordance with the previous results, only information about the applicant's unhelpfulness led to lower recruiter interview intentions, information about the applicant's disloyalty had no effect. However, this is surprising, since it was expected that recruiters would give greater weight to loyalty-related information because of being aware of problems and consequences coming with hiring disloyal persons. Even though recruiters were sensitive to this information and formed lower loyalty impressions on basis of the SNS-profile compared to the control group, these impressions were not relevant for their screening decisions. This suggests that negative loyalty-related information is no critical topic recruiters take into account when deciding whether or not to invite an applicant. Nevertheless, it should be mentioned that the pretest result of the disloyal SNS-profile indicated considerably stronger perceived disloyalty than indicated by the manipulation check results in Study 1.3 and Study 1.4. Therefore, one could argue that something (e.g., the applicant's high qualification or the whole trainee selection scenario) might have qualified the perceived disloyalty of the applicant which led to a less extreme disloyalty impression which accordingly was not strong enough to affect recruiters' screening decisions. However, since recruiters' impression formations were measured at the very end, it is unclear at what stage of the whole assessment and how this potential qualification might have taken place. It is conceivable that due to dissonance-reducing mechanisms the final loyalty rating was less critical after already making important decisions which the applicant's disloyalty was not considered as relevant for. Due to this lack of clarity, the focus should lie on the results of the screening decision variable which was measured at first and suggests that information about applicants' low loyalty does not have the expected impact on recruiters' screening decisions.

The present study did not replicate the findings of Study 1.3 regarding recruiters' intentions to ask provocative interview questions (DV 2). Neither information about the applicant's unhelpfulness nor about her disloyalty led to higher confirmatory questioning

intentions compared to the control group. This is surprising because research has shown that HR-professionals' preinterview impressions lead to confirmatory questioning strategies (Dougherty et al., 1994) and that the use of provocative and offensive questions during employment interviews is common practice (Weuster, 2008). However, there are two possible reasons why the expected effects were not found. The before mentioned problems with Sackett's (1982) *list methodology* may apply for the sample of HR-professionals as well. It is likely that recruiters would not literally ask the proposed questions and therefore indicated very low intentions to pose exactly these questions to the applicant. Nevertheless, it is very likely that those interviewers who perform their interviews in an unstandardized and unstructured way, generate comparable questions spontaneously during their conversation with the applicant. Therefore, it is possible that the effect did not occur due to methodological reasons, but will occur in real life settings. Moreover, it cannot be ruled out that the participants showed socially desirable responding indicated by the blatantly obvious low intention ratings. Participants knew that they represented their company's recruiting division and that indicating high intentions of asking provocative questions might put them and the company in a bad light. This assumption is suggested by the comments participants left in the final text field and by statements directly addressed to the author. However, before drawing further conclusions, additional studies with HR-professionals should be conducted and methodological weaknesses should be taken care of (e.g., applying the *free question generation methodology*).

#### 7.4.2 Limitations

The most important limitation of this study is that it was carried out as an online study. Even though there were good reasons, this method has some drawbacks which should not be ignored. Most importantly, it could not be controlled for environmental conditions under which the HR-professionals participated. For example, it is unclear which technical devices were used to complete the online survey (e.g., desktop computer, tablet, smartphone) and how this might have influenced participants' information processing. Furthermore, in laboratory settings it can be controlled for many kinds of distractions and interruptions (e.g., telephone ringing, colleagues asking, pop-up windows) which is not the case for studies based on online surveys. Finally, as already mentioned in the method section the pool of participants was provided by three HR-managers and therefore a certain sample bias cannot be ruled out. All in all, the presented study should be carried out again under more controlled conditions and with a larger sample.

#### *7.4.3 Implications*

The replication of the impression formation and screening decision results with a sample of HR-professionals is an important step towards generalizing the previous findings. Recruiters seem to be sensitive to OCB-related information derived from applicants' SNS-profiles and form according impressions of applicants' OCB-propensities. However, only negative helping-related information has an effect on recruiters' screening decisions, while negative information about applicants' loyalty has no such effect. From a practical point of view this is unfortunate because screening applicants' SNS-profiles seems not to be applicable in regards of intuitively promoting loyalty behavior. However, from a scientific point of view this finding has the positive effect of providing result differentiation. In case of all OCB-operationalizations having the same negative effect on recruiters' intentions to invite the applicant to a job interview, one could argue that this is not only an OCB-related effect, but rather a general effect occurring with all kinds of negative information. Even though this argument cannot completely be ruled out, the present differentiated findings suggest that screening applicants' SNS-profiles can have a positive effect on promoting helping behavior in the context of employee selection by promoting the rejection of unhelpful applicants.

Results regarding recruiters' intentions to ask provocative OCB-related questions were not replicated with the sample of HR-professionals. From a practical point of view, this is beneficial because posing provocative questions mostly has no diagnostic added value and can lead to negative candidate experience with all its above mentioned consequences. However, as argued above there are several reasons to believe that recruiters generate such provocative questions in the context of employment interviews. Moreover, under certain circumstances (e.g., ego depletion) confirmatory questioning strategies are likely to even increase. Therefore, one purpose of the following Study 1.5 is to investigate the effect of ego depletion on confirmatory questioning strategies after screening an applicant's SNS-profile.



## 8. Study 1.5

The main purpose of the present study is to examine the impact of recruiters' states of *ego depletion* on *confirmatory questioning strategies*. Furthermore, the present study tries to replicate previous findings regarding the impact of *negative* information about applicants' *conscientiousness*, *helpfulness*, and *loyalty* on recruiters' *screening decisions*.

### 8.1 Background

As already argued in the course of this study series, recruiters are sensitive to SNS-mediated information about applicants' conscientiousness, helping and loyalty behaviors and accordingly take this information into account when making screening decisions. Building on the findings of Study 1.1 - Study 1.4 the following hypotheses are formulated:

**H1: SNS-mediated negative information about job applicants' OCBs affects recruiters' screening decisions.**

*H1a: Information suggesting a low level of conscientiousness leads to lower intentions to invite the applicant to a job interview compared to a control group with no information.*

*H1b: Information suggesting a low level of helpfulness leads to lower intentions to invite the applicant to a job interview compared to a control group with no information.*

*H1c: Information suggesting a low level of loyalty leads to lower intentions to invite the applicant to a job interview compared to a control group with no information.*

Research has repeatedly shown "that people tend to prefer information that is consistent with their decisions, attitudes, and beliefs and, in contrast, neglect information that is standpoint-inconsistent (biased information search)" (Fischer, Greitemeyer, & Frey, 2008, p. 382). The relevance of such biased information search in the context of employment interviews has been described detailed in Study 1.3 by showing that interviewers tend to seek for evidence to confirm preinteraction beliefs by applying confirmatory questioning strategies. Fischer et al. (2008) found that the effect of biased information search is augmented by the depletion of individuals' self-regulation resources (i.e., *ego depletion*). Self-regulation is defined as the exertion of control over the self by the self and is used when an individual tries to "change the way he or she would otherwise think, feel, or behave" (Muraven & Baumeister, 2000, p. 247). Many scholars support the idea that self-regulation is a limited resource which becomes depleted when required for various psychological and behavioral activities (e.g., intellectual performance, controlling

behavioral impulses). Therefore, it is obvious to assume that during the workday recruiters now and then are in a state of ego depletion (e.g., after screening numerous applications) which might accordingly augment the effect of confirmatory questioning in the context of subsequent employment interviews. The negative consequences of such a questioning strategy have been mentioned in Study 1.3 which is why it is important to investigate whether the state of ego depletion augments the use of such a strategy. Even though the findings of Fischer et al. (2008) are limited to a post-decisional research paradigm (i.e., investigating how people search for standpoint-consistent and standpoint-inconsistent information *after* making a preliminary decision), they argue that the state of ego depletion should also augment the confirmation of initial expectations, for example by confirmatory hypothesis testing. In fact, Sackett (1982) described interviewers as *hypothesis testers* alluding to the examined effects of impressions of applicants on interviewer questioning strategies. Choosing interview questions which are likely to confirm preinteraction beliefs creates belief-consistent information and can be understood as a form of biased information search. Accordingly, the following interaction hypotheses between recruiters' states of ego depletion and OCB-related impressions of the applicant are formulated:

**H2: SNS-mediated negative information about job applicants' OCBs increases OCB-related confirmatory questioning. This effect is augmented by a state of high ego depletion.**

*H2a: Information suggesting a low level of conscientiousness leads to a higher intention to ask a conscientiousness-related provocative interview question compared to a control group with no information. This effect is augmented by a state of high ego depletion.*

*H2b: Information suggesting a low level of helpfulness leads to a higher intention to ask a helpfulness-related provocative interview question compared to a control group with no information. This effect is augmented by a state of high ego depletion.*

*H2c: Information suggesting a low level of loyalty leads to a higher intention to ask a loyalty-related provocative interview question compared to a control group with no information. This effect is augmented by a state of high ego depletion.*

## **8.2 Method**

The following section describes the design, materials, and the procedure of Study 1.5.

### *8.2.1 Participants and design*

One hundred and twenty students at the University of Regensburg (84 female and 36 male; age ranged from 18 to 33 years,  $M = 23.64$ ,  $SD = 3.63$ ) participated in the

experiment which was based on a two-factorial between-subjects design. The first independent variable *OCB* had four conditions (conscientiousness vs. helpfulness vs. loyalty vs. control group) and the second independent variable *ego depletion* had two conditions (low vs. high). All individuals participated in exchange for course credit or small gifts (e.g., chocolate bar) and were randomly and evenly assigned to the test conditions.

### *8.2.2 Materials*

#### *Scenario, role and job description*

The present study used the same trainee selection scenario as Study 1.4 and provided participants with the same instruction sheets and the same trainee job description.

#### *Application documents*

All participants received the pretested résumé and cover letter of the highly qualified applicant of Study 1.1.

#### *SNS-profiles*

The pretested SNS-profiles of Study 1.3 and Study 1.4 were used to manipulate the applicant's conscientiousness, helpfulness, and loyalty. The control group did not receive a SNS-profile.

#### *Ego depletion*

To manipulate participants' states of ego depletion, the procedure of Fischer et al. (2008) was chosen, a proven procedure for inducing a state of low or high ego depletion. Prior to the selection scenario, participants of both ego depletion conditions received three standard letter-size sheets of paper (European size A4) bearing a difficult text about statistics. In the low depletion condition, participants had to underline all letter *es* (e.g., Peter). In the high depletion condition, participants had to consider the following extra rules: (1) to underline all *es* only when the *es* were not directly preceded or followed by another vowel, (2) not to underline those *es* that lay only two letters away from another vowel (e.g., no *e* should be underlined in the name Peter). After ten minutes the concentration task was stopped and participants received the instructions for the selection scenario.

#### *Measures*

Participants received the same assessment sheet as used in Study 1.3 to systematically evaluate the applicant's documents and personality impressions, to make screening

decisions (DV 1), and to choose job interview questions out of a set of 16 questions (DV 2). Recruiters' OCB impression formations were measured at the end as a manipulation check. Demographic information was collected in a final questionnaire. All ratings were made on a 7-point Likert scale (1 = *not at all*; 7 = *very much*).

### 8.2.3 Procedure

The present study used the same procedure as applied in Study 1.3. However, before starting with the actual selection scenario, participants had to work on the above mentioned concentration task.

## 8.3 Results

### 8.3.1 Manipulation check

To check whether the ego depletion manipulation had the intended effect, participants were asked to indicate on a 7-point Likert scale (1 = *not at all*; 7 = *very much*) how concentrated they felt prior to the selection scenario. An independent samples *t*-test was conducted on the self-rated concentration score to evaluate whether the means of the two ego depletion conditions were significantly different. The *t*-test results were as expected and showed that the sample mean of the low ego depletion condition ( $M = 4.87$ ,  $SD = 1.22$ ) was significantly higher than the sample mean of the high ego depletion condition ( $M = 4.39$ ,  $SD = 1.39$ ),  $t(118) = 2.01$ ,  $p = .04$ ,  $d = 0.37$ .

To check whether the contents of the three SNS-profiles had the intended effects on participants' impressions of applicants' personalities, an ANOVA for each of the three single manipulation check items was conducted. The means and standard deviations of the impression scores by experimental conditions for each of the three SNS-profiles are reported in Table 1.4. The first ANOVA revealed a significant effect of the factor *OCB* on participants' conscientiousness ratings,  $F(3, 112) = 5.78$ ,  $p = .001$ ,  $\eta^2 = .13$ , no main effect for the factor *ego depletion*  $F(1, 112) = 0.16$ ,  $p = .73$ , and no significant interaction effect  $F(3, 112) = 1.69$ ,  $p = .17$ . The subsequently conducted post hoc comparisons using Fisher LSD test showed that the unconscientious applicant was rated as significantly less conscientious ( $M = 5.00$ ,  $SD = 1.17$ ) than the control group applicant ( $M = 6.13$ ,  $SD = 0.73$ ,  $p < .001$ ).<sup>11</sup> The second ANOVA revealed a significant effect of the factor *OCB* on participants' helpfulness ratings,  $F(3, 112) = 22.32$ ,  $p < .001$ ,  $\eta^2 = .37$ , no main effect for the factor *ego depletion*  $F(1, 112) = 0.70$ ,  $p = .40$ , and no significant interaction effect  $F(3, 112) = 0.15$ ,  $p = .93$ . The subsequently conducted post hoc comparisons using Fisher

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<sup>11</sup> Descriptive statistics and results of remaining post hoc control group comparisons: *unhelpful profile* ( $M = 5.48$ ,  $SD = 1.18$ ,  $p = .02$ ), *disloyal profile* ( $M = 5.61$ ,  $SD = 1.12$ ,  $p = .06$ ).

LSD test showed that the unhelpful applicant was rated as significantly less helpful ( $M = 2.48$ ,  $SD = 1.35$ ) than the control group applicant ( $M = 5.03$ ,  $SD = 1.33$ ,  $p < .001$ ).<sup>12</sup> The third ANOVA revealed a significant effect of the factor OCB on participants' loyalty ratings,  $F(3, 112) = 17.52$ ,  $p < .001$ ,  $\eta^2 = .32$ , no main effect for the factor *ego depletion*  $F(1, 112) = 1.21$ ,  $p = .27$ , and no significant interaction effect  $F(3, 112) = 0.40$ ,  $p = .75$ . The subsequently conducted post hoc comparisons using Fisher LSD test showed that the disloyal applicant was rated as significantly less loyal ( $M = 3.71$ ,  $SD = 1.30$ ) than the control group applicant ( $M = 5.03$ ,  $SD = 1.13$ ,  $p < .001$ ).<sup>13</sup>

Table 1.4

*Descriptive statistics of conscientiousness impressions, helpfulness impressions, and loyalty impressions by experimental conditions in Study 1.5*

Condition	OCB	Ego depletion	n	Conscientiousness impression		Helpfulness impression		Loyalty impression	
				M	SD	M	SD	M	SD
1	C	Low	15	4.60	1.30	5.00	0.85	5.27	0.80
2	H	Low	15	5.60	0.83	2.60	1.06	3.60	0.99
3	L	Low	16	5.75	1.13	3.75	1.69	3.81	1.17
4	CG	Low	15	6.13	0.64	5.27	1.28	5.33	1.23
5	C	High	15	5.40	0.91	5.00	1.13	5.20	1.01
6	H	High	14	5.36	1.50	2.36	1.65	3.57	1.28
7	L	High	15	5.47	1.13	3.60	1.88	3.60	1.45
8	CG	High	15	6.13	0.83	4.80	1.37	4.73	0.96

Note. C = Conscientiousness; H = Helpfulness; L = Loyalty; CG = Control group.

### 8.3.2 Screening decision

An univariate ANOVA was conducted to examine the hypothesized effects of the SNS-profiles on recruiters' intentions to invite the applicant to a job interview. The means and standard deviations of the interview intention scores by experimental conditions are reported in Table 1.5. The ANOVA revealed a significant effect of the OCB-manipulation

<sup>12</sup> Descriptive statistics and results of remaining post hoc control group comparisons: *unconscientious profile* ( $M = 5.00$ ,  $SD = 0.98$ ,  $p = .93$ ), *disloyal profile* ( $M = 3.68$ ,  $SD = 1.76$ ,  $p < .001$ ).

