The concept of the self is central to an individual's perceptions, evaluations and behaviors in a social context (e.g. Markus & Kitayama, 1991; Triandis, 1989). How individuals define themselves influences how they think, feel, and interact with others. An important notion of an individual's self conception is that it can be construed in multiple ways. Self construal is conceptualized as “a constellation of thoughts, feelings and actions concerning one's relationship to others, and self as distinct from others” (Triandis, 1994). Up till now, the literature on self representation has been predominantly focused on two levels of self definition: an individual or personal self (those aspects of the self-concept that differentiate the self from others) and a social self (those aspects of the self-concept that reflect connectedness to others or significant social groups; e.g., Markus & Kitayama, 1991; Singelis; 1994; Trifimow, Triandis & Goto, 1991; Triandis 1989). However, when looking at the social self, a further distinction between two levels of social self seems feasible to make: a level of self that derives from interpersonal relationships with specific others, i.e. the relational self, and a level of self that derives from membership in larger, more impersonal collectives or social categories, i.e. the collective self (Brewer & Gardner, 1996; Cross, Bacon & Morris, 2000).

Research on the different levels of the self mainly originates from two different theoretical research traditions. On the one hand, context based theories, such as social identity theory (Tajfel & Turner, 1979) and social categorization theory (Turner et al., 1987), assume that different levels of the self coexist within the same individual. Dependent on the context, one level of the self may be activated and dominant over the other levels of the self. On the other hand, cross-cultural and (social) personality psychologists approach the self from a slightly different perspective, assuming that self representations are more or less stable internalized in the self concept. How an individual's self is construed, varies between cultures (e.g. Triandis, 1989; Markus & Kitayama, 1991) or between individuals within the same culture (e.g., Cross et al., 2000; Cross & Madson, 1997). Up till now, existing personality approaches to self representation are mainly focused on operationalizing the classical distinction between the personal/individualistic and social/collective self. Recently, a few authors have extended this two way distinction and focused on elaborating constructs referring to the relational self (Brewer & Gardner, 1996; Cross et al., 2000). The present study aims to integrate this extended model of the self with an individual difference perspective on self representation. More specifically, we will describe the development and validation of an

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1 This chapter is based on Vos, Van der Zee & Buunk (2009).
instrument aimed at measuring individual differences in the three levels of self representation, namely the personal self, the relational self and the collective self (Identity Orientation Scale – IOS).

First we will discuss the concepts of the three self representations more in-depth. Second, we will present two studies in which our IOS scale will be validated and linked to theoretically related psychological constructs.

Conceptual approaches to self representation

The notion that self representation is multifaceted has early been acknowledged by social identity theorists (Tajfel & Turner 1979). Social identity theory assumes that people enter social situations with a self-concept that is basically determined by their personal identity and their social identity (see Turner, 1982). Personal identity is the individuated self – those characteristics that differentiate one individual from others within a given social context. Social identities are categorizations of the self into more inclusive social units that depersonalize the self-concept (Tajfel & Turner, 1986). When social identities are salient, individuals have a tendency to categorize themselves as members of social groups and the characteristics that belong to the group will be internalized in the self.

Brewer and Gardner (1996) recognized that the social self does not always have to be based on group identities, but can also revolve around interpersonal bonds with other individuals. In their extended model of the self, they proposed a theoretical framework in which three distinct self views are central: the personal (individual), relational (interpersonal) and collective (group) identity orientation. The personal identity orientation refers to an individual’s self conception primarily in terms of their individual traits and characteristics. A positive view about the self is derived from a sense of uniqueness compared to others. These individuals have therefore the tendency to contrast themselves from others (see Stapel & Van der Zee, 2006). The relational identity orientation refers to an individual’s conception of their relatedness to other individuals. In other words, they include representations of (close) relationships with others into their mental representations of themselves (cf. Aron, Aron & Smollan, 1992). Positive feelings about the self will derive from developing and maintaining close relationships with other individuals (Cross et al., 2000). Examples of interpersonal identities are those derived from intimate dyadic relationships such as friendships but also networks of dyadic relationships such as small, face-to-face work groups (Brickson, 2000). Finally, the collective identity orientation revolves around a self conception in terms of being a group member and describing oneself in terms of characteristics that are connected to the group. Furthermore, these individuals are likely to emphasize group affiliation, ingroup
norms and roles and status defined by collectives (Kashima & Hardie, 2000; Tajfel & Turner, 1979). Collective identities, as opposed to relational identities, do not necessarily require interpersonal relationships among group members.

Although Brewer and Gardner acknowledge that there may be individual differences in identity orientation, their model primarily focuses on contextual properties of self representation: different self representations coexist in the same individual and can be activated at different times and in different contexts. Alternatively, cross-cultural and (social) personality psychologists approach the self from a slightly different perspective, assuming that self representations are more or less stable internalized in the self concept. The cross-cultural psychology literature assumes that how the self is construed, is imbedded in the specific culture (e.g. Markus & Kitayama, 1991; Triandis, 1994). In this regard, members of western cultures tend to think of themselves as independent of relationships and as autonomous or separated from others. The primary components of this independent self view are one's unique traits, abilities, preferences, interests, goals and experiences, and these are differentiated from social contexts, interpersonal relationships, and group memberships. By contrast, members of more collectivistic cultures tend to think of themselves as interdependent with close others and as defined by important roles and situations. The underlying principle that determines these interdependent self views is the notion that individuals are connected to others, so that the self is defined by important roles, group memberships and interpersonal relationships with others. Cross-cultural research on the independent and interdependent self has studied effects of different self representations on ratings of expression of emotions (Matsumoto, Kudoh, Scherer & Wallbott, 1988), coping with stress (Cross, 1995) and reactions to threat to the self (Brockner & Chen, 1996).

Recent work has indicated that cultures are more complex than the basic individualism/independent self – collectivism/interdependent self distinction suggests. Therefore, several researchers have stated that there also may be variations within cultures with respect to how the self is defined (e.g. Greenfield, Keller, Fuligni & Maynard, 2003; Matsumoto, Kudoh & Tekeuchi, 1996; Cross et al., 2000). Greenfield et al. (2003) argue that independent and interdependent concerns are prevalent in the same culture. More specifically, an individual’s developmental pathway across their lifespan is characterized by a focus on either individuation and independence or group membership and interdependence. For example, interdependence is strongly emphasized during the relationship formation phase at birth and early childhood with other family members, whereas adolescence and early adulthood is characterized by a strong focus on individual choice and independence.

In addition, studies on gender differences challenge the dominant perspective in western societies of the self as independent and separate from others as well. Cross and
Madson (1997) argued that women in western societies have a strong focus on interpersonal relationships and thus are more likely to view themselves as connected to or interdependent with others rather than as individuals separated from others. In contrast, Wainryb & Turiel (1994) found a stronger orientation toward autonomy and independence among men than women. There also appears to be variation in how the self is construed within the sexes (e.g. Cross et al., 2000; Kashima & Hardie, 2000). According to Higgins (1990), individuals differ in terms of which elements of self knowledge are frequently activated. This may correspond to a predisposition among individuals towards a particular identity orientation.

Some important issues have been raised with regard to the individualism/independence – collectivism/interdependence framework. One aspect of these criticisms addresses the questionable empirical support of the theoretical perspective. In this regard, Kagitcibasi (2005) pointed out that many measures of individualistic/independent self views confound agency (autonomy-heteronomy) with interpersonal distance (separateness-relatedness). In addition, the (cross-cultural) literature’s more collectivistic group-oriented notion of interdependence, in which the self is defined in terms of the position in the group, does not adequately seem to fit the relationship centered conception of interdependence that characterizes western cultures (Cross et al., 2000; Kashima et al., 1995; Kashima & Hardie, 2000). Most existing scales of interdependent self contain elements referring both to connectedness to other individuals as well as connectedness to social groups. We argue, in line with Brewer and Gardner’s extended model of the self, Cross et al. (2000) and Kashima et al., (1995), that the concept of interdependent self can be subdivided into a relational self view component, which stresses relationships and connectedness with other individuals, and a collective self view component, which refers to connectedness with social groups and regarding oneself a group member. Although earlier attempts have been made to construct scales that tap into the differences between these conceptualizations (e.g. Kashima & Hardie, 2000), reasonable independent operationalizations of these individual differences in the three different self representations have not yielded clear results. In the present research, we aimed at developing a valid instrument for identity orientations that clearly discriminates between the personal, relational and collective self.