<sup>13</sup> Descriptive statistics and results of remaining post hoc control group comparisons: *unconscientious profile* ( $M = 5.23$ ,  $SD = 0.90$ ,  $p = .49$ ), *unhelpful profile* ( $M = 3.59$ ,  $SD = 1.12$ ,  $p < .001$ ).

on participants' screening decisions,  $F(3, 112) = 8.26$ ,  $p < .001$ ,  $\eta^2 = .18$ , no significant effect of the ego depletion manipulation,  $F(1, 112) = 0.23$ ,  $p = .63$ , and no significant interaction effect,  $F(3, 112) = 1.25$ ,  $p = .30$ . To further analyze the main effect of the OCB-manipulation post hoc comparisons using Fisher LSD test were conducted. Results showed that the interview intention score for the applicant with an unconscientious profile ( $M = 5.43$ ,  $SD = 1.25$ ) was significantly lower than for the control group applicant ( $M = 6.40$ ,  $SD = 0.68$ ,  $p = .001$ ) as well as for the applicant with an unhelpful profile compared to the control group ( $M = 5.10$ ,  $SD = 1.37$ ,  $p < .001$ ). However, the interview intention score for the applicant with a disloyal profile ( $M = 5.87$ ,  $SD = 0.85$ ) was only marginally significant lower than the control group score ( $p = .06$ ). Accordingly, hypothesis 1a and hypothesis 1b can be confirmed and hypothesis 1c must be rejected.

Table 1.5

*Descriptive statistics of interview intentions by experimental conditions in Study 1.5*

Condition	OCB	Ego depletion	n	Interview intention	
				M	SD
1	C	Low	15	5.13	1.25
2	H	Low	15	5.33	1.11
3	L	Low	16	5.81	0.91
4	CG	Low	15	6.33	0.62
5	C	High	15	5.73	1.22
6	H	High	14	4.86	1.61
7	L	High	15	5.93	0.80
8	CG	High	15	6.47	0.74

*Note.* C = Conscientiousness; H = Helpfulness; L = Loyalty; CG = Control group.

### 8.3.3 Confirmatory questioning

Three ANOVAs were conducted to investigate the hypothesized interaction effects between participants' states of ego depletion and OCB-related information from the applicant's SNS-profile on participants' intentions to choose a themed provocative interview question. Cell means and standard deviations for participants' intentions to ask the themed provocative interview questions are shown in Table 1.6. The first ANOVA

revealed a significant main effect of the OCB-manipulation on participants' intentions to choose the conscientiousness-related provocative question,  $F(3, 112) = 8.69$ ,  $p < .001$ ,  $\eta^2 = .19$ , no significant main effect of the ego depletion manipulation,  $F(1, 112) = 0.45$ ,  $p = .50$ , but a significant interaction between the OCB-manipulation and the ego depletion manipulation,  $F(3, 112) = 4.78$ ,  $p = .004$ ,  $\eta^2 = .11$ . To further analyze the significant interaction effect, simple effects analyses were carried out separately for the participants in the high and low ego depletion groups. Simple effects analyses revealed that, in the high ego depletion conditions, there were no significant differences between the four groups,  $F(3, 112) = 0.74$ ,  $p = .53$ . In contrast, in the low ego depletion conditions there were significant differences between the four groups,  $F(3, 112) = 12.77$ ,  $p < .001$ ,  $\eta^2 = .26$ . Post hoc comparisons (Fisher LSD test) indicated that the group with the unconscientious profile significantly differed from all other OCB-conditions (all  $ps < .001$ ), while all other OCB-conditions (unhelpful, disloyal, control group) were not significantly different from each other (all  $ps > .50$ ). This suggests that contrary to hypothesis 2a only participants who observed the unconscientious SNS-profile in a state of low ego depletion had higher intentions to choose the conscientiousness-related provocative interview question. Accordingly, hypothesis 1a must be rejected.

The second ANOVA revealed a significant main effect of the OCB-manipulation on participants' intention to choose the helpfulness-related provocative question,  $F(3, 112) = 6.32$ ,  $p = .001$ ,  $\eta^2 = .15$ , no significant effect of the ego depletion manipulation,  $F(1, 112) = 0.06$ ,  $p = .81$ , and no significant interaction effect,  $F(3, 112) = 0.09$ ,  $p = .97$ . Accordingly, hypothesis 2b has to be rejected. However, to further analyze the main effect of the OCB-manipulation post hoc comparisons using Fisher LSD test were conducted. Results showed that participants' who observed the unhelpful profile showed higher intentions to pose the helpfulness-related provocative question to the applicant than the control group ( $p < .001$ ); the other two experimental groups did not significantly differ from the control group (unconscientious profile:  $p = .51$ ; disloyal profile:  $p = .16$ ).

The third ANOVA revealed no significant main effect of the OCB-manipulation,  $F(3, 112) = 1.06$ ,  $p = .37$ , no significant main effect of the ego depletion manipulation,  $F(1, 112) = 0.30$ ,  $p = .59$ , and no significant interaction effect,  $F(3, 112) = 1.35$ ,  $p = .26$ . Accordingly, hypothesis 2c has to be rejected.

Table 1.6

*Descriptive statistics of confirmatory questioning intentions by experimental conditions in Study 1.5*

Condition	OCB	Ego depletion	n	Conscientiousness question		Helpfulness question		Loyalty question	
				M	SD	M	SD	M	SD
1	C	Low	15	4.13	2.30	2.53	1.13	2.73	1.53
2	H	Low	15	1.80	0.94	4.07	2.31	2.53	1.81
3	L	Low	16	1.56	0.89	2.69	2.27	2.88	2.16
4	CG	Low	15	1.47	0.74	2.13	1.85	2.07	1.22
5	C	High	15	2.33	1.29	2.20	1.52	1.80	1.47
6	H	High	14	2.29	1.33	4.14	2.63	3.29	2.46
7	L	High	15	1.67	1.18	2.80	1.97	2.20	1.78
8	CG	High	15	2.00	1.73	1.93	1.58	2.20	1.74

Note. C = Conscientiousness; H = Helpfulness; L = Loyalty; CG = Control group.

## 8.4 Discussion

### 8.4.1 Findings

The results of the present study replicated previous results of this study series regarding the impact of SNS-mediated information on recruiters' screening decisions (DV 1). Applicants with a profile showing unconscientious or unhelpful behaviors were less likely to be invited to a job interview compared to the control group applicant (hypothesis 1a; hypothesis 1b). Contrary to hypothesis 1c, a SNS-profile showing the applicant's disloyal behavior had no effect on participants' screening decisions; however, this is consistent with the findings of Study 1.3 and Study 1.4. Nevertheless, the disloyalty effect reached marginal significance which is surprising because the invitation intention scores of the disloyalty groups in Study 1.3 and Study 1.4 were not at all significantly different from the control group scores ( $p = .21$ ;  $p = .35$ ). Since the same materials were used as in Study 1.3 and Study 1.4, it is unclear whether this effect occurred due to a sample effect or whether information about disloyal behavior in fact has an effect on recruiters' invitation intentions. Since this effect had not been found in the two previous studies and furthermore disloyalty-related information had no effect on confirmatory questioning strategies in any of the studies, it seems to be more reasonable to assume that this kind



of OCB-related information (at least as operationalized in this study series) does not have the assumed effects. As expected, state of ego depletion had no effect on participants' screening decisions and did not interact with the OCB-related information.

Results of DV 2 (confirmatory questioning) were somehow heterogeneous and none of the hypothesized interactions between state of ego depletion and OCB-related impressions of the applicant were confirmed. In case of a SNS-profile suggesting the applicant to be an unconscientious person, only participants with a state of low ego depletion showed higher intentions to pose the provocative conscientiousness-related interview question to the applicant. This is surprising because it was assumed that confirmatory questioning would occur in both ego depletion groups with an augmentation in case of high ego depletion. However, even though it is unclear why confirmatory questioning did not occur with high ego depletion participants at all, it is even more important to note that depletion of self-regulation resources was not necessary for the occurrence of the confirmatory questioning bias which supports the findings of Study 1.3. In case of a SNS-profile suggesting the applicant to be an unhelpful person, participants showed higher intentions to ask the provocative helpfulness-related question independent of their state of ego depletion. This goes with the findings of Study 1.3 and further supports the assumption that depletion of self-regulation resources is not a prerequisite for the occurrence of the confirmatory questioning bias. In case of a SNS-profile suggesting the applicant to be a disloyal person, none of the two independent variables had an effect on participants' intentions to pose the loyalty-related question to the applicant which is in line with the results of Study 1.3 and Study 1.4 and further suggests that loyalty-related information is not taken into account when making screening decisions or preparing interview questions. All in all, the present findings mostly replicated the findings of Study 1.1 - Study 1.4 and are in line with others' findings regarding confirmatory questioning strategies (e.g., Binning et al., 1988; Judice & Neuberg, 1998).

#### *8.4.2 Limitations*

Even though the ego depletion manipulation of Fischer et al. (2008) had successfully induced a state of reduced self-regulation resources in the group of high ego depletion compared to the group of low ego depletion, it must be noted that the group difference was rather small. Therefore, the manipulation might have been not strong enough to produce the assumed confirmatory questioning effects. On the other hand, the manipulation check item might have been not optimally formulated to measure participants' states of ego depletion. While Fischer et al. (2008) asked participants "to what extent the previous task was laborious" (p. 384) and "to what extent they were able to concentrate during the previous task" (p. 384), the present manipulation check item

asked “how concentrated they currently felt” right after the concentration task. Due to socially desirable responding or due to obligation feelings (participants knew they would receive course credits or a small gift for their participation), it might be that participants indicated a higher concentration level than actually present. However, even if the actual manipulation had been successful, there is another possible explanation why the state of ego depletion did not have the assumed effects. Fischer et al. (2008) emphasized that ego depleted participants need to be fatigued immediately before they start working on the dependent measure; otherwise it cannot be ruled out that participants of the low ego depletion condition tire over time as well or participants of the high ego depletion condition recover over time. However, for comparability reasons, participants of the present study passed the same procedure as participants of the previous laboratory studies of this study series which first provided them with information about the selection scenario, role and job description, application documents, SNS-profiles, and finally the assessment sheet. After making different assessments, participants had to make their screening decisions (DV 1) and subsequently had to choose interview questions out of a set of questions (DV 2). Therefore, it cannot be ruled out that in the meantime one of the above mentioned artefactual processes (tiring and/or recovering over time) took place. This shortcoming needs to be addressed by future research, for example by putting the ego depletion manipulation directly after reading the instructions and application documents. Furthermore, participants’ confirmatory questioning should be measured first in order to avoid influences from previous assessments (e.g., quality of application documents) and decisions (e.g., intention for interview invitation). However, to the knowledge of the author this has been the first study investigating the potentially augmenting effect of ego depletion on confirmatory questioning strategies in the context of employment interviews. Therefore, the present findings can be used as a first basis of further investigations of this practically highly relevant effect.

#### *8.4.3 Implications*

From a practical perspective the present results regarding the influence of ego depletion on confirmatory questioning are highly relevant. With consideration of the results of Study 1.3 it can be assumed that a state of high ego depletion is not a necessary precondition for the occurrence of confirmatory questioning strategies in the context of employment interviews. In fact, this bias occurs independent of recruiters’ self-regulatory resources, at least in case of negative preinterview impressions. Even though the present results did not support the assumption of a high ego depletion state augmenting confirmatory questioning strategies, the underlying theoretical basis is quite strong. Furthermore, several methodological artefacts have been identified which suggest that

further research needs to be done before being sure that a state of high ego depletion does not augment confirmatory questioning strategies. Therefore, the present results underscore the importance of implementing structured interviews to neutralize this bias whether augmented by recruiters' state of ego-depletion or not.

## 9. Concluding discussion

This section summarizes all main findings, limitations, and implications of *Study Series 1*. First of all, the main findings are reported of how SNS-mediated information about applicants' OCB-propensities affects recruiters' impression formations, screening decisions, and questioning strategies. Second, the main limitations of this study series are reported and ideas for future research are presented. Third, the most important practical implications and ethical and legal issues are discussed.

### 9.1 Findings

The following section summarizes the main findings regarding the effects of OCB-related information from applicants' SNS-profiles on recruiters' impression formations and screening decisions. Additionally, the effects of OCB-related information on recruiters' questioning strategies in employment interviews are presented.

#### 9.1.1 Sensitivity, selectivity, negativity

The results of all five studies show that recruiters seem to have a natural *sensitivity* to information about applicants' OCBs. Even though participants were not instructed by the experimenter or prompted by the job description, they were sensitive to information of all of the three examined OCB-dimensions (*conscientiousness*, *helping*, and *loyalty*) and formed according impressions of the applicants. As stated by Podsakoff et al. (2011), further research is necessary to isolate the exact mechanisms underlying this sensitivity; however, from an evolutionary perspective it seems to be obvious that this sensitivity is highly functional for those who have to decide whether to cooperate with and to include an unknown person into the group. Being sensitive to information about an unknown person's propensity to show behaviors that support the social and psychological environment of a group (i.e., organizational citizenship behavior) or violate it seems to be highly beneficial. Accordingly, this sensitivity is an ideal prerequisite for promoting OCBs by screening job applicants' SNS-profiles and identifying information relevant for the social and psychological environment of an organization.

In the context of employee selection, it is important to investigate what kind of information recruiters take into account when making screening and selection decisions and how this information affects their decision-making processes (Podsakoff et al., 2011). The results of the present study series suggest that recruiters display a certain kind of *selectivity* when integrating OCB-related information into their screening decisions. More precisely, information about applicants' conscientiousness and helping behaviors was taken into account when indicating how likely recruiters would be to invite them to an employment interview; however, information about applicants' loyalty behaviors had no

such effect on recruiters' interview intentions. Even though this OCB-related selectivity has been surprising, it seems to be in line with previous findings of Podsakoff et al. (2011) in the context of employment interviews. All in all, recruiters take information of all three examined OCB-dimensions into account when forming impressions of applicants' personalities, but only conscientiousness and helping behaviors seem to be relevant when making screening decision. However, for both the impression formations and the screening decisions, ratings were independent of applicants' qualifications which further support the idea of a SNS-based promotion of OCB in the screening phase of employee selection.

Furthermore, this kind of OCB-promotion seems to underlie a certain kind of *negativity* and to correspond to *promoting by rejecting* rather than to *promoting by selecting*. More precisely, only negative information about applicants' OCB-related behaviors influenced recruiters' screening decisions; positive information did not have an effect on their intentions to invite the applicant to an employment interview. A similar OCB-related negativity bias had been reported by Podsakoff et al. (2011) in the context of employment interviews which can now be expanded to the screening phase of employee selection. This even supports the original character of the screening phase which according to Mondy and Mondy (2014) focuses on sifting out unsuitable applicants and reducing the pool of applicants rather than choosing between highly suitable finalists. This negativity bias even seems to be beneficial to that effect that positive OCB-impressions do not lead to undifferentiated overall positive impressions or to outshining insufficient qualification, and accordingly do not promote selecting unsuitable applicants (*false positives*).

Taken together, this study series suggests that in the screening phase of employee selection (1) recruiters are sensitive to SNS-mediated information about applicants' OCB-propensities; (2) conscientiousness and helping behaviors are taken into account when making screening decisions; and (3) the OCB-promoting effect is that applicants with adverse OCB-propensities are more likely to be rejected. All this supports the idea of promoting OCBs based on applicants' online self-disclosure.

#### 9.1.2 Confirmatory questioning

Sometimes interviews are used as a part of the screening phase of employee selection (*screening interviews*) which is why Study 1.3 - Study 1.5 introduced a new variable measuring recruiters' intentions to pose OCB-related provocative interview questions to the applicant. The purpose of this investigation was to see whether SNS-mediated information about an applicant's adverse OCB-propensity would lead to confirmatory questioning and whether this effect would be moderated by recruiters' states of ego

depletion. Even though the results were somewhat heterogeneous, it can be concluded that recruiters show a general tendency to ask provocative questions after observing negative information about applicants' conscientiousness and helping behaviors. Given the potential negative consequences of such questioning strategies, its comparatively low diagnostic added-value, and the reasonable assumption that SNS-profiles provide a lot of bias provoking information (e.g., tattoos, obesity, sexual pictures), the present findings suggest that screening applicants' SNS-profiles in preparation of an employment interview is rather a risk for diagnostic quality and does not contribute to the idea of promoting OCBs in the context of employee selection.