Overview present research

The aim of the present study was to develop and evaluate the psychometric properties of an instrument aimed at measuring individual differences in the three levels of self representation (Identity Orientation Scale – IOS). In terms of psychometric properties evaluating, we focused on the reliability and construct validity of this instrument. The construct validity of
the IOS was examined by relating the scale to theoretically related psychological constructs. In study 1, we will describe the development of the IOS, its psychometric properties, and its relations to other personality constructs. Furthermore, gender differences in identity orientation will be discussed and analyzed. In study 2, construct validity will be further examined by relating our measure with other self construal concepts. In addition, we will test stability over time to further establish the reliability of the identity orientation scale. Again, gender differences will be examined.

**Study 1**

In Study 1 we report the development ad psychometric properties of the IOS. Construct validity was assessed by relating the IOS with the Big Five personality traits (Goldberg; 1993; Hendriks, Hofstee & de Raad, 1999), and closely related constructs, i.e. communal orientation (Clark, Ouellette, Powell & Milberg, 1987; Buunk, Doosje, Jans & Hopstaken, 1993), collective self esteem (Luhtanen & Crocker, 1998) and measures of independent/interdependent self construal (Singelis, 1994). Furthermore, we were interested in gender differences in identity orientation.

First, we expected that the interpersonal traits of the Big Five, namely extraversion and agreeableness, were particularly related to the relational identity component of the IOS. **Extraversion**, the first factor of the Big Five factors of personality refers to an individual’s tendency to be sociable, to disclose oneself easily to seek high levels of activity (Hendriks et al., 1999). A focus on interactivity with others seems to tap into both relational and collective self conceptions, as these orientations reflect the social spectrum of the self. However, self disclosure seems particularly relevant in interpersonal relationships as the sharing of personal information seems to strengthen bonds between individuals (e.g. Buhrmester, Furman, Wittenberg & Reis, 1988). For collectively oriented individuals self disclosure will be less relevant because their focus will be not as much on improving bonds with other individuals as relationally oriented individuals, but more on fitting into the group or adapting to collective goals. We therefore expected extraversion to be particularly related to our measure of relational identity orientation. **Agreeableness**, the second factor of the Big Five factors of personality, reflects individual differences in concern with cooperation and social harmony. Agreeable individuals value getting along with others and are considerate, friendly, generous, helpful, and willing to compromise their interests with others. Although the tendency to strive for social harmony may be relevant in collectives, we expected that agreeableness will particularly be related to a relational identity orientation. Collective identities often involve
depersonalized conceptions about the groups to which one belongs and therefore do not necessarily require interpersonal relationships among its members. Consequently, concern for the group and its goals may be more relevant for these individuals than concern for other individuals. A relational identity orientation, on the other hand, involves a strong focus on maintaining harmonious relationships and a high concern for others. We therefore expected agreeableness to be particularly related to our measure of relational identity orientation. In contrast to these two social traits of the Big Five, we expected autonomy, which refers to an individual’s tendency to take independent decisions without being influenced by the social environment, will particularly be related to our measure of personal identity orientation, as both concepts share the notion of the self being independent of others. We have no specific predictions about the relatedness of IOS with the remaining Big Five personality traits – i.e. conscientiousness and emotional stability - as these traits do not, or to a lesser extent, directly involve a social environment.

Second, we expected that communal orientation will be strongly related to the relational identity orientation. Communal orientation refers to a trait that encompasses the desire to give and receive benefits in response to the needs of and out of concern for others (Buunk et al., 1993). Clark et al. (1987) show that individuals high in communal orientation have a tendency to help other individuals more than individuals low in communal orientation. As the tendency to procure the welfare of other is associated with the relational self representation (Brewer & Gardner, 1996), we expected that communal orientation will particularly be related to our measure of relational identity orientation.

Third, we expected collective self esteem to be particularly related to the collective identity orientation. Collective self esteem reflects the positive feelings that individuals derive from their social group and the values they place on their social group (Luhtanen & Crocker, 1998). Feeling positive about one’s group can be attained by favorable comparisons with relevant other groups (Tajfel & Turner, 1986), which is also a central notion in the concept of the collective identity orientation. Because collectively oriented individuals derive their self esteem from their memberships of social groups (Brewer & Gardner, 1996), we expected that our measure of collective identity orientation will be positively related to collective self esteem.

Fourth, we expected our measure of identity orientation to be related to existing measures of independent and interdependent self (Singelis, 1994). More specifically, independent self will be related to our measure of personal identity orientation and the interdependent self measure will be related to both relational and collective identity orientation.

Finally, we were interested in gender differences in self representations. Research on gender roles and stereotypes (e.g. Broverman et al., 1972; Eagly & Wood, 1999; Glick &
Individual differences in self representation

Fiske, 2001; Williams & Best, 1982), showed that men are generally perceived as independent and competitive towards others and women as relationship oriented and cooperative towards others. Therefore, Cross & Madson (1997) proposed that men have independent self schemas, whereas woman mainly have interdependent self schemas and these differences can be explained on the basis that men prefer separateness and independence, whereas women generally seek to form intimate connections with other individuals. These preferences seem to be shaped in early childhood when norms of autonomy and competition are adopted by boys and norms of cooperation and efforts to maintain social relationships by girls (see Maccoby, 1990). Based on these findings, we expected men to be more likely to define themselves in terms of their uniqueness compared to others and women to be more likely to define themselves in terms of close relationships with others. In other words, we hypothesized that men are more personally oriented compared to women, whereas women would be more relationally oriented compared to men.

Method

Sample and procedure
376 first year psychology students participated in the first study during a mass testing session. The sample consisted of 98 men (26.7 %) and 278 women (73.3 %). The mean age was 20.3 (SD = 2.1) years old. All participants filled in a questionnaire, which contained the measures described below.

Measures
Identity Orientation Scale (IOS). Based on the literature (e.g. Brewer & Gardner, 1996; Triandis, 1994; Cross et al., 2000) and the conceptualizations of the three levels of the self given in the introduction, items for the IOS were generated by the authors. Items referring to self conception in terms of individual traits and characteristics and the sense of uniqueness compared to others were developed for the personal identity orientation scale. Sample items are: “I enjoy being different from others” and “It is important for me to do my own thing”. The items for the relational identity orientation scale referred to a self conception in terms of relatedness to other individuals, i.e. individuals’ representations of (close) relationships with others into their mental representations and their focus on maintaining relationships with others. Sample items are: “I enjoy maintaining personal relationships with others” and “I think that close others have much influence on my identity”. Finally, items referring to self conception in terms of group memberships and the connectedness to the groups to which one belongs were developed for the collective identity orientation scale. Sample items are: “I
like to describe myself as a member of the groups to which I belong” and “It is very important to my identity to belong to a group”.

Altogether, 57 items (19 items for each subscale) were included in the initial identity orientation scale and were randomly ordered in the questionnaire. Participants responded on the scale using a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree).

**Big Five personality traits.** Extraversion, agreeableness, conscientiousness, emotional stability and autonomy were measured using the Five Factor Personality Inventory (FFPI; Hendriks et al., 1999). Each subscale of the FFPI consists of 20 brief statements that can be answered on a five point scale (1 = does not apply at all; 5 = full applied). Examples of items are “loves to chat” (extraversion; Cronbach’s alpha = .83), “accepts people as they are” (agreeableness; alpha = .81), “does things according to plan” (conscientiousness; Cronbach’s alpha = .82), “is always in the same mood” (emotional stability; Cronbach’s alpha = .79) and “wants to form his own opinion” (autonomy; alpha = .79).