## **9.2 Limitations**

The following section discusses the main limitations of *Study Series 1* and offers ideas for future research.

### **9.2.1 Participants**

One factor which may limit the present findings is the use of students as participants in four of the five studies. Several researchers hold the opinion that student subjects are not representative of nonstudents which should diminish the generalizability of results based on student samples. On the other hand there are studies which show no substantial decisional or behavioral differences between students and HR-professionals (e.g., Bernstein, Hakel, & Harlan, 1975; Gordon, Slade, & Schmitt, 1986). Podsakoff et al. (2011) accordingly argue that "research across a variety of topic areas [...] has shown that student subjects in laboratory settings behave in a manner highly similar to practitioners in organizational settings" (p. 322). Moreover, Gordon et al. (1986) reason that, when student participants have certain knowledge about the task which the fictitious job applicant is selected for, there are no differences between students and professional recruiters. Accordingly, there was a substantive match between participants' areas of study (mainly psychology and business administration) and the HR-trainee selection scenario which assured that student participants had a good idea of the whole recruiting procedure and the specified position requirements. Furthermore, most of the time the purpose of the screening phase is to reduce the pool of applicants to a manageable amount which is why organizations often use student apprentices or working students for this task in this early phase of employee selection. This even supports the use of students as participants in studies like the present. Furthermore, the percentage of female participants in all of the five studies ranged from 70% to 75% which corresponds with the percentage of female HR-employees (Demmer, 2012). Finally, some of the results were

even replicated with a sample of HR-professionals (Study 1.4). Summarized, the sample compositions of all five studies should allow for an essential generalizability of the findings of *Study Series 1*.

### 9.2.2 Selection scenario

One general criticism with experimental selection scenarios like the one used in this study series is the low involvement of the participants. More precisely, none of the decisions made within a selection scenario have any occupational consequences for the participants or any financial consequences for the fictitious organization (e.g., hiring *false positives*); Weuster (2008) accordingly speaks of *low investment situations*. Especially in case of unsuitable applicants (e.g., low qualification or negative OCB-related information) study participants are likely to make rather liberal evaluations and decisions than actually reasonable. This effect might additionally be enhanced by the fact that due to time and motivational constraints the present study and most other studies provide participants with information about only one applicant. This lack of a competitive application situation further promotes liberal instead of adequately critical evaluations. Therefore, future research should create selection scenarios which pretend to have consequences for the participants (e.g., losing course credits in case of negligent hiring) and create competitive application situations (e.g., evaluating more than one applicant for the same position). However, these limitations suggest that the effect sizes found in *Study Series 1* are rather underestimated and that the impact of negative OCB-related information should be even stronger in real employee selection. In fact, Bohnert and Ross (2010) suggest that it is even “likely that [such] findings underestimate the findings from a sample of older, professional managers, who may be even less sympathetic to [negative] postings [...] on the Internet” (p. 345).

### 9.2.3 Operationalization

The contents on the SNS-profiles used to operationalize the three OCB-dimensions were slightly modified in the course of this study series in order to enhance generalizability. However, it must be noted that these contents represented only a small sample of all possible behaviors associated with each of the OCB-dimensions. Therefore, in order to increase generalizability, future research should try to replicate the present findings with other behavioral examples of the OCB-dimensions conscientiousness, helping, and loyalty. Furthermore, the present study series used an aggregated OCB-framework to investigate the effects of OCB-related information on recruiters' impressions formations and screening decisions. Therefore, it would be worthwhile to investigate the impact of

each of Organ's (1988) single OCB-dimensions in order to allow for a greater differentiation.

Another limitation coming along with the present operationalization of the SNS-mediated OCB-related information is that participants received a printout of only one section of the applicant's SNS-profile containing the relevant OCB-related information. This is a realistic scenario because as argued above recruiters are often provided with application documents preselected for example by working students and possibly added with additional information from applicants' SNS-profiles. Moreover, some companies even hire agencies to screen applicants' SNS-profiles which take screen shots of potentially problematic content (e.g., drug use or violent tendencies) and forward these in a report to the client (Fisher, 2011; Moe, 2011). However, this does not entirely and precisely correspond to actually screening a SNS-profile as reported for more than 40% of recruiters (e.g., Clark & Roberts, 2010); accordingly, it remains unclear whether participants would take other work-related or even work-unrelated information into account as well and whether this would have an effect on the weighting of the OCB-related information. Therefore, future research should provide participants with access to a complete applicant SNS-profile or with a comprehensive compilation of documented SNS-contents. Nevertheless, it is most important to note that the present series of studies provides preliminary evidence that OCB-related information is taken into account when available in the screening phase of employee selection.

As already argued before, Sackett's (1982) list methodology used to measure confirmatory questioning has some significant disadvantages. While providing a maximum of standardization compared to a free question generation methodology, at the same time it is very likely to underestimate the use of provocative interview questions. First of all, participants are likely to be surprised by the fact that provocative questions are part of an official interview catalogue. Furthermore, due to social desirability, it is likely that participants will not indicate high intentions to ask such questions. Additionally, participants may not be generally averse to asking the applicant provocative questions, but may not like the exact wording of the pre-formulated questions and therefore indicate rather low intentions to ask exactly these questions. Therefore, it is not surprising that research has shown the confirmatory questioning bias to be especially strong when interviewers generate their own interview questions (e.g., Binning et al., 1988). Therefore, future research should try to replicate the present findings with the even ecologically more valid methodology of freely generating interview questions.



### **9.3 Implications**

The following section discusses practical implications of the present findings as well as ethical and legal issues coming along with screening applicants' SNS-profiles.

#### *9.3.1 Selection training*

A fundamental prerequisite for any kind of personality assessment is that "target information is conveyed in a rich, yet representative enough manner to project consistent behavioral tendencies and patterns" (Kluemper et al., 2012, p. 1146). In the present study series recruiters received a SNS-printout including only a few pictures and comments which should not be representative enough to draw reasoned inferences concerning the applicant's OCB-propensity. This potential misuse of striking single information (e.g., committing the fundamental attribution error) from online screenings is one reason why some scholars recommend that HR-employees should be trained in how to screen and evaluate applicants' SNS-profiles (e.g., Slovensky & Ross, 2012). However, the present selection scenario pretended that recruiters received the SNS-printout from a HR-colleague which might have led to the assumption that this information was a representative excerpt of the applicant's organizational citizenship behavior. Furthermore, according to findings of Caers and Castelyns (2011) 57.6% of their sample of HR-professionals stated that "they would look to all information on Facebook if it is publicly available" (p. 445), which indicates a rather small risk of recruiters stopping the screening process after finding only a single striking information. Furthermore, raters' impressions of others' personalities and performances have been shown to be quite accurate, even when the amount of information is limited (Borkenau, Mauer, Rieman, Spinath, & Angleitner, 2004). Therefore, and due to recruiters' natural sensitivity to OCB-related information, it does not seem to be necessary to implement SNS-screening trainings for HR-professionals as claimed, for example, by Slovensky and Ross (2012). A much more important, but rather general implication derived from this discussion is the following: Organizations need to make sure that those who make screening and selection decisions get well trained in the psychologic and diagnostic basis of interpersonal assessment. Drawing wrong inferences about one's personality is not an issue inherent to screening SNS-profiles, but can occur with all kinds of information in the context of employee selection (e.g., overestimation of single answers during a job interview or of single behaviors in an assessment center exercise). Therefore, recruiters should generally be well-trained in the psychologic fundamentals and the performance of screenings, interviews, and assessment centers, and in the correct interpretation and application of information gathered from these selection methods.

The same can be noted for the findings regarding recruiters' tendencies for confirmatory questioning after observing negative OCB-related information. This interview bias is not inherent to OCB-related information, but occurs with other kinds of preinterview information as well (e.g., Binning et al., 1988). Accordingly, organizations should provide anti-bias interviewer trainings and implement structured forms of employment interviews which prevent the occurrence of such biases, show better predictive validity, and lead to better selection decisions (Schmidt & Hunter, 1998).

### 9.3.2 Application of SNS-screenings

The present findings are encouraging in regards of offering a social media based approach of promoting OCBs in the context of employee selection. Applicants' online self-disclosures on SNSs can provide valid information about their OCB-propensities and others viewing such information generally draw reliable inferences. Moreover, this kind of personality assessment can deliver more accurate information than provided by OCB-related self-ratings or interview questions due to socially desirable responding and faking (Kluemper et al., 2012). Therefore, from a diagnostic point of view, screening applicants' SNS-profiles seems to be a valuable method for gathering and integrating unique OCB-related information into the employee selection process.

From an economic point of view, screening applicants' SNS-profiles is a valuable method because additional personal information is gathered with a minimal investment of time and expenses. Furthermore, such screenings can help to avoid unnecessary and costly procedures for unsuitable candidates because they are sifted out before even invited to an interview or to an assessment center. Moreover, since OCBs are positively related to important organizational outcomes (e.g., productivity, customer satisfaction), there seems to be no drawback of using information about one's OCB-propensity as a rejection criterion.

The present results suggest that those who use information from SNS-screenings should do so either early in the employee selection process (*screening phase*) for sifting out unsuitable applicants or later in the process (*selection phase*) for choosing between suitable finalists; they should not use it in preparation of conversations with the applicants (*interview phase*) due to the risk of a confirmatory questioning bias. Furthermore, Brown and Vaughn (2011) suggest that if information from SNS-profiles is taken into account in the screening phase, "printed screenshots of profile aspects that may have affected the screening decision" (p. 224) should be included in applicants' personnel files in order to assure legal and procedural transparency.

However, it must be noted that to date no published research has empirically demonstrated that using information from SNS-screenings in fact improves hiring

decisions (especially in regards of applicants' OCB-propensities). Even though there are promising results regarding the accuracy and construct-related validity of SNS-based personality ratings, future research needs to find evidence for its criterion-related validity before clear recommendations regarding the use of SNS-screenings can be given. In any case, organizations have to decide for themselves and in principle whether screening applicants' private online profiles is an appropriate method of gathering additional personal information. Therefore, the next section briefly outlines ethical and legal issues potentially coming along with online screenings.

### 9.3.3 Ethical and legal issues

There are detailed essays about the ethical and legal issues of using SNS-screenings in the context of employee selection (e.g., Brown & Vaughn, 2011; Clark & Roberts, 2010; Slovensky & Ross, 2012) which is why this section only briefly outlines two core issues.

Fair selection procedures are important to job applicants and involve *informational fairness*, which is "how information is used to make decisions and what types of explanations are offered for those decisions" (Slovensky & Ross, 2012, p. 62). It is obvious to consider that applicants are likely to perceive SNS-screenings as informationally unfair. In fact, 56% of job applicants view organizations as unethical for considering personal information from applicants' SNS-profiles in the selection process (see Slovensky & Ross, 2012). Even though there are other selection methods which are perceived as unpleasant and somehow invasive as well (e.g., intelligence test, personality test), it is clear that screening private SNS-profiles is likely to produce a different quality of feeling screened and spied on. Aside from considering the before mentioned *external* consequences of negative *Candidate Experience* (e.g., negative company image, low application rates), organizations need to also consider *internal* consequences such as employees' perceptions of the congruence between company's selection methods and its core values.

Legal regulations regarding data privacy protection can vary to a great degree and it is beyond the scope of this discussion to provide a review about the legal situation in different countries regarding the use of information from applicants' private SNS-profiles. Nevertheless, the common idea underlying most of the legal regulations is preventing the occurrence of discrimination in the context of employee selection. This idea might be at risk given the vast amount of personal information available on SNS-profiles including information regarding gender, race, age, disabilities, pregnancy, and sexual and political preferences. Even though such information must not be used as selection decision criteria, it is very likely that, consciously or not, such information has an influence on recruiters' decision making processes. On the other hand, SNS-profiles can provide

information helping to prevent hiring people who are involved in illegal activities (*negligent hiring*) such as using illegal drugs, acting out pedophilic dispositions, or supporting illegal parties. In any case, printed screenshots of SNS-profile contents that may have affected screening decisions should be filed in order to prevent discrimination and employment litigations.

All in all, for transparency reasons and to not leave it to recruiters' own discretion, companies should make a clear statement and create internal policies regarding the use of SNS-screenings, especially since Clark and Roberts' (2010) personnel survey results showed that only "5% of respondents surveyed had a policy in place governing the [SNS-screening] practice" (p. 509).

## STUDY SERIES 2: VIRTUAL LEADERSHIP

The purpose of *Study Series 2* is to examine whether virtual leaders' purposeful online self-disclosure can help to develop trustful leader-follower-relationships in order to promote OCBs in virtual work environments. Therefore, it needs to be examined whether and how virtual leaders' SNS-mediated self-disclosure affects followers' trustworthiness impressions. All three studies are presented in detail with theoretical backgrounds, methods, results and discussions. A concluding discussion summarizes and discusses all main findings, limitations, and implications of *Study Series 2*. All materials used in this study series are compiled in a PDF document which is available upon request<sup>14</sup>. All calculations were performed with IBM SPSS Statistics 19 and the alpha level for all inference statistical tests was 5%.

### 10. Study 2.1

This study investigates the effects of leaders' SNS-mediated *self-disclosure* and *leadership style* on followers' *trustworthiness impressions*.

#### 10.1 Background

Mayer, Davis, and Schoorman (1995) define trust as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (p. 712). Research has shown that employees' trust in their leaders positively affects employees' performances of OCBs (for meta-analytical overviews, see Colquitt, Scott, & LePine, 2007; Dirks & Ferrin, 2002). It is argued amongst others that trust in one's leader contributes to positive attitudes towards the job (e.g., affective organizational commitment) and to creating safe social atmospheres at work, both leading to employees going beyond their job roles, such as assisting one another and the organization on a voluntary basis (i.e., OCBs) (e.g., Konovsky & Pugh, 1994; Yang & Mossholder, 2010). However, as argued in detail above (see section 3.2) the development of trustful leader-follower-relationships is a major issue in virtual work environments especially since virtual cooperation is often short-lived (Jarvenpaa, et al., 1998), whereas trust is supposed to develop over time and through frequent and meaningful interaction (Holton, 2001). However, McKnight, Cummings and Chervany (1998) found that organizational members develop a certain kind of trust already at the

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earliest stage of an organizational relationship, that is, *initial trust*. Their proposed model of initial trust formation is based on Mayer et al.'s (1995) integrative model of organizational trust (see Figure 2.1) which provides the theoretical basis of *Study Series 2*.

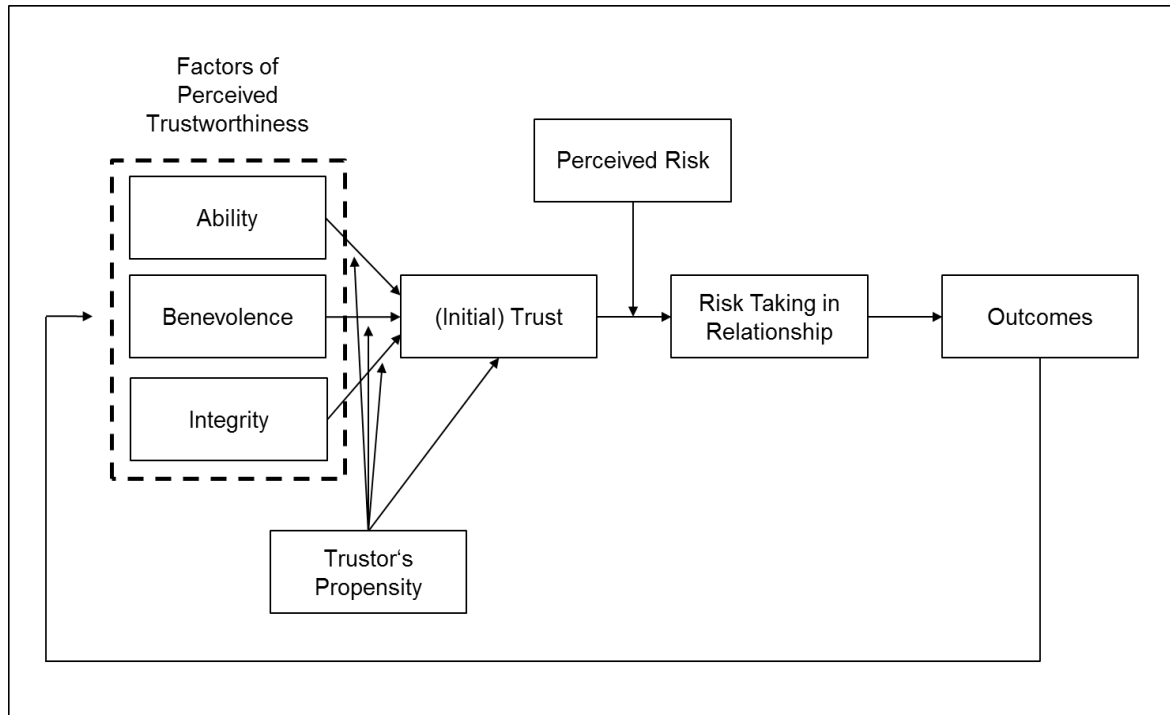


Figure 2.1. Integrative model of organizational trust (Mayer et al., 1995).

According to the model of Mayer et al. (1995), the development of organizational trust depends on trustees' perceived *trustworthiness* and trustors' *propensity to trust* in others. *Propensity to trust* refers to a personality-based perspective of trust and describes a person's general tendency to trust or distrust others; *trustworthiness* is determined by three characteristics of the trustee: *ability*, *benevolence*, and *integrity*. *Ability* refers to the trustors' perceptions of trustees' skills and competencies which "enable [the trustee] to have influence within some specific domain" (Mayer et al., 1995, p. 717). *Benevolence* represents the perception of a positive orientation and interpersonal care and concern of the trustee toward the trustor; "the extent to which a trustee is believed to want to do good to the trustor, aside from an egocentric profit motive" (p. 718). *Integrity* refers to "the trustor's perception that the trustee adheres to a set of principles that the trustor finds acceptable" (p. 719). These three characteristics have been shown to explain a major portion of the perception of one's trustworthiness and each to have unique relationships with trust and behavioral outcomes in the organizational context (e.g., Colquitt et al.,

2007). Trustors' perceptions of others' trustworthiness are normally based on common experiences and outcomes of past trusting behaviors (see Figure 2.1); however, there is no such experience and firsthand information when people in organizations first meet, especially in virtual task teams in which participants are often new to each other. Therefore, McKnight et al. (1998) suggested "that the processes by which trust forms initially are not the same as those by which it forms later" (p. 487) and identified two main cognitive processes which lead to initial trust formation: *Categorization* and *illusion of control*. While the latter has no relevance for the present study series, the focus lies on two categorization processes suggested by the scholars: *Reputation categorization* and *stereotyping*. McKnight et al. (1998) argued that those "with good reputations are categorized as trustworthy individuals" (p. 480), for example, by reflecting professional competence, and that by "positive stereotyping, one can quickly form positive trusting beliefs about the other by generalizing from the favorable category into which the person was placed" (p. 481). Due to the lack of personal knowledge paired with the need to engage in trusting behaviors immediately to perform their jobs, individuals are highly motivated (both consciously and unconsciously) to use category-driven information processing to form stereotypical impressions of others; this helps to manage issues of vulnerability, uncertainty, risk, and expectations in the initial phase of organizational relationships (Meyerson, Weick, & Kramer, 1996). Accordingly, the main purpose of *Study Series 2* is to investigate whether and how virtual leaders can provide followers with information which triggers beneficial categorization processes and leads to high initial trustworthiness impressions.

One possibility might be using SNS-mediated self-disclosure which has become a socially accepted and appropriate way of providing others with personal information about oneself (see section 2.2). In fact, several companies have established internal SNSs where employees can set up their personal profiles and can connect and communicate with each other (e.g., *ConNext* at Continental AG). One of the main ideas of such internal SNSs is to provide information about one's occupational competencies; this helps especially in larger enterprises to find internal specialists and contact persons faster. Therefore, providing information about one's competencies (e.g., qualifications, career) on an internal SNS-profile should trigger *reputation categorization* processes and, in case of good qualifications, should promote the formation of *ability*-related trustworthiness impressions. Therefore, the following hypothesis regarding a virtual leader's competence-related self-disclosure is formulated:<sup>15</sup>

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<sup>15</sup> The exact structure of the self-disclosure conditions is explained in section 10.2. However, for reasons of better understanding the nomenclature of the conditions is briefly explained: *Low self-disclosure* contains information of *low intimacy* (e.g., *competence-related* information); *high self-disclosure* additionally contains information of *high intimacy* (e.g., *privacy-related* information).

**H1: Followers who view a leader's SNS-profile low or high in self-disclosure form higher ability impressions than followers who do not view the leader's SNS-profile.**

Furthermore, in order to promote *benevolence*-related trustworthiness impressions, a leader could use the company internal SNS-profile to describe him as generally caring and as wanting to do good to his followers. However, since benevolence is an *affect-based* source of trust (in contrast to ability and integrity which are *cognition-based* sources of trust; Colquitt et al., 2007) which is associated with the process of relationship building (Jarvenpaa et al., 1998), an actual act of relationship orientation should have greater impact. According to the *disclosure-liking hypothesis* (see section 2.3.2) people who disclose more intimately are viewed by others as trusting, friendly, and warm, and as communicating their desire to initiate a closer relationship. Therefore, a leader's high intimacy self-disclosure (e.g., privacy-related information about family situation and outside interests) should trigger *positive stereotyping* processes and accordingly promote *benevolence*-related trustworthiness impressions. In fact, Jarvenpaa et al. (1998) provided preliminary evidence for such an effect in a virtual context by showing that a team building exercise, which included purposeful self-disclosure via email, had a positive effect on other team members' benevolence perceptions. More recently, Mazer, Murphy, and Simonds (2007) found that students who viewed a teacher's Facebook profile high in intimate self-disclosure (e.g., privacy-related information about relationship status, personal pictures) gave higher ratings on affect-related variables (e.g., affective learning, classroom climate) compared to students who viewed a low intimacy self-disclosure version of the teacher's Facebook profile (e.g., job-related information about current position, portrait photo). A follow up study showed that teachers' high intimacy self-disclosure also positively affected students' perceptions of teachers' credibility (Mazer, Murphy, & Simonds, 2009). Even though these preliminary results are encouraging, it needs to be examined whether these effects apply for organizational leaders as well and whether high intimacy self-disclosure on company internal SNS-profiles underlies a more critical evaluation of appropriateness. Moreover, leaders' perceived style of leadership needs to be considered when examining the effects of leaders' purposeful online self-disclosure on followers' trustworthiness impressions. For example, transformational leaders whose leadership behaviors are based on the principles of *inspirational motivation*, *intellectual stimulation*, *individualized consideration*, and *idealized influence* (Bass, 1985; Bass & Avolio, 1994), generally demonstrate high levels of individualized concern and respect for their followers, which is why they are perceived as caring and relationship-oriented (Dirks & Ferrin, 2002). On the contrary, transactional leaders whose



leadership behaviors are based on the principles of *contingent reward* and *management by exception* (Bass, 1985; Bass & Avolio, 1994), “seem to put less emphasis on the relationship and more emphasis on ensuring that they are seen as fair, dependable, and having integrity” (Dirks & Ferrin, 2002, p. 614). Therefore, a leader with transformational leadership principles is likely to be perceived as relationship-oriented from the outset and high intimacy self-disclosure should have no further promoting effect on followers’ benevolence impressions. Therefore, the following interaction hypothesis regarding a virtual leader’s privacy-related self-disclosure (i.e., high self-disclosure) is formulated:

**H2: Followers who view a leader’s SNS-profile high in self-disclosure form higher benevolence impressions than followers who view a leader’s SNS-profile low in self-disclosure or followers who do not view the leader’s SNS-profile. This beneficial effect occurs for a transactional leader, but not for a transformational leader.**

Finally, most of the larger enterprises have something akin to ethical guidelines or company values which are promoted as principles employees should orient their behaviors on. Therefore, presenting principles on a SNS-profile which emphasize one’s company value orientation or contradict them might be rather unusual or misplaced. Therefore, providing *integrity*-related information on one’s internal SNS-profile does not to be sensible. It rather makes sense for a virtual leader to directly communicate his project-related expectations and leadership principles to the new followers, for example, within a welcome message. However, this is not a SNS-based approach and it is further unclear whether the principles of the two mainly researched leadership styles (transformational and transactional leadership; Bass, 1985) are found to be of different integrity when initially communicated to new followers. Therefore, the following exploratory research question regarding followers’ perceptions of leaders’ integrity is formulated:

**Does a virtual leader’s initial communication of either transactional or transformational leadership principles lead to different integrity impressions?**

## 10.2 Method

The following section describes the design, materials, and the procedure of Study 2.1.

### 10.2.1 Participants and design

One hundred and twenty-five students at the University of Regensburg (86 female and 39 male; age ranged from 18 to 52 years,  $M = 23.98$ ,  $SD = 4.46$ ) participated in the experiment which was based on a two-factorial between-subjects design. The first independent variable *self-disclosure* had three conditions (low vs. high vs. control group<sup>16</sup>) which were defined by their comparative intimacy level of the disclosed information: Competence-related information (low), privacy-related information (high), and no information (control group). The second independent variable *leadership style* had two conditions (transformational vs. transactional). All individuals participated in exchange for course credit or small gifts (e.g., chocolate bar) and were randomly and evenly assigned to the test conditions.

### 10.2.2 Materials

#### *Scenario and role description*

The present study used an *impression formation* paradigm which is widely used in self-disclosure lab research and in which subjects “did not actively engage in an interaction but simply observed or read about a target who disclosed at either a high or low [intimacy] level” (Collins & Miller, 1994, p. 463); this means, subjects were asked to form impressions of the discloser without actually interacting with him or her. In the present scenario, participants were told to assume the role of a trainee in a fictitious company who had been assigned to an internal project. Participants then viewed a welcome email of the virtual project leader in which he introduced him and his project-related expectations and leadership principles and invited them to visit his company internal SNS-profile for further personal information. Based on this first-time one-way interaction, participants formed and indicated their initial trustworthiness impressions of the virtual leader.

#### *SNS-profiles*

To manipulate self-disclosure two online SNS-profiles were generated on [www.wordpress.com](http://www.wordpress.com). The profile of the low intimacy self-disclosure condition showed a portrait photo of a male in the mid-50s in business outfit (shirt, tie, and jacket) of moderate

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<sup>16</sup> Control group data were originally collected in a pretest of the email text and were added subsequently in order to examine the effect suggested in hypothesis 1. Methodological restrictions coming along with this procedure are discussed in section 10.4.2.

attractiveness<sup>17</sup> and a tabulated competence-related overview with six key facts about his study and professional career (e.g., study of business administration, current manager position) which suggested the leader having good qualifications. The profile of the high intimacy self-disclosure condition consisted of the same profile described above, but had an additional section (*More about me*) which included privacy-related information about the leader's family situation (e.g., where he met his wife, when they married, and how old their two kids are), his hobbies and interests (e.g., playing the piano and hiking), and a private picture of him on a hiking tour and a picture of the family's pet dog. These contents were derived from an online pre-study with a working sample of 35 participants. Subjects were asked to indicate on a 7-point Likert scale (1 = *not at all*; 7 = *very much*) how much they felt it would promote their trustworthiness impressions of a new virtual leader if he disclosed the following personal information: *Family situation* ( $M = 5.74$ ,  $SD = 1.42$ ), *hobbies* ( $M = 5.74$ ,  $SD = 1.04$ ), *private picture* ( $M = 3.06$ ,  $SD = 1.63$ ), *principles* ( $M = 5.77$ ,  $SD = 1.14$ ), *résumé* ( $M = 6.49$ ,  $SD = 1.07$ ), *current projects* ( $M = 6.00$ ,  $SD = 1.24$ ), *strengths* ( $M = 4.63$ ,  $SD = 1.46$ ), and *weaknesses* ( $M = 4.40$ ,  $SD = 1.75$ ). One sample  $t$ -tests revealed that the sample mean of each topic was significantly higher than 4, the neutral score (all  $t$ s  $> 2.55$ , all  $p$ s  $< .016$ ), with the exceptions of *private picture* being significantly lower than 4,  $t(34) = -3.43$ ,  $p = .002$ , and *weaknesses* not being significantly different from 4,  $t(34) = -3.43$ ,  $p = .19$ . Accordingly, the relevant ability-related topics (*résumé*, *current projects*, and *strengths*) were assembled in the above mentioned tabulated competence-related overview and showed the leader's good qualifications. The topics high in intimacy (*family*, *hobbies*, and *private picture*) were included in the section *More about me*. Even though the pre-study results did not suggest including a *private picture*, such a picture was included because this seemed to be a good and realistic way of inducing a strong self-disclosure effect in this first study. Furthermore, Mazer et al. (2009) also used private pictures amongst others to operationalize high intimacy self-disclosure and examined positive effects. However, in Study 2.2 there is an additional experimental condition (medium intimacy self-disclosure) which excludes the private picture in order to not ignore the results of the pre-study and to provide an even more differentiated view on the self-disclosure effect. The topic *principles* was operationalized in the welcome email of the virtual leader which also contained the link to the project leader's internal SNS-profile. In the control group condition there was no such link in the email. To make sure that the two SNS-profiles had the intended effects on observers' impressions regarding the level and appropriateness of the self-disclosure, a pretest with 21 participants was conducted. One half of the participants received the competence-related

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<sup>17</sup> A pretest with 23 participants showed that subjects rated the male on a 7-point Likert scale (1 = *not at all*; 7 = *very much*) as moderately attractive ( $M = 3.87$ ,  $SD = 1.06$ ). The attractiveness score was not significantly different from the neutral score 4,  $t(22) = 0.59$ ,  $p = .56$ .

self-disclosure profile and the other half received the privacy-related self-disclosure profile; both made their ratings regarding the level and appropriateness of the self-disclosure on a 7-point Likert scale (1 = *not at all*; 7 = *very much*). Participants who rated the privacy-related self-disclosure profile reported a significantly higher intimacy level of the disclosed information ( $M = 4.82$ ,  $SD = 1.33$ ) than participants who rated the competence-related self-disclosure profile ( $M = 1.80$ ,  $SD = 0.63$ ),  $t(19) = 6.53$ ,  $p < .001$ ,  $d = 3.00$ . Accordingly, the self-disclosure level of the privacy-related self-disclosure profile was perceived as being higher ( $M = 4.64$ ,  $SD = 1.63$ ) than the self-disclosure level of the competence-related self-disclosure profile ( $M = 2.70$ ,  $SD = 0.48$ ),  $t(19) = 3.61$ ,  $p = .002$ ,  $d = 1.66$ . The ratings regarding participants perceived inappropriateness of the leader's self-disclosure were relatively low for both profiles (high self-disclosure:  $M = 2.27$ ,  $SD = 1.10$ ; low self-disclosure:  $M = 2.60$ ,  $SD = 1.35$ ) and were not significantly different from each other,  $t(19) = 0.61$ ,  $p = .55$ . Finally, two concluding remarks need to be made: First, the high intimacy self-disclosure profile has been built on the low intimacy self-disclosure profile (i.e., providing the same competence-related information) which accordingly does not allow drawing own conclusions for privacy-related self-disclosure, but only conclusions which include competence-related self-disclosure. However, this operationalization has been chosen for reasons of practical relevance; as already argued the main idea of company internal SNSs is to provide others with work-related information, but not to provide others exclusively with privacy-related information. Therefore, a separate privacy-related self-disclosure profile was not included in the present study series. Second, the nomenclature of the self-disclosure conditions (low vs. high) followed a comparative naming meaning that the high self-disclosure condition contained information of higher intimacy than the low self-disclosure condition; however, in the pretest the high-self-disclosure content was rated as moderately intimate, but not as highly intimate. This is important to note for the practical application of the findings of *Study Series 2*.