**Communal orientation.** We used the 14-item communal orientation scale developed by Clark et al. (1987). Sample items are: “When making a decision, I take other people’s needs and feelings into account” and “I don’t especially enjoy giving others aid” (reverse scored). Participants responded using a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). The reliability of this scale was .80.

**Collective self esteem.** The collective self esteem scale (CSE; Luhtanen & Crocker, 1992) is a 16 item-item measure that assesses collective self-esteem along four dimensions: private collective self-esteem, public collective self-esteem, importance to identity and membership esteem (each subscale is composed of 4 items). Participants could give their responses on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). Sample items from the CSE are, “I feel good about the social groups I belong to” (private subscale; Cronbach’s alpha = .74); “In general, others respect the social groups that I am a member of” (public subscale; alpha = .80); “The social groups I belong to are an important reflection of who I am” (importance to identity subscale; alpha = .77); and “I am a worthy member of the social groups I belong to” (membership subscale; alpha = .72).

**Independent/interdependent self.** To compare our identity orientation scale with existing self construal scales, we used a slightly modified version of Singelis’ (1994) independent and interdependent self construal scale. This scale consists of 22 items and participants responded using a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). Example items of the
Individual differences in self representation

Independent self are: “I act the same way no matter who I am with” and “I prefer to be direct and forthright when dealing with people I’ve just met”. Sample items of the interdependent scale are: “It is important to me to maintain harmony within my group” and “I often have the feeling that my relationships with others are more important than my own accomplishments”. The reliabilities of the independent interdependent subscales were .73 and .67 respectively.

Results

Factor structure

In order to examine the internal structure of the IOS, principal component analysis was used. A well interpretable three factor solution was found when factors with eigenvalues under 3 were omitted. As some of the items did not seem to fit one factor exclusively, which resulted in high inter-correlations between the factor ‘relational identity orientation’ and ‘collective identity orientation’, we decided to exclude items that loaded either low (criterion: < .50) on all of the factors or loaded high on more than one factor.

A three-factor solution with a varimax rotation was a priori imposed on the remaining 21 items on the basis of the theoretical framework discussed in the introduction. The eigenvalues for the three factors all exceeded 3 and 51.42% of the variance was explained. Cronbach’s alpha reliabilities for the personal identity orientation, relational identity orientation and collective identity orientation were respectively .83, .81 and .86. As can be derived from Table 2.1, most of the loadings exceeded .50. Only the relational identity orientation and collective identity orientation subscales correlated moderately (r = .40, p < .001).
Table 2.1 - Factor loadings that resulted from exploratory factor analysis for the population sample ($N = 376$).

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal identity orientation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am someone who is comfortable doing my own thing</td>
<td>.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think I am an unique individual, with unique attributes</td>
<td>.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy being different from others</td>
<td>.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to describe myself in terms of my own unique qualities</td>
<td>.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think that I have much influence on my own identity</td>
<td>.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is important for me to do my own thing</td>
<td>.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to stand out as an individual</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relational identity orientation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy maintaining personal relationships with others</td>
<td>.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think that close others have much influence on my identity</td>
<td>.46 ($r = .40$)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is important for me to be accepted by close others</td>
<td>.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to be absorbed in relationships</td>
<td>.52 ($r = .26$)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is important for my self-image to have personal relations with others</td>
<td>.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to be valued by others who are important for me</td>
<td>.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is important for me to maintain social relations with others</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Collective identity orientation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to describe myself as a member of the groups to which I belong</td>
<td>.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When making important decisions I am inclined to follow the judgment of the groups to which I belong</td>
<td>.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is very important to my identity to belong to a group</td>
<td>.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I meet other people, I like them to know to which groups I belong</td>
<td>.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In my thoughts I mostly focus on groups to which I belong</td>
<td>.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to be absorbed in the group</td>
<td>(.36)</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>It is important for my self-image for me to belong to a group</td>
<td>.78</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Relations with other constructs**