#### *Email message*

The welcome email message was created in order to manipulate leadership style and to plausibly provide participants with the link to the leader's SNS-profile. The latter was referred to in the last sentence of the email message in which the virtual leader invited the new project members to follow the link to his profile in order to learn more about him. To manipulate leadership style, two email messages were generated; one suggesting that the leader had a transformational leadership style, the other suggesting that he had a transactional leadership style. The email message was a welcome message of the virtual leader consisting of information about the upcoming project and the leader's project-

related expectations and leadership principles. The email texts were adapted from Braun, Peus, and Frey (2012) and were similar in length (transformational text: 536 words; transactional text: 492 words). Transformational leadership was manipulated based on its four dimensions (Bass, 1985; Bass & Avolio, 1994): The leader introduced his future vision for the project and encouraged followers' contributions (*inspirational motivation*), demonstrated openness to and appreciation of feedback and suggestions (*intellectual stimulation*), emphasized the relevance of followers' personal needs and wishes (*individualized consideration*), formulated his claim to act as a role model, and promised to meet his own standards (*idealized influence*). Transactional leadership was manipulated based on two dimensions (Bass, 1985; Bass & Avolio, 1994): The leader particularly stressed important goals of the project, communicated rewards for good performances (*contingent reward*), and emphasized that he would critically evaluate each process and performance in regards of mistakes, outcomes, and internal standards (*management by exception*). A pretest was conducted with 61 student participants to check whether the email texts had the intended effects on followers' perceptions of the leader's leadership principles. Participants read either the transformational email text or the transactional email text and rated their perceptions of leadership style on a 5-point Likert scale (1 = *not at all*; 5 = *frequently*). The rating items were adapted from the German version of the Multifactor Leadership Questionnaire Form 5x Short (Felfe & Goihl, 2002), for example, "The project leader considers an individual as having different needs, abilities, and aspirations from others" (transformational leadership) and "The project leader makes clear what one can expect to receive when performance goals are achieved" (transactional leadership). The pretest analysis followed an adapted pretest and manipulation check procedure of Braun et al. (2012): (1) use of two composite scales for transformational leadership (20 items,  $\alpha = .94$ ) and transactional leadership (8 items,  $\alpha = .70$ ), (2) comparison of the scale scores *between* groups, (3) comparison of the scale scores *within* groups. Results showed that the email message displaying transformational leadership principles was ascribed significantly higher ratings of transformational leadership ( $M = 3.92$ ,  $SD = 0.50$ ) than the email message displaying transactional leadership principles ( $M = 2.96$ ,  $SD = 0.65$ ),  $t(59) = 6.49$ ,  $p < .001$ ,  $d = 1.68$ . The email message displaying transactional leadership principles was ascribed significantly higher ratings of transactional leadership ( $M = 3.95$ ,  $SD = 0.52$ ) than the email message displaying transformational leadership principles ( $M = 3.28$ ,  $SD = 0.41$ ),  $t(59) = 5.23$ ,  $p < .001$ ,  $d = 1.45$ . Additionally, the leader in the transformational condition was perceived as significantly more transformational than transactional,  $t(29) = 5.07$ ,  $p < .001$ ,  $d = 1.21$ , and the leader in the transactional condition was perceived as significantly more transactional than transformational,  $t(30) = 9.73$ ,  $p < .001$ ,  $d = 1.66$ . The pretest results

indicated that the email messages had the intended effects on followers' impression formations regarding leaders' leadership principles.

### Measures

Participants received a three-sectioned assessment sheet after reading the welcome message of the virtual leader and viewing his company internal SNS-profile (the control group did not view a SNS-profile). The first section contained the three main dependent variables and measured on a 7-point Likert scale (1 = *not at all*; 7 = *very much*) participants' impressions of the virtual leader's ability (DV 1), benevolence (DV 2), and integrity (DV 3). DV 1 was measured with two items ( $\alpha = .70$ ), for example, "The leader is very engaged and qualified". DV 2 was measured with five items ( $\alpha = .89$ ) adapted from Mayer and Davis' (1999) benevolence scale, for example, "The leader is very concerned about my welfare". DV 3 was measured with four items ( $\alpha = .74$ ) adapted from Mayer and Davis' (1999) integrity scale, for example, "The leader seems to adhere to sound principles". The second section contained the leadership manipulation check items adapted from the German version of the Multifactor Leadership Questionnaire Form 5x Short (Felfe & Goihl, 2002) and measured participants' leadership style perceptions on a 5-point Likert scale (1 = *not at all*; 5 = *frequently*). Again, the adapted pretest and manipulation check procedure of Braun et al. (2012) was applied; comparisons of the composite scales scores for transformational leadership (20 items,  $\alpha = .93$ ) and for transactional leadership (8 items,  $\alpha = .67$ ) between and within the two leadership groups indicated that the manipulation of leadership style was effective.<sup>18</sup> The third section consisted of items which measured participants' usability impressions and general impressions in order to optimize study materials and to generate new research questions. Data from this section were not included in the present calculations.

### 10.2.3 Procedure

The experiment took approximately 30 minutes and was carried out in single sessions under constant conditions in a laboratory at the University of Regensburg. First, participants received a consent form and a demographic questionnaire. After filling out the two documents, participants received the instruction sheet containing all necessary information to assume the role of a trainee who had been assigned to a virtual project

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<sup>18</sup> The email message displaying transformational leadership principles was ascribed significantly higher ratings of transformational leadership ( $M = 3.84$ ,  $SD = 0.48$ ) than the email message displaying transactional leadership principles ( $M = 3.13$ ,  $SD = 0.66$ ),  $t(123) = 6.88$ ,  $p < .001$ ,  $d = 1.24$ . The email message displaying transactional leadership principles was ascribed significantly higher ratings of transactional leadership ( $M = 4.03$ ,  $SD = 0.43$ ) than the email message displaying transformational leadership principles ( $M = 3.35$ ,  $SD = 0.40$ ),  $t(123) = 9.25$ ,  $p < .001$ ,  $d = 1.65$ . Additionally, the leader in the transformational condition was perceived as significantly more transformational than transactional,  $t(61) = 6.70$ ,  $p < .001$ ,  $d = 1.13$ , and the leader in the transactional condition was perceived as significantly more transactional than transformational,  $t(62) = 11.80$ ,  $p < .001$ ,  $d = 1.56$ .

group. Participants then read the welcome email of the virtual project leader on a computer screen and subsequently viewed his SNS-profile which automatically loaded in an internet browser after clicking on the link in the email. The control group email did not provide such a link and control group participants accordingly did not view the leader's SNS-profile. Afterwards, subjects filled out the three-sectioned assessment sheet and were then fully debriefed and received their course credit or a small gift.

### **10.3 Results**

#### *10.3.1 Ability impressions*

An univariate ANOVA was conducted to check for the hypothesized effect of the SNS-mediated competence-related self-disclosure on followers' formations of ability-related impressions. The means and standard deviations of the ability impression scores by experimental conditions are reported in Table 2.1. The ANOVA revealed no significant main effect of the self-disclosure manipulation on participants' ability impressions,  $F(2, 119) = 0.95$ ,  $p = .39$ , no significant main effect of the leadership style manipulation,  $F(1, 119) = 0.11$ ,  $p = .75$ , but a significant interaction between the self-disclosure manipulation and the leadership style manipulation,  $F(2, 119) = 3.82$ ,  $p = .03$ ,  $\eta^2 = .06$ . To further analyze the significant interaction effect, simple effects analyses were carried out separately for the participants in the transformational and the transactional leadership groups. Simple effects analyses revealed that in the transformational leadership conditions there were no significant differences between the three self-disclosure groups,  $F(2, 119) = 1.38$ ,  $p = .26$ . In contrast, in the transactional leadership conditions there were significant differences between the three groups,  $F(2, 119) = 3.39$ ,  $p = .04$ ,  $\eta^2 = .05$ . Post hoc comparisons indicated that the high self-disclosure group significantly differed from the low self-disclosure group and the control group (all  $ps < .04$ ), while the latter two groups were not significantly different from each other ( $p = .52$ ). This suggests that contrary to hypothesis 1 only high self-disclosure of a transactional leader promoted followers' ability impressions. Accordingly, hypothesis 1 must be rejected.

Table 2.1

*Descriptive statistics of trustworthiness impressions by experimental conditions in Study 2.1*

Condition	Self-disclosure	Leadership style	n	Ability impression		Benevolence impression		Integrity impression	
				M	SD	M	SD	M	SD
1	Low	Transformational	16	4.60	1.30	5.00	0.85	5.27	0.80
2	High	Transformational	16	5.60	0.83	2.60	1.06	3.60	0.99
3	CG	Transformational	30	5.75	1.13	3.75	1.69	3.81	1.17
4	Low	Transactional	16	6.13	0.64	5.27	1.28	5.33	1.23
5	High	Transactional	16	5.40	0.91	5.00	1.13	5.20	1.01
6	CG	Transactional	31	5.36	1.50	2.36	1.65	3.57	1.28

Note. CG = Control group.

### 10.3.2 Benevolence impressions

An univariate ANOVA was conducted to check for the hypothesized effect of the SNS-mediated high intimacy self-disclosure on followers' formations of benevolence-related impressions. The means and standard deviations of the benevolence impression scores by experimental conditions are reported in Table 2.1. The ANOVA revealed a significant main effect of the self-disclosure manipulation on participants' benevolence impressions,  $F(2, 119) = 6.03$ ,  $p = .003$ ,  $\eta^2 = .09$ , a significant main effect of the leadership style manipulation,  $F(1, 119) = 41.55$ ,  $p < .001$ ,  $\eta^2 = .26$ , and a significant interaction between the self-disclosure manipulation and the leadership style manipulation,  $F(2, 119) = 7.74$ ,  $p = .001$ ,  $\eta^2 = .12$ . To further analyze the significant interaction effect, simple effects analyses were carried out separately for the participants in the transformational and the transactional leadership groups. Simple effects analyses revealed that in the transformational leadership conditions there were no significant differences between the three self-disclosure groups,  $F(2, 119) = 1.70$ ,  $p = .19$ . In contrast, in the transactional leadership conditions there were significant differences between the three groups,  $F(2, 119) = 12.06$ ,  $p < .001$ ,  $\eta^2 = .17$ . Post hoc comparisons indicated that the high self-disclosure group significantly differed from the low self-disclosure group and the control group (all  $ps < .001$ ), while the latter two groups were not significantly different from each other ( $p = .14$ ). Accordingly, hypothesis 2 can be confirmed.



### 10.3.3 Integrity impressions

An univariate ANOVA was conducted to examine whether leaders' initial communications of their transactional or transformational leadership principles led to different integrity impressions (*exploratory research questions*). The means and standard deviations of the integrity impression scores by experimental conditions are reported in Table 2.1. The ANOVA revealed no significant main effect of the self-disclosure manipulation on participants' integrity impressions,  $F(2, 119) = 0.56$ ,  $p = .57$ , no significant main effect of the leadership style manipulation,  $F(1, 119) = 2.01$ ,  $p = .16$ , but a significant interaction between the self-disclosure manipulation and the leadership style manipulation,  $F(2, 119) = 3.29$ ,  $p = .04$ ,  $\eta^2 = .05$ . To further analyze the significant interaction effect, simple effects analyses were carried out separately for the participants in the three self-disclosure groups. Simple effects analyses revealed that in the high self-disclosure group there were no significant differences between the transactional and the transformational leader,  $F(1, 119) = 1.44$ ,  $p = .23$ , as well as in the low self-disclosure group,  $F(1, 119) = 2.56$ ,  $p = .11$ . However, in the control group there was a significant difference,  $F(1, 119) = 6.53$ ,  $p = .01$ ,  $\eta^2 = .05$ , indicating that the leader with transformational leadership principles was perceived as having more integrity than the leader with transactional leadership principles.

## 10.4 Discussion

### 10.4.1 Findings

Results show that the leader's SNS-mediated self-disclosure of competence-related information did not have the predicted effect on followers' ability impressions (DV 1). Even though there was the surprising finding that in case of a transactional leader SNS-mediated high self-disclosure led to higher ability perceptions than low or no self-disclosure, the following finding seems to be most important: Participants of the control group gave considerably high ability ratings that were not different from the ratings of the low self-disclosure group which was provided with information about the leader's competence. This means participants inferred their ability-related impressions either from the assumption that only competent employees are assigned with project leads; or, the email messages were perceived as representing the project-related expectations and principles of a competent person. Furthermore, it might be that for some reason participants of the two self-disclosure conditions gave no weight to the competence-related information. One explanation could be that since participants were students with mostly no work experience they did not value competence-related information as much as

real employees would do. Those who work in companies and project groups might give greater weight to information about leaders' competence because project success and one's day-to-day work life strongly depend on leaders' competent decisions. Therefore, the present findings need to be re-examined with work experienced subjects which is one of the purposes of Study 2.2.

Results regarding the benevolence-related impressions (DV 2) showed the predicted interaction effect: The transactional leader benefited from high self-disclosure on his SNS-profile and was perceived as similarly benevolent as the transformational leader. These results are encouraging and suggest that the preliminary findings of Jarvenpaa et al. (1998) and Mazer et al. (2007), who investigated self-disclosure effects in relationships of virtual team members and of teachers and their students, might be extended to leader-follower-relationships in virtual work environments. However, it must be noted that all of these studies used student participants who gave great positive weight to others' act of revealing intimate information, but it is unclear whether employees would feel the same way. As mentioned above, those who work in companies and project groups might give greater weight to competence-related information and might evaluate leaders' SNS-mediated high self-disclosure even as critical and inappropriate. Therefore, this high intimacy self-disclosure effect needs to be replicated with a sample of subjects with work experience which is one of the purposes of Study 2.2.

Results of the integrity-related impressions (DV 3) show interesting results regarding the exploratory research question whether transformational leadership principles and transactional leadership principles have different effects on followers' initial integrity perceptions. In the control group condition, transformational leaders received significantly higher integrity ratings than transactional leaders; the same tendency could be observed in the low self-disclosure condition. Even though this tendency only almost reached marginal significance, there seems to be no plausible reason why competence-related information should change followers' integrity perceptions; therefore, in case of no or low self-disclosure it might be argued that leaders who initially communicate transformational leadership principles are perceived as being of higher integrity than leaders who communicate their transactional leadership principles. This difference did not occur in the high self-disclosure condition which might suggest that followers' initial integrity perceptions are crucially influenced by their benevolence impressions. One possible explanation could be that at the beginning of such a compulsory relationship between organizational strangers, there is a high level of uncertainty and vulnerability, and accordingly a strong need for gathering information about the other person. Especially in case of subordinates, any information which reduces this socially vague situation and allows forming impressions about the new leader should be welcome. Moreover,

information which suggests that the leader is a benevolent and relationship-oriented person might lead to a kind of vulnerability-relieving feeling and to an affect-based overall positive impression effect, which also affects cognition-based impressions (i.e., ability and integrity). This might furthermore explain the previous finding that high intimacy self-disclosure of a transactional leader promoted followers' ability impressions.

#### 10.4.2 Limitations

General limitations, for example, regarding the experimental paradigm, are subject of the concluding discussion of *Study Series 2*; this sections deals with the most important limitations of Study 2.1 which are (1) the subsequent adding of a control group and (2) the use of student samples. As described in section 10.2.1, control group data were originally collected in the pretest of the email messages. Even though the same materials (email messages, assessment sheet) were used, pretest data were collect at a different time with a different student sample. Therefore, the incorporation and direct comparison of these data and data of the main study can only be made with considerable caution. However, it must be noted that data of the main study produced the same inference statistical results regarding low and high self-disclosure comparisons (i.e., hypothesis 2 and *exploratory research question*) when control group data were not included. Therefore, effectively only results of hypothesis 1 relied on the added data. However, even though it was surprising that leaders who disclosed competence-related information did not receive higher ability ratings than the control group, there is no reason to believe that the hypothesized effect would have occurred in case of collecting data with one overall sample. It rather seems that the hypothesized effect did not occur because of using student samples. Even though researchers argue that across a variety of topic areas student subjects behave in a manner highly similar to practitioners in organizational settings (Podsakoff et al., 2011), it might be that due to no or low work experience student participants either under-weighted the relevance of the competence-related information or overly used the information in the welcome message to draw ability-related inferences. On the contrary, it might be that student participants over-weighted the leader's act of high self-disclosure or at least gave greater weight than actual employees would do. As argued above it could be that actual employees give greater weight to information about leaders' competence and evaluate high intimacy self-disclosure as even inappropriate potentially leading to adverse perceptions of leaders' trustworthiness and professionalism. In order to meet these shortcomings, Study 2.2 used a sample of subjects with work experience and included a medium self-disclosure group for an even more differentiated examination of the self-disclosure effects.

#### 10.4.3 Implications

The findings of Study 2.1 are practically highly relevant because they suggest that virtual leaders' SNS-mediated self-disclosure has a positive effect on followers' initial trustworthiness impressions. More precisely, transactional leaders benefited from high self-disclosure regarding followers' perceptions of their ability, benevolence, and integrity. It seems that the predicted benevolence-related effect created some kind of overall positive effect which additionally affected followers' ability and integrity perceptions. In the present study transformational and transactional leadership were operationalized in purest form meaning that the transformational leader communicated only transformational principles and the transactional leader communicated only transactional principles. In fact, organizational leaders show behaviors of both styles, with one being more prominent than the other. Moreover, according to the *Full range of leadership* model (Bass & Avolio, 1994), transactional leadership is a necessary prerequisite for the effectiveness of transformational leadership. It is accordingly assumed that also transformational leaders who communicate their transformational and transactional principles will benefit from high self-disclosure at the beginning of an organizational relationship. Therefore, the present results suggest that leaders should generally use company internal SNSs for high self-disclosure, for example, in sections like *More about me*.

Even though results did not indicate leaders' disclosure of competence-related information having a positive effect on followers' ability impressions, it is recommended to provide such information for two reasons. First, the main idea of company internal SNSs is to provide others with work-related information such as one's current position, projects, and qualifications. This helps to find internal specialists and contact persons faster. Second, the high self-disclosure profile of the present study provided the same competence-related information as the low self-disclosure profile and additionally had a *More about me* section which provided personal information of higher intimacy (family, hobbies, and private picture). Accordingly, it cannot be said whether the positive effect of high self-disclosure will occur in case of not providing competence-related information. It might be that providing only private information will be perceived as strange, inappropriate, and ignoring the main idea of company internal SNSs. Therefore, it is recommended that those who use *More about me* sections for high self-disclosure also provide competence-related information on their profiles.

Results of all three trustworthiness ratings suggest that leaders, who initially communicate their leadership principles, should communicate and emphasize transformational facets of their leadership style. This would help to utilize the suggested benevolence-induced (overall) positive effect and to accordingly promote followers' initial trustworthiness impressions. However, this does not suggest that leaders should pretend

being transformational leaders, but should become aware of the transformational facets of their leadership styles and maybe even increase them, both under professional guidance, for example, in leadership trainings (see section 13.3.2).

All in all, the present findings preliminarily support the idea of promoting followers' initial trustworthiness impressions through leaders' SNS-mediated self-disclosure in virtual work environments. The following Study 2.2 examines whether these findings are valid for work experienced subjects.

## 11. Study 2.2

The main purpose of the present study is to see whether the examined effects of Study 2.1 also occur with a sample of work experienced subjects. Moreover, a medium self-disclosure condition is added for a more differentiated examination of the self-disclosure effect. Accordingly, this study investigates the effects of leaders' SNS-mediated *self-disclosure* and *leadership style* on followers' *trustworthiness impressions*.

### 11.1 Background

Results of Study 2.1 showed that a high intimacy self-disclosure profile had a positive effect on followers' trustworthiness impressions of transactional leaders and no effect on followers' trustworthiness impressions of transformational leaders. However, results of the pre-study with a working sample indicated that leaders' provision of private pictures on an internal SNS-profile would rarely promote followers' trustworthiness impressions and might even be perceived as inappropriate and unprofessional. Therefore, the present study included a medium self-disclosure profile (based on the high self-disclosure profile of Study 2.1, but without the private picture of the leader) in order to examine the privacy-related self-disclosure effect more differentiated and to see whether high self-disclosure actually produces adverse impression effects with work experienced followers. However, the following hypotheses assume no negative effect of leaders' high self-disclosure based on the theoretical derivations and results of Study 2.1.

As argued in Study 2.1 providing information about one's competence on a SNS-profile is one of the main ideas of company internal SNSs. Viewing information about a leader's good qualification should trigger reputation categorization processes and accordingly lead to high ability-related trustworthiness impressions. Even though this effect did not occur with a sample of students in Study 2.1, it has been argued that subjects with work experience are likely to give greater weight to competence-related information. Those who work in companies and project groups know how much project success and one's day-to-day work life depend on leaders' competent decisions. Therefore, employees are likely to value information about a new leader's good qualification. Accordingly, the following hypothesis regarding a virtual leader's competence-related self-disclosure is formulated:

**H1: Followers who view a leader's SNS-profile high, medium, or low in self-disclosure form higher ability impressions than followers who do not view the leader's SNS-profile.**

Building on the benevolence-related results of Study 2.1, the following interaction hypothesis regarding a virtual leader's privacy-related self-disclosure is formulated:

**H2: Followers who view a leader's SNS-profile high or medium in self-disclosure form higher benevolence impressions than followers who view a SNS-profile low in self-disclosure or followers who view no SNS-profile. This beneficial effect occurs for a transactional leader, but not for a transformational leader.**

Results of the exploratory research question in Study 2.1 suggest that in case of no or low self-disclosure, a transformational leader is perceived as being of higher integrity than a transactional leader. Since this difference did not occur in case of high self-disclosure, it was argued that followers' integrity-related perceptions might be influenced by their positive benevolence impressions causing an overall positive impression effect. However, these assumptions are somewhat speculative and need to be further investigated. Therefore, the exploratory research question regarding leaders' integrity perceptions remains the same:

**Does a virtual leader's initial communication of either transactional or transformational leadership principles lead to different integrity impressions?**

## **11.2 Method**

The following section describes the design, materials, and the procedure of Study 2.2.

### *11.2.1 Participants and design*

One hundred and fifty-three subjects (68 female and 85 male; age ranged from 22 to 73 years,  $M = 39.76$ ,  $SD = 13.47$ ; work experience ranged from 1 to 47 years,  $M = 17.31$ ,  $SD = 13.71$ ) participated in the online study and were acquired via Facebook, notice boards, and direct contact. One-hundred and ninety-four participants started the online survey and 159 participants completed the online survey; six participants were excluded due to having no working experience. The online study was based on a two-factorial between-subjects design. The first independent variable *self-disclosure* had four conditions (low vs. medium vs. high vs. control group) and the second independent variable *leadership style* had two conditions (transformational vs. transactional). All

individuals participated on voluntary basis and were randomly and evenly assigned to the test conditions.

### 11.2.2 Materials

#### *Scenario and role description*

The present study used the same scenario as Study 2.1 and provided participants with the same instructions. However, instead of imagining being a trainee, participants were told to assume the role of a normal employee who had been assigned to a new virtual project group. This small change had been made since subjects of all ages participated and trainee positions are normally filled with rather young employees (mid-20s to early-30s).

#### *SNS-profiles*

To manipulate self-disclosure three SNS-profiles (low vs. medium vs. high) were generated based on the pretested SNS-profiles of Study 2.1. While the information of the tabulated competence-related overview contained the same information as in Study 2.1, some other small changes were made in order to increase generalizability: A profile picture of another male in the mid-50s was used and the content of the section *More about me* was slightly changed. While family-related information remained the same, information about the leader's hobbies was partly changed from hiking and playing the piano to handball and jogging. Accordingly, the private picture in the high self-disclosure condition showed the leader in sportswear in front of a handball goal; the picture of the pet dog was excluded. The medium self-disclosure condition, which was added in order to not ignore the results of the pre-study of Study 2.1 and to examine the self-disclosure effect more differentiated, did not show the private picture in the *More about me* section. Furthermore, in the present study the SNS-profiles were not accessed by clicking on a link, but were integrated as screenshots in the online survey. This procedure was chosen because being requested to click on an unknown link while using one's private or professional computer might have caused participants to skip the SNS-profile visit or to even stop the online survey.

#### *Email message*

To manipulate leadership style, the two pretested email messages from Study 2.1 were used. As described above, this time the email messages did not contain the links to the SNS-profiles on [www.wordpress.com](http://www.wordpress.com).



### *Measures*

After reading the welcome message of the virtual leader and viewing his company internal SNS-profile (except for the control group), participants answered different items derived from the first section of the assessment sheet used in Study 2.1. Items measured participants' impressions of the virtual leader's ability (DV 1), benevolence (DV 2), and integrity (DV 3) on a 7-point Likert scale (1 = *not at all*; 7 = *very much*). DV 1 was measured with three items ( $\alpha = .93$ ), DV 2 was measured with the same previously used five items ( $\alpha = .95$ ), and DV 3 was measured with the same previously used four items ( $\alpha = .88$ ). Due to efficiency reasons items of the second and third section of the assessment sheet used in Study 2.1 were not included.

#### *11.2.3 Procedure*

The present study was conducted as an online study since subjects participated from all over Germany and laboratory testing was not applicable. All participants received an email with a link to one of the eight surveys on the online platform *LimeSurvey* (each condition had a separate survey link). The online survey was based on a step-by-step procedure which automatically led participants through the study. All information presented and collected during these steps corresponded in order and content with the information from Study 2.1. However, the main difference regarding the presentation method was that the SNS-profiles were integrated into the survey as screenshots so that participants did not have to click on an unknown link which might have caused a high dropout rate. After working through the scenario and filling out all assessment sections (approx. 15 min), participants were thanked for their participation.

### **11.3 Results**

#### *11.3.1 Ability impressions*

An univariate ANOVA was conducted to check for the hypothesized effect of the leader's SNS-mediated competence-related self-disclosure on followers' formations of ability-related impressions. The means and standard deviations of the ability impression scores by experimental conditions are reported in Table 2.2. The ANOVA revealed a marginally significant main effect of the self-disclosure manipulation on participants' ability impressions,  $F(3, 145) = 2.22$ ,  $p = .09$ ,  $\eta^2 = .04$ , and subsequently conducted post hoc comparisons using Fisher LSD test showed that compared to the control group ( $M = 4.29$ ,  $SD = 1.51$ ) the low self-disclosure group gave marginally significantly higher ratings ( $M = 4.80$ ,  $SD = 1.38$ ,  $p = .09$ ), the medium self-disclosure group gave significantly higher

ratings ( $M = 4.92$ ,  $SD = 1.31$ ,  $p = .04$ ), and the ratings of the high self-disclosure group were not significantly different ( $M = 4.36$ ,  $SD = 1.46$ ,  $p = .82$ ). Furthermore, the ANOVA revealed a significant main effect of the leadership style manipulation,  $F(1, 145) = 17.35$ ,  $p < .001$ ,  $\eta^2 = .11$ , showing that the transformational leader received higher ability ratings ( $M = 5.05$ ,  $SD = 1.30$ ) than the transactional leader ( $M = 4.14$ ,  $SD = 1.42$ ). There was no significant interaction between the self-disclosure manipulation and the leadership style manipulation,  $F(3, 145) = 1.84$ ,  $p = .14$ . Accordingly, hypothesis 1 can partially be confirmed.

Table 2.2

*Descriptive statistics of trustworthiness impressions by experimental conditions in Study 2.2*

Condition	Self-disclosure	Leadership style	n	Ability impression		Benevolence impression		Integrity impression	
				M	SD	M	SD	M	SD
1	Low	Transformational	18	5.15	1.53	5.00	1.23	5.06	1.25
2	Medium	Transformational	18	5.04	1.36	4.87	0.83	4.85	1.04
3	High	Transformational	18	4.94	1.24	4.61	1.15	4.94	0.91
4	CG	Transformational	20	5.06	1.16	4.50	1.30	4.70	0.99
5	Low	Transactional	21	4.51	1.19	2.95	0.95	4.23	1.04
6	Medium	Transactional	18	4.80	1.28	3.56	1.74	4.60	1.44
7	High	Transactional	19	3.81	1.47	2.65	1.21	3.96	1.40
8	CG	Transactional	20	3.48	1.42	3.25	1.53	4.06	1.52

Note. CG = Control group.

### 11.3.2 Benevolence impressions

An univariate ANOVA was conducted to check for the hypothesized positive effect of medium and high self-disclosure on followers' formation of benevolence impressions. The means and standard deviations of the benevolence impression scores by experimental conditions are reported in Table 2.2. The ANOVA revealed no significant main effect of the self-disclosure manipulation on participants' benevolence impressions,  $F(3, 145) = 1.31$ ,  $p = .27$ , but a significant main effect of the leadership style manipulation,  $F(1, 145) = 63.65$ ,  $p < .001$ ,  $\eta^2 = .31$ , indicating that the transformational leader received

higher benevolence ratings ( $M = 4.73$ ,  $SD = 1.14$ ) than the transactional leader ( $M = 3.09$ ,  $SD = 1.39$ ). There was no significant interaction between the self-disclosure manipulation and the leadership style manipulation,  $F(3, 145) = 1.06$ ,  $p = .37$ . Accordingly, hypothesis 2 must be rejected.

### *11.3.3 Integrity impressions*

An univariate ANOVA was conducted to examine whether leaders' initial communication of their transactional or transformational leadership principles led to different integrity impressions (*exploratory research questions*). The means and standard deviations of the integrity impression scores by experimental conditions are reported in Table 2.2. The ANOVA revealed no significant main effect of the self-disclosure manipulation on participants' integrity impressions,  $F(3, 145) = 0.65$ ,  $p = .58$ , but a significant main effect of the leadership style manipulation,  $F(1, 145) = 11.75$ ,  $p = .001$ ,  $\eta^2 = .08$ , indicating that the transformational leader received higher integrity ratings ( $M = 4.88$ ,  $SD = 1.04$ ) than the transactional leader ( $M = 4.21$ ,  $SD = 1.35$ ). There was no significant interaction between the self-disclosure manipulation and the leadership style manipulation,  $F(3, 145) = 0.62$ ,  $p = .60$ .

## **11.4 Discussion**

### *11.4.1 Findings*

Results show that the leader's SNS-mediated self-disclosure of competence-related information had an important influence on followers' ability impressions (DV 1). Leaders of the low and the medium self-disclosure conditions received higher ability ratings than the control group. Interestingly, the leader with the high self-disclosure profile did not receive higher ability ratings than the control group leader, but received considerably lower ratings than the low and medium self-disclosure leader who had provided the same competence-related information. These results seem to confirm the assumptions that employees give weight to competence-related information and that, according to the pre-study results of Study 2.1, providing private pictures might be perceived as unprofessional in occupational settings. However, one restraining factor regarding the interpretation of the beneficial effects of the low and medium self-disclosure profiles might be given by the fact that the control group participants did not receive a portrait photo of the leader. The portrait photo (which was part of the SNS-profile) showed the leader in business outfit which might have had a positive influence on perceptions of professionalism and competence. However, study participants were work and business experienced individuals who were used to

business outfits and presumably not influenced by leaders' look. Moreover, due to the fact that the present study series used portrait pictures of moderately attractive individuals, effects of the *what is beautiful is good* stereotype (Dion, Berscheid, & Walster, 1972) can with reasonable certainty be excluded as well. Furthermore, the main effect of leadership style showed that transformational leaders received higher ability ratings than transactional leaders; as already argued in Study 2.1 this might be due to high benevolence impressions causing an overall positive impression effect. This idea seems to be supported by the descriptive finding that within the transformational leader conditions all ability ratings were considerably high with almost no mean differences between the self-disclosure conditions. Even the transformational leader of the control group who did not provide any competence-related information received the same high ability ratings. Moreover, the transactional leader with a medium self-disclosure profile received the highest ability ratings within the transactional leader condition. Surprisingly, subjects of the transactional control group, who were not provided with any information about the leader's level of qualification, rated the leader's ability considerably lower than subjects of the same condition did in Study 2.1. It might be that the present subjects already had experiences with pronounced transactional leadership or were able to image what it would feel like to work for a leader focusing only on task completion and respective rewards and punishments. Moreover, as suggested before there is a high level of uncertainty and vulnerability at the beginning of a new organizational relationship, which is why subordinates might have appreciated a more relationship-oriented first encounter. All in all, concerns and reservations regarding the transactional characterized first encounter might have led to some kind of overall negative impression effect which caused the work experienced subjects to give considerably low ability ratings.

Results regarding followers' benevolence perceptions (DV 2) show that only leadership style had an influence on the ratings. Transformational leaders were generally perceived as being more benevolent than transactional leaders. Furthermore, the transactional leader did not benefit from medium or high self-disclosure which is surprising since this hypothesized effect had been quite strong in the previous study and Mazer et al. (2007) reported the same effects in their study with teachers and students. It might be that due to the fictitious character of the scenario and due to the fact that participants were not forwarded to the leader's online profile and received screenshots of the profile instead, the whole setting was not realistic and strong enough to have an effect on the affect-based impressions of work and leadership experienced subjects.