To test the construct validity of the IOS we examined if our measure of self representation was related to the aforementioned theoretically related concepts. First we expected that the interpersonal dimensions of the Big Five measures were related to the relational identity orientation. As can be derived from Table 2.2, agreeableness revealed its highest correlation with the relational identity orientation ($r = .14; p < .01$). It must be noted that this correlation
Individual differences in self representation

was not very strong. Against our expectations, extraversion appeared not only to be significantly related to the relational identity orientation \((r = .23; p < .01)\) but also to the personal identity orientation \((r = .27; p < .001)\). Second, autonomy was expected to be related to the personal identity orientation. Indeed, autonomy showed its highest correlation with the personal identity orientation \((r = .37; p < .001)\).

Third, we expected that communal orientation was related to the relational identity orientation. Indeed, communal orientation correlated most strongly with the relational identity orientation \((r = .51; p < .001)\) compared to the other identity orientations.

Table 2.2 - Correlations of the IOS with other related constructs.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Personal</th>
<th>Relational</th>
<th>Collective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Five</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>.27***</td>
<td>.23**</td>
<td>.09</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>-.04</td>
<td>.14**</td>
<td>-.11*</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>-.08</td>
<td>-.02</td>
<td>-.03</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>.27***</td>
<td>-.03</td>
<td>-.08</td>
</tr>
<tr>
<td>Autonomy</td>
<td>.37***</td>
<td>-.06</td>
<td>-.28</td>
</tr>
<tr>
<td>Communal Orientation</td>
<td>.21*</td>
<td>.51***</td>
<td>.25*</td>
</tr>
<tr>
<td>Collective Self Esteem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>.26***</td>
<td>.40***</td>
<td>.41***</td>
</tr>
<tr>
<td>Public</td>
<td>.24***</td>
<td>.33***</td>
<td>.26***</td>
</tr>
<tr>
<td>Identity</td>
<td>-.18*</td>
<td>.44***</td>
<td>.62***</td>
</tr>
<tr>
<td>Membership</td>
<td>.35***</td>
<td>.27***</td>
<td>.33***</td>
</tr>
<tr>
<td>Independent / Interdependent Self</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent Self</td>
<td>.68***</td>
<td>.13*</td>
<td>-.10</td>
</tr>
<tr>
<td>Interdependent Self</td>
<td>-.10</td>
<td>.45***</td>
<td>.44***</td>
</tr>
<tr>
<td>Interdependent Relational Self</td>
<td>.10*</td>
<td>.40***</td>
<td>.30***</td>
</tr>
<tr>
<td>Interdependent Collective Self</td>
<td>-.08</td>
<td>.30***</td>
<td>.44***</td>
</tr>
</tbody>
</table>

* \(p < .05\)  
** \(p < .01\)  
*** \(p < .001\)

Fourth, we hypothesized that collective self esteem would be related to the collective identity orientation. Although all subscales of collective self esteem correlated high with the collective identity orientation, the results revealed comparably high correlations with the other identity orientations. In line with our expectations we found a highly positive
correlation between the identity subscale of collective self esteem and the collective identity orientation \(r = .62, p < .001\), combined with a negative relationship between the identity subscale and the personal identity orientation \(r = -.18, p < .01\).

Finally, we examined the relationship between our measure of self representation and Singelis' (1994) independent/interdependent self construal scale. As predicted, the measure of independent self correlated high with personal identity orientation \(r = .68, p < .001\). The measure of interdependent self correlated with both the relational identity orientation \(r = .45, p < .001\) and the collective identity orientation \(r = .44, p < .001\). The finding that the interdependent self was related to both these subscales of the IOS may be attributed to the fact the interdependent scale consists of items related to the relatedness of the self with other individuals as well as items related to the self as a group member. To examine whether this was the case, we classified the Singelis' interdependent self construal items as either ‘relational’ or ‘collective’, based on the definitions described in the introduction. Of the 11 items, 6 items were classified as ‘relational’, 4 items as ‘collective’ and 1 item could not be classified in both categories. Relational and collective items were both aggregated and related to our measure of identity orientation. The interdependent relational self items indeed appeared to be more strongly related to our measure of the relational identity orientation \(r = .40, p < .001\) than to our measure of collective identity orientation \(r = .30; p < .001\). A comparison between the Fisher Z transformed correlations showed that this difference was significant \((Z = 1.69, p < .05; \text{one-sided})\). Moreover, the interdependent collective self items were also more strongly related to our measure of the collective identity orientation \(r = .44, p < .001\) than to our measure of the relational identity orientation \(r = .30; p < .001\). The difference between the Fisher Z transformed correlations appeared to be significant \((Z = 2.14, p < .05; \text{one-sided})\).