The present results regarding followers' integrity impressions (DV 3) show a similar tendency as the results of Study 2.1. The transformational leader was perceived as being of higher integrity than the transactional leader; however, this time the transactional leader

did not benefit from disclosing privacy-related information. Accordingly, it can be noticed that leaders' initial communications of transformational leadership principles lead to higher integrity perceptions than the communication of transactional leadership principles.

#### *11.4.2 Limitations*

The most important limitation of Study 2.2 is that it was carried out online. Using online surveys does not allow for controlling environmental conditions under which subjects participate. For example, it cannot be controlled for distractions and interruptions (e.g., telephone ringing, pop-up windows) and it is unclear which technical devices are used (e.g., desktop computer, tablet, smartphone) and whether all this influences participants' information processing and ability to empathize with their fictitious role. However, despite these methodological shortcomings it must be noted that the results of this work experienced sample emphasize the practical relevance of the present research idea and provide a solid basis for further research.

#### *11.4.3 Implications*

The findings of Study 2.2 are practically highly relevant because they show that a virtual leader's competence-related self-disclosure on a company internal SNS-profile has positive effects on ability impressions of work experienced followers. This suggests that leaders should use such profiles in order to provide others with information about their qualifications and competencies. However, since this positive effect disappeared in case of a high self-disclosure profile, one should not provide private pictures as this seems to be perceived as unprofessional and inappropriate.

Regarding the communication of leadership principles, it can be recommended to especially communicate transformational facets of one's leadership style; this seems to have a positive (overall) effect on followers' integrity, ability, and benevolence impressions. As already argued in Study 2.1, this does not suggest that leaders should pretend being transformational leaders, but should become aware of the transformational facets of their leadership styles and maybe even train them (see section 13.3.2) in order to initially communicate and emphasize them.

Finally, within the transactional leadership condition the medium self-disclosure profile descriptively received the highest ratings on all of the three trustworthiness components. Within the transformational leadership condition the medium self-disclosure profile received the almost same ratings as the other self-disclosure conditions. Accordingly, in regards of these results and the results of Study 2.1, it can be recommended to use internal SNS-profiles for medium self-disclosure because it seems that medium self-

disclosure does not have adverse effects for highly transformational leaders and can have positive effects for transactional or generally less transformational leaders.

However, research has shown that in case of female leaders strong perceptions of femininity collided with a transformational leadership style, which negatively affected followers' trustworthiness impressions (Braun et al, 2012). Therefore, it needs to be examined whether the act of disclosing personal information and signaling relationship-orientation, which according to traditional sex-role stereotypes is associated with women rather than men (Collins & Miller, 1994), has an adverse effect for female leaders with a transformational leadership style (Study 2.3).

## 12. Study 2.3

The main purpose of the present study is to investigate whether high self-disclosure has an adverse effect on followers' benevolence impressions of female leaders with a transformational leadership style. Furthermore, it is examined whether the strong positive effect of high self-disclosure on followers' benevolence impressions of transactional leaders (Study 2.1) can be replicated, both for male and female leaders. Due to the clear results regarding the effect of leadership style on followers' integrity impressions (*exploratory research questions* in Study 2.1 and Study 2.2), Study 2.3 does not further investigate this effect. Moreover, since the present study uses student participants, ability-related effects are not further investigated since Study 2.1 showed that work inexperienced participants gave no weight to competence-related information. All in all, Study 2.3 examines whether and how leaders' SNS-mediated *self-disclosure*, *leadership style*, and *gender* affect followers' *benevolence impressions*.

### 12.1 Background

"[T]he number of women in leadership positions has increased continuously within the last 15 years" (Braun et al., 2012, p. 98), and due to the recently resolved *women's quota* this number is about to further grow in Germany's large companies. However, female leaders still struggle with the stereotypical lack of fit between the female gender role and the leadership role (*lack of fit model*; Heilman, 1983): The female gender stereotype is characterized by communal attributes (being sensitive, helpful, and concerned about others) and is less concordant with the managerial stereotype than the male gender stereotype (*think manager – think male* phenomenon; Schein, 1973) which is characterized by agentic attributes (being dominant, aggressive, and independent). While the women's quota might help to diminish this bias against women in the context of personnel decisions, research has shown that women suffer from this bias even when having leadership positions. More precisely, in case of increased femininity perceptions (e.g., high attractiveness) the perceived lack of fit between female gender role and leader role is augmented and female leaders are devaluated regarding their performance (Heilman & Stopeck, 1985), their leadership competence (Sczesny, Spreemann, & Stahlberg, 2006), and their trustworthiness (Braun et al., 2012). The latter study is of special interest for Study 2.3 which is why it is presented in more detail. Scholars used the almost same scenario as *Study Series 2* and provided participants with two introducing messages of a new male or female leader (*gender*) who either displayed a transformational or a transactional leadership style (*leadership style*). Furthermore, portrait pictures of an attractive or an unattractive person (*attractiveness*) were used to

primarily manipulate femininity perceptions in case of the female leader. After viewing the leader's résumé which included the portrait picture and after reading the two messages, participants had to rate their trust and loyalty towards the leader. Followers' trust impressions were operationalized with McAllister's (1995) construct of affect-based trust which can be understood as a manifestation of affect-based trustworthiness (i.e., benevolence). Results showed that increased femininity perceptions had a negative influence on followers' affect-based trust and loyalty towards the female leader with a transformational leadership style. This effect did not occur for male transformational leaders and not for male or for female transactional leaders. Braun et al. (2012) argued that strengthened femininity perceptions collided with the influential style of transformational leadership which accordingly led to low trust and loyalty ratings. These findings are highly relevant for the present study for two reasons: First, in their meta-analysis Eagly, Johannesen-Schmidt, and Van Engen (2003) found that female leaders are generally perceived as being more transformational than male leaders; second, according to traditional sex-role stereotypes, high self-disclosure has been considered being a feminine act rather than being a masculine act resulting "from the fact that females in our society are taught to be more expressive and emotional than males" (Kleinke & Kahn, 1980, p. 190). Therefore, it needs to be examined whether the act of high intimacy self-disclosure increases femininity perceptions and accordingly negatively affects followers' trustworthiness impressions of female leaders with a transformational leadership style. In the style of Braun et al. (2012), the following three-way interaction hypothesis is formulated:

**H1: Followers who view a female leader's SNS-profile high in self-disclosure form lower benevolence impressions than followers who view a female leader's SNS-profile low in self-disclosure. This adverse effect occurs for a transformational female leader, but not for a transactional female leader nor for a male leader.**

Since this negative effect is considered only for female leaders with a transformational leadership style, the following sex-independent interaction hypothesis for a transactional leadership style is formulated according to the results of Study 2.1:

**H2: Followers who view a leader's SNS-profile high in self-disclosure form higher benevolence impressions than followers who view a leader's SNS-profile low in self-disclosure. This beneficial effect occurs for a transactional leader, but not for a transformational leader.**



## **12.2 Method**

The following section describes the design, materials, and the procedure of Study 2.3.

### *12.2.1 Participants and design*

One hundred and twenty students at the University of Regensburg (85 female and 35 male; age ranged from 18 to 45 years,  $M = 22.75$ ,  $SD = 3.31$ ) participated in the experiment which was based on a three-factorial between-subjects design. The first independent variable *self-disclosure* had two conditions (low vs. high), the second independent variable *leadership style* had two conditions (transformational vs. transactional), and the third independent variable *gender* had two conditions (male vs. female). All individuals participated in exchange for course credit or small gifts (e.g., chocolate bar) and were randomly and evenly assigned to the test conditions.

### *12.2.2 Materials*

#### *Scenario and role description*

The present study used the same scenario as Study 2.1 and provided participants with the same instructions.

#### *SNS-profiles*

To manipulate self-disclosure of the male leader the same pretested profiles of Study 2.1 were used. For the female leader the same profile contents were used and included a portrait picture of a female in the mid-50s in business outfit (blouse and jacket) and a private picture of her in the *More about me* section (casual leisure outfit). A pretest showed that the female leader was perceived as being of moderate attractiveness: Eighteen participants rated the portrait picture of the female leader on a 7-point Likert scale (1 = *not at all*; 7 = *very much*) as moderately attractive ( $M = 3.87$ ,  $SD = 1.06$ ) and the attractiveness score was not significantly different from the neutral score 4,  $t(17) = 0.20$ ,  $p = .85$ . The high self-disclosure profiles were used (instead of the medium self-disclosure profiles of Study 2.2) to aim for strong self-disclosure impressions and the assumed increased femininity perceptions.

#### *Email message*

To manipulate leadership style, the two pretested email messages from Study 2.1 were used.

### Measures

After reading the welcome message of the virtual leader and viewing his or her company internal SNS-profile, participants received the same three-sectioned assessment sheet used in Study 2.1. However, of the first section only benevolence (DV), which was measured with the same previously used five items ( $\alpha = .89$ ) adapted from Mayer and Davis (1999), was included in the present calculations (see hypotheses). The second section contained the leadership manipulation check items adapted from the German version of the Multifactor Leadership Questionnaire Form 5x Short (Felfe & Gohli, 2002) and measured participants' leadership style perceptions on a 5-point Likert scale (1 = *not at all*; 5 = *frequently*). The pretest and manipulation check procedure of Braun et al. (2012) was applied; comparisons of the composite scales scores for transformational leadership (20 items,  $\alpha = .92$ ) and for transactional leadership (8 items,  $\alpha = .73$ ) between and within the two leadership groups indicated that the manipulation of leadership style was effective.<sup>19</sup> Again, data from the third section which measured participants' usability impressions and general impressions were not included in the present calculations.

#### 12.2.3 Procedure

The present study used the same procedure as Study 2.1.

### 12.3 Results

An univariate ANOVA was conducted to check for the hypothesized effects of leader's SNS-mediated self-disclosure, leadership style, and gender on followers' formations of benevolence impressions. The means and standard deviations of the benevolence impression scores by experimental conditions are reported in Table 2.3. The ANOVA revealed no significant main effect of the self-disclosure manipulation,  $F(1, 112) = 0.79$ ,  $p = .38$ , a significant main effect of the leadership style manipulation,  $F(1, 112) = 136.18$ ,  $p < .001$ ,  $\eta^2 = .55$ , and no significant main effect of the gender manipulation,  $F(1, 112) = 0.65$ ,  $p = .42$ . Furthermore, the ANOVA revealed a significant interaction between the self-disclosure manipulation and the leadership style manipulation,  $F(1, 112) = 7.60$ ,  $p = .007$ ,  $\eta^2 = .06$ , a significant interaction between the self-disclosure manipulation and the gender manipulation,  $F(1, 112) = 5.49$ ,  $p = .02$ ,  $\eta^2 = .05$ , no

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<sup>19</sup> The email message displaying transformational leadership principles was ascribed significantly higher ratings of transformational leadership ( $M = 3.93$ ,  $SD = 0.48$ ) than the email message displaying transactional leadership principles ( $M = 3.28$ ,  $SD = 0.54$ ),  $t(118) = 7.03$ ,  $p < .001$ ,  $d = 1.28$ . The email message displaying transactional leadership principles was ascribed significantly higher ratings of transactional leadership ( $M = 4.11$ ,  $SD = 0.37$ ) than the email message displaying transformational leadership principles ( $M = 3.44$ ,  $SD = 0.52$ ),  $t(118) = 8.12$ ,  $p < .001$ ,  $d = 1.50$ . Additionally, the leader in the transformational condition was perceived as significantly more transformational than transactional,  $t(59) = 6.14$ ,  $p < .001$ ,  $d = 0.98$ , and the leader in the transactional condition was perceived as significantly more transactional than transformational,  $t(59) = 10.42$ ,  $p < .001$ ,  $d = 1.42$ .

significant interaction between the leadership style manipulation and the gender manipulation,  $F(1, 112) = 1.82, p = .38$ , and no significant three-way interaction of self-disclosure, leadership style, and gender,  $F(1, 112) = 0.79, p = .38$ . Due to the non-significant three-way interaction, hypothesis 1 must be rejected. To further analyze the significant interaction between self-disclosure and leadership style, simple effects analyses were carried out separately for participants in the transformational and the transactional leadership groups. Simple effects analyses revealed that, in the transformational leadership condition, there was no significant difference between the low and high self-disclosure groups,  $F(1, 112) = 1.74, p = .19$ . In contrast, in the transactional leadership condition there was a significant difference between the low and high self-disclosure groups,  $F(1, 112) = 6.65, p = .01, \eta^2 = .06$ , showing that transactional leaders with high self-disclosure profiles received significantly higher benevolence ratings ( $M = 3.74, SD = 0.88$ ) than transactional leaders with low self-disclosure profiles ( $M = 3.15, SD = 0.99$ ). Accordingly, hypothesis 2 can be confirmed. To further analyze the significant interaction between self-disclosure and gender, simple effects analyses were carried out separately for participants in the male leader and the female leader groups. Simple effects analyses revealed that, in the male leader condition, there was no significant difference between the low and high self-disclosure groups,  $F(1, 112) = 1.05, p = .31$ . In contrast, in the female leader conditions there was a significant difference between the low and high self-disclosure groups,  $F(1, 112) = 5.23, p = .02, \eta^2 = .05$ , showing that female leaders with high self-disclosure profiles received significantly higher benevolence ratings ( $M = 4.58, SD = 1.09$ ) than female leaders with low self-disclosure profiles ( $M = 4.06, SD = 1.55$ ).

Table 2.3

*Descriptive statistics of benevolence impressions by experimental conditions in Study 2.3*

Condition	Self-disclosure	Leadership style	Gender	<i>n</i>	Benevolence impression	
					<i>M</i>	<i>SD</i>
1	Low	Transformational	Male	15	5.55	1.00
2	High	Transformational	Female	15	5.33	0.71
3	Low	Transformational	Female	15	5.40	0.84
4	High	Transformational	Male	15	5.01	0.88
5	Low	Transactional	Male	15	3.59	1.10
6	High	Transactional	Female	15	3.83	0.85
7	Low	Transactional	Female	15	2.72	0.64
8	High	Transactional	Male	15	3.65	0.94

## 12.4 Discussion

### 12.4.1 Findings

Results show that, contrary to hypothesis 1, the female leader with a transformational leadership style and a SNS-profile high in self-disclosure did not receive lower benevolence ratings than the same leader with a SNS-profile low in self-disclosure. This means, female transformational leaders did not suffer from high self-disclosure just like the male transformational leaders. One possible explanation is that the high self-disclosure profile did not have the assumed increasing effect on followers' femininity perceptions due to its rather moderate level of intimacy (see pre-study in section 10.2.2). More precisely, other scholars used information of much higher intimacy to operationalize high self-disclosure, for example, guilt feelings resulting from involvement in a fatal car accident and a nervous breakdown suffered by the discloser's mother (Derlega & Chaikin, 1976) or the discloser's feelings about a recent suicide by one of the parents (Kleinke & Kahn, 1980). Moreover, these researchers argue that especially self-disclosure about personal problems is stereotypically associated with and perceived as appropriate for females. Therefore, since high self-disclosure in the present study did not involve information about personal problems, it seems that the corresponding profile did not lead to exaggerated perceptions of female-related attributes. This is an important finding suggesting that, as long as organizational leaders do not use their profiles for disclosing

information about personal problems, SNS-mediated high self-disclosure should have no adverse effects on benevolence impressions of transformational female leaders due to increased femininity perceptions.

Furthermore, results showed the expected significant interaction between leadership style and self-disclosure and accordingly replicated the findings of Study 2.1 and Study 2.2: Those who are perceived as being transactional leaders benefit from high self-disclosure regarding followers' initial benevolence perceptions. This effect occurred independently of leader gender and further emphasized the idea of using internal SNS-profiles for promoting initial trustworthiness impressions.

Unexpectedly, results showed a significant interaction between self-disclosure and leader gender suggesting that only female leaders benefited from high self-disclosure. However, this effect seems to be a sample induced artefact; the present study used the same materials as the previous two studies, but for some reason male leaders of the low self-disclosure condition received considerably higher benevolence ratings than in the previous studies (e.g., almost a whole rating point more than in Study 2.1). Accordingly, since the benevolence level of the low self-disclosure leaders was almost as high as the benevolence level of the high self-disclosure condition in the previous studies, there was no further positive impact of leaders' high self-disclosure on followers' benevolence impressions. However, since this effect did not occur in the previous studies and there seems to be no plausible reason for its occurrence, this effect should be of no further relevance.