**Gender differences in identity orientation**

We expected that males would score higher on the personal identity orientation subscale than females, whereas females would score higher on the relational identity orientation subscale than males. Mean and standard deviation scores for all three identity orientations for both men and women were computed based on the 7 items for each identity orientation subscale. As can be derived from Table 2.3, our hypotheses with regard to gender differences in identity orientation seemed (partly) confirmed. Male participants scored higher on the personal identity orientation subscale compared to female participants \(t (374) = 3.64, p < .001; \text{one-sided}\). Furthermore, female participants appeared to score somewhat higher on the relational identity orientation subscale compared to male participants, although this difference is only marginally significant \(t (374) = 1.33, p < .10; \text{one-sided}\). No significant differences
between male and female participants were found with regard to the collective identity orientation ($t(374) = .50, \text{n.s.}$).

Table 2.3 - Means and standard deviations for the different subscales of the IOS.

<table>
<thead>
<tr>
<th>Identity Orientation</th>
<th>Personal</th>
<th>Relational</th>
<th>Collective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male (N = 98)</td>
<td>5.41 (.71)</td>
<td>5.41 (.71)</td>
<td>3.73 (1.09)</td>
</tr>
<tr>
<td>Female (N = 278)</td>
<td>5.11 (.75)</td>
<td>5.52 (.70)</td>
<td>3.69 (1.07)</td>
</tr>
</tbody>
</table>

**Study 2**

Study 1 provided moderate to strong support for a three factor solution of our measure of identity orientation and its relations with related (broader) personality constructs. The aim of study 2 was to further validate the IOS by investigating if the same item configuration could be confirmed among a second sample. In addition, to further strengthen the construct validity, we examined the relations between our measure and other, more closely related self construal measures - i.e. relational interdependent self construal (Cross et al., 2000), collectivism (Yamaguchi, 1994) and, again, independent/interdependent self (Singelis, 1994) - more thoroughly. Finally, stability over time was assessed by measuring identity orientation at two points in time.

We expected that the relational identity orientation subscale of the IOS was strongly related to Cross’ measure of relational interdependent self construal as both measures tap into self conception in terms of relationships with close others. Furthermore, we expected our measure of collective identity orientation to be strongly related to measures of collectivism (Triandis, 1994; Yamaguchi, 1994), as describing oneself in terms of group memberships and characteristics that belong to these groups taps into collectivist's central notion of giving priority to group goals over personal goals. With regard to measures of independent/interdependent self, we expected the same patterns of relations as in Study 1: independent self will be related to our measure of personal identity orientation and the interdependent self measure will be related to both relational and collective identity orientation. Again, we expected more typical relational interdependent self items to be related to relational identity orientation, and more typical collective interdependent self items to be related to collective identity orientation. Finally, we examined whether we could replicate the pattern of gender differences in identity orientation.
Method

Sample and procedure
The second study consists of three sub samples which are combined into one sample of 1011 participants. The first sub sample consisted of 367 first year psychology students from the University of Groningen which participated in a mass testing session one year after the first study was conducted. The second sub sample was collected three months prior to this mass test session, and consisted of 166 students from different faculties from the University of Groningen. The final sub sample was collected during a mass test session among 478 first year psychology students one year after the first sub sample.