#### 12.4.2 Limitations

The most important drawback of Study 2.3 is that, since the present study used only pictures of moderately attractive individuals, it remains unclear whether the act of high self-disclosure can be used to compensate for the *beauty is beastly* effect reported by Braun et al. (2012) for highly attractive female leaders with a transformational leadership style. More precisely, according to the scholars, followers' low initial trust toward above described female leaders is mediated by low ascribed leader communality. "Communion perceptions are related to one's social attraction toward a person, as, for instance, liking" (Braun et al., 2012, p. 100), and comprise attributes such as being *supportive*, *understanding*, *sensitive*, and *caring* (Heilman & Okimoto, 2007). According to the *disclosure-liking hypothesis* and due to the conceptual similarity of Heilman and Okimoto's (2007) communality attributes to Mayer and Davis' (1999) benevolence attributes (e.g., *helping others* or *concern about others welfares*), leaders' high self-disclosure is very likely to have beneficial effects on followers' communality perceptions. This actual act of disclosing and showing relationship-orientation should have great impact on followers'

communality perceptions, especially since Heilman and Okimoto (2007) provided preliminary evidence for the positive effect of simply describing a leader's communality favorably. They showed that in a written memo about a new female leader, two sentences which described her communality favorably were sufficient to positively influence followers' communality perceptions. Therefore, it seems reasonable to argue that leaders' high self-disclosure (operationalized as in the present study series on a moderate intimacy level in order to not increase femininity or inappropriateness perceptions) should have an even stronger beneficial effect on followers' communality perceptions. This might be a promising approach for overcoming the *beauty is beastly* effect found for attractive female leaders with a transformational leadership style (Braun et al., 2012). However, additional research is needed before further conclusions can be drawn.

#### *12.4.3 Implications*

The practically most important findings of Study 2.3 are that (1) high self-disclosure did not have the assumed negative effect for female leaders' with a transformational leadership style, that (2) transactional leaders of both genders benefited from high self-disclosure, and that (3) transformational leaders of both genders received generally high trustworthiness ratings. Therefore, the practical implications derived from Study 2.1 and Study 2.2 can be extended to leaders of both genders, generally suggesting that employees should use their company internal SNS-profiles to reveal moderately intimate information about themselves to others. A more detailed and summarizing overview about the practical implications, advantages, and challenges of this social media based approach of promoting initial trustworthiness impression is given in the following concluding discussion.

### **13. Concluding discussion**

This section summarizes all main findings, limitations, and implications of *Study Series 2*. First of all, the main findings are reported of how leaders' SNS-mediated self-disclosure and leadership style affect followers' initial trustworthiness impressions. Second, the main limitations of this study series are reported and ideas for future research are presented. Third, the most important practical implications are discussed.

#### **13.1 Findings**

The following section summarizes the main findings regarding the effects of leaders' SNS-mediated self-disclosure on followers' trustworthiness impressions. Additionally, the relevance of leaders' style of leadership is discussed.

##### *13.1.1 Self-disclosure effects*

Results of the three studies show that SNS-mediated self-disclosure of a virtual leader has positive effects on followers' initial trustworthiness impressions. Even though the results partially differed depending on study sample and procedure, there are sufficient reasons to conclude the following: (1) Competence-related self-disclosure has a positive effect on perceptions of leaders' skills and competencies and accordingly increases followers' ability impressions; and (2) privacy-related self-disclosure (in addition to competence-related self-disclosure) has a positive effect on benevolence impressions of leaders whom followers initially perceived as being of low goodwill (e.g., strongly transactional leaders). While the ability-related effect is based on the content of self-disclosure (e.g., one's factual qualification), the benevolence-related effect is rather explained by the disclosing act itself and the fact that observers develop more positive beliefs about others who are willing to disclose more intimately; however, the positive nature of both effects relies on followers' perceived appropriateness of the self-disclosure which is a critical and sensitive issue during first encounters. Online self-disclosure has become a socially accepted and even desired act of revealing personal information to others (see section 2.2) and it seems that online self-disclosure might have an expanded *critical threshold of appropriateness* compared to conventional personal interactions. For instance, a leader's act of providing new project members with hard copy compilations about own qualifications, hobbies, family situations, and private pictures during a first meeting is likely to be perceived as inappropriate and to cause adverse impression effects; on the contrary, providing the same information on a company internal SNS-profile and inviting others to view this information is likely to be perceived as somehow usual and appropriate. Therefore, the present findings regarding leaders' self-disclosure provide

preliminary but promising evidence for the suggested SNS-based approach of promoting trustful leader-follower-relationships and accordingly OCB-performances in virtual work environments.

#### *13.1.2 Leadership style effects*

Results regarding leaders' style of leadership show that those who initially communicate and emphasize transformational leadership principles receive generally high trustworthiness ratings. It seems that this positive overall evaluation is crucially influenced by followers' perceptions of leaders' benevolence because transactional leaders who increase their benevolence perceptions through privacy-related self-disclosure also receive high ability and integrity ratings. Even though this assumed process is somewhat speculative, there seems to be a plausible need-based explanation. As argued before, there is a high level of uncertainty and vulnerability at the very beginning of an organizational relationship and a strong need for gathering information about the other person in order to reduce this socially vague situation. Accordingly, at this earliest stage of relationship development, principles which suggest the leader to be a benevolent and relationship-oriented person (i.e., transformational principles) reduce followers' concerns to a larger extent than principles which suggest the leader to focus on task completion and respective rewards and punishments (i.e., transactional principles). Therefore, communicating transformational leadership principles is likely to be appreciated by new followers and to create a benevolence-induced positive overall effect leading to generally high trustworthiness impressions.

### **13.2 Limitations**

The following section discusses the main limitations of *Study Series 2* and offers ideas for future research.

#### *13.2.1 Participants*

The most important sample-related limitation is that student participants produced different self-disclosure effects than work experienced participants. More precisely, in case of student participants, competence-related self-disclosure did not have the expected effect on ability impressions, but privacy-related self-disclosure had a strong effect on benevolence impressions; in case of work experienced participants the effects occurred the other way round. Nevertheless, there are several reasons which should allow for a generalization of both examined self-disclosure effects. As already argued, due to their low work experience student participants did not value competence-related



information as much as work experienced participants did who in contrast knew how much project success and one's day-to-day work life depended on leaders' qualifications and competent decisions. Therefore, in work settings in which students have considerable experience (e.g., academic context), it is expected that they give greater weight to competence-related information and accordingly take it into account when forming ability impressions. However, in case of the work experienced sample it might be that participants already had experience with the *usual use* of company internal SNS-profiles (i.e., providing others with information about one's occupational qualifications and department affiliation), but were irritated by the leaders' *unusual use* (i.e., providing others with privacy-related information). Moreover, since work experienced participants had an average age of almost 40 years, it might be that several participants were not familiar with the phenomenon of online self-disclosure and its commonness on *privately* used SNSs and accordingly devaluated the leaders unusual act of even *publicly* disclosing private information. All in all, future research needs to address these sample-related limitations, for example, by creating real life work settings for the respective samples and by considering participants' experiences with and attitudes towards online self-disclosure.

### 13.2.2 Operationalization

The present study series used an *impression formation* paradigm (i.e., subjects did not actively engage in an interaction but simply read a scenario and viewed self-disclosing information of a fictitious leader) for investigating the assumed self-disclosure effects. However, research has shown that lab studies which use this kind of self-disclosure paradigm obtain only small self-disclosure effects, whereas lab studies which use an *acquaintance* paradigm (i.e., subjects are actively engaged or believe they are engaged in an interaction) obtain considerably larger self-disclosure effects (Collins & Miller, 1994). One reason for the reduced self-disclosure effects might be the unavoidable lower (emotional) involvement of the participants in impression formation settings: The rewarding or relieving effect of a person's self-disclosure on recipients is likely to not have the same intensity in imagined scenarios as in situations in which subjects are personally engaged in first encounters. This might particularly be true for Study 2.2 which was conducted as an online study and in which subjects could not be provided with the authentic SNS-profile of the virtual leader, but simply observed screenshots of the SNS-profile. However, even though future research should re-examine the investigated self-disclosure effects using a more realistic and involving acquaintance paradigm, the present limitations suggest that the effects sizes found in *Study Series 2* are rather underestimated and the positive impact of leaders' SNS-mediated self-disclosure might even be stronger in real life work settings.

Some limitations might occur regarding the generalizability of the self-disclosure contents. All three studies used the same competence-related information which seems to limit its generalizability to other professions and business contexts. However, the information on the SNS-profile showed the leader's general academic and professional qualification rather than project specific competencies. Therefore, providing information about one's general qualification might be sufficient enough to trigger reputation categorization processes in any occupational context. Accordingly, the present competence-related findings might be representative enough to be generalized to other professions and occupational contexts as well. The contents on the SNS-profiles used to operationalize privacy-related self-disclosure were slightly modified in the course of *Study Series 2* in order to enhance generalizability. Furthermore, these contents were representative for leaders' private interests as identified by Groysberg and Bell (2013) who questioned more than 1000 board members in 59 countries regarding their outside interests. The most prominent categories were *family and friends*, *sports and fitness*, *reading and writing*, and *nature* which were all operationalized on the SNS-profiles of the present study series. However, content regarding the leader's family situation was the same in all three studies and described the leader as being married and having two kids. Even though research suggests that the positive impression effect of one's self-disclosure is mostly reduced to the self-disclosing act itself, it is unclear whether in the present scenario this effect would have been the same for a leader described as being unmarried and having no kids. More precisely, leaders' perceived relationship-orientation should have been a crucial point for followers' formation of benevolence impressions and the status of a marital relationship including kids might have positively and substantially influenced this impression. Therefore, future research needs to replicate the self-disclosure effects found in *Study Series 2* with additional operationalizations of the above mentioned categories of outside interests.

Leadership styles were operationalized within the leader's email message which is the most common and most frequently used communication tool within virtual work units (e.g., Lurey & Raisinghani, 2001). However, there are also other tools which virtual leaders use for communicating with their followers (e.g., voice mailing or video conferencing) and research has started to investigate how certain leadership styles interact with different communication media (e.g., Hambley, O'Neill, & Kline, 2007; Kahai, Sosik, & Avolio, 2003; Purvanova & Bono, 2009). According to *media richness theory* (Daft & Lengel, 1986), communication media can be differentiated by their ability to reproduce the information sent over them, describing richer media (e.g., video conferencing) as allowing for transmitting more information such as verbal and non-verbal cues, using natural language, and better conveying personal feelings and emotions than

less rich media (e.g., email). Some researchers argue that especially the perception of a transformational leadership style, which develops part of its effects through nonverbal and paraverbal cues (Kirckpatrick & Locke, 1996; Schyns & Mohr, 2004), should be affected by media richness; however, the perceived salience and intensity of any leadership style is likely to be affected by the chosen communication medium. For instance, using a rich communication tool (e.g., video conferencing) for introducing oneself might cause a transactional leader to be more intensely perceived as being transactional than the same leader using an introducing email message; additionally, this strong first impression might be less revisable and considerably reducing the beneficial effects of leaders' self-disclosure. Furthermore, a transformational leader using rich communication media and high self-disclosure for a virtual introduction, might be perceived as too intrusive and the whole act as *too much of a good thing*. Finally, it is also conceivable that followers visit leaders' SNS-profiles even before their self-introduction which changes the informational order investigated in the present studies; this might influence observers' interpersonal perceptions, for example, due to sequence effects. Therefore, future research needs to investigate whether and how communication media and informational order influence the effects of leaders' SNS-mediated self-disclosure.

### **13.3 Implications**

The following section discusses practical implications of the findings of *Study Series 2*.

#### **13.3.1 Purposeful self-disclosure**

From a trust promoting point of view, the results of *Study Series 2* suggest that virtual leaders should use their company internal SNS-profiles for purposeful competence-related and privacy-related self-disclosure. There are no adverse effects of SNS-mediated self-disclosure on leaders' professional appearance, but beneficial effects on all of the three trustworthiness characteristics. Applying purposeful self-disclosure helps virtual leaders to create a trustworthy first impression which allows starting the virtual relationship with their followers on a higher trust level than usual. Moreover, this trustworthiness impression should have a certain persistence due to people's tendencies to rather confirm than disconfirm first impressions (e.g., Snyder & Swann, 1978) and to misinterpret new information as supporting initial beliefs (e.g., Rabin & Schrag, 1999); therefore, followers' trust is likely to remain on the increased initial level, at least until leaders prove otherwise by obviously untrustworthy statements or behaviors.

However, the positive effect of self-disclosure substantially depends on its perceived appropriateness which is determined by the content of the self-disclosure and the context

in which it takes place. The present research has addressed an occupational context which involves the significant challenge of achieving a good balance between providing intimate information and at the same time appearing professional. Therefore, the following rough guidelines for leaders' appropriate and beneficial self-disclosure on company internal SNS-profiles can be given: (1) Competence-related self-disclosure should comprise information about the profile owner's competencies and qualifications (e.g., acquired degrees and certificates) and information about the professional career (e.g., current and past positions and projects). There is almost no risk for this kind of self-disclosure of being perceived as inappropriate since providing other organizational members with competence-related information is one of the main ideas of company internal SNSs. (2) Privacy-related self-disclosure should be applied in addition to competence-related self-disclosure and comprise more intimate information such as information about the leader's family situation and hobbies; typical outside interests of organizational leaders which one can orient to are family and friends, sports and fitness, reading and writing, and nature (Groysberg & Bell, 2013). However, private pictures and information about personal problems and weaknesses should not be included as well as any information generally being perceived as critical (e.g., extreme party affiliations or violent leisure activities). Nevertheless, it cannot be ruled out that the same privacy-related self-disclosure is perceived as appropriate in one occupational context and as inappropriate in the other due to different national and corporate cultures and social norms. Therefore, (3) one should only disclose information which he or she would feel comfortable with when disclosing in personal interactions (considering own and social norms). Finally, even though company internal SNS-profiles are accessible to any organizational member mostly by default, (4) leaders should explicitly invite their new followers to visit their SNS-profiles because "when people perceive that they have been personally selected for intimate disclosure, they feel trusted and liked and are more apt to evaluate the discloser favorably" (Collins & Miller, 1994, p. 465).

### 13.3.2 Leadership training

Most importantly, leaders must be aware of the temporary character of initial trust "because of the tentative and assumption-based nature of its antecedents. Initial trust is not based so much on evidence as on lack of contrary evidence" (McKnight et al., 1998, p. 483). During their cooperation followers acquire *evidence* regarding leaders' trustworthiness through personal experiences with the leaders. According to Mayer et al.'s (1995) model of organizational trust, followers continually reevaluate leaders' trustworthiness considering their behaviors and the outcomes and consequences of own acts of trust. This means, the promoting effect of leaders' SNS-mediated self-disclosure

on followers' initial trust should be understood as a start-up support which, however, does not compensate for subsequent untrustworthy leadership behaviors. Accordingly, leaders need to actually act trustworthy and best have a leadership style which creates a safe and trustful social atmosphere at work.

Research has repeatedly shown that leaders with a transformational leadership style are highly trusted and that transformational leadership is one of the strongest antecedents of trustful leader-follower-relationships (e.g., Dirks & Ferrin, 2002), and accordingly of followers' OCB-performances (e.g., Podsakoff et al., 2000; Zhu et al., 2013). Therefore, organizations should provide their management staff with leadership trainings which have already been shown to effectively train transformational leadership (Dvir, Eden, Avolio, & Shamir, 2002; Frese, Beimeel, & Schoenborn, 2003). Moreover, Purvanova and Bono (2009) provide preliminary evidence for the effectiveness of increasing managers' transformational leadership behaviors in virtual work environments. Accordingly, implementing transformational leadership trainings in personnel development programs will have two important effects: First, leaders will learn about and become aware of the transformational facets of their leadership style; accordingly, they will be able to emphasize these facets in their initial communications which increases followers' initial trustworthiness impressions. Second, due to an increased transformational leadership style, virtual leaders will create trustful relationships with their followers which are beyond the assumption and impression based trust of the initial relationship phase.

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