The total sample consisted of 254 men (25.1 %) and 723 women (71.5 %). The remaining 34 participants (3.4 %) did not provide information about their gender. The mean age was 20.3 (SD = 2.6) years old.

Measures
Identity Orientation Scale (IOS). Participants in all sub samples filled out the 21-item Identity Orientation Scale. The IOS was administered twice to participants in the third sub sample to test stability over time.

Relational Interdependent Self Scale (RISC). The RISC scale (Cross et al., 2000) was administered to participants of the third sub sample. This scale measures an individual's tendency to think of oneself in terms of relationships with close others and consists of items such as: “When I think of myself, I often think of my close friends or family also”, “When I establish a close friendship with someone, I usually develop a strong sense of identification with that person”. Responses to the 11-item scale were made on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Cronbach’s alpha was .78.

Collectivism Scale. Yamaguchi’s Collectivism Scale (1994) was used among participants of the third sub sample to measure collectivism among individuals. This scale consists of 10 items describing the extent to which individuals choose group goals over personal goals. Example items are: “I sacrifice self-interest for my group”, “I support my group, whether they are right or wrong”. Responses were made on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Cronbach’s alpha was .82

Independent/interdependent self. Singelis' (1994) independent and interdependent self construal scale, which is described in Study 1, was administered to participants of the third sub sample.
The reliabilities of the independent and interdependent scales in this sample were .75 and .70 respectively. As in Study 1, the interdependent scale was subdivided in a relational interdependent self construal subscale, consisting of 6 items (Cronbach’s alpha = .73) and a collective interdependent self construal subscale, consisting of 4 items (Cronbach’s alpha = .69).

Results

A confirmatory factor analysis was conducted to test whether the factor structure underlying the identity orientation items that was found in Study 1 could be replicated. We used the Multiple Group Method (e.g. Nunnally, 1978; Kiers, 1990) as a method for confirmatory factor analysis which starts with a weight matrix with binary elements (‘0’ or ‘1’) based on theoretical expectations, in our case on the a priori expected scales. Support for the a priori components is first obtained when the amount of variance explained by the components is not much lower than the variance explained by principal component analysis. Second, items have to show the highest loading on the component to which they are a priori allocated. Third, the correlations between the components provide information about the independence of the scales.

When the amount of variance which was explained by the a priori components (42.1%) was compared with the amount of variance that was accounted for by principal component analysis (47.4%), it was found that 5.3% less variance was explained by our components. This suggests that that the hypothesized components account reasonably well for the variance in the original items. As can be derived from Table 2.4, which represent the correlations between the item scores and the component scores for the hypothesized components, only one item had a somewhat higher loading on another factor than its own.
### Chapter 2

Table 2.4 - Factor loadings that resulted from confirmatory factor analysis for the population sample (N= 1011).

<table>
<thead>
<tr>
<th>Item</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal identity orientation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am someone who is comfortable doing my own thing</td>
<td>.45</td>
<td>.17</td>
<td>-.12</td>
</tr>
<tr>
<td>I think I am an unique individual, with unique attributes</td>
<td>.52</td>
<td>.31</td>
<td>-.05</td>
</tr>
<tr>
<td>I enjoy being different from others</td>
<td>.56</td>
<td>.30</td>
<td>-.04</td>
</tr>
<tr>
<td>I like to describe myself in terms of my own unique qualities</td>
<td>.53</td>
<td>.09</td>
<td>-.03</td>
</tr>
<tr>
<td>I think that I have much influence on my own identity</td>
<td>.47</td>
<td>.15</td>
<td>.12</td>
</tr>
<tr>
<td>It is important for me to do my own thing</td>
<td>.51</td>
<td>.31</td>
<td>-.07</td>
</tr>
<tr>
<td>I like to stand out as an individual</td>
<td>.50</td>
<td>.37</td>
<td>.10</td>
</tr>
<tr>
<td><strong>Relational identity orientation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy maintaining personal relationships with others</td>
<td>.30</td>
<td>.50</td>
<td>.17</td>
</tr>
<tr>
<td>I think that close others have much influence on my identity</td>
<td>.09</td>
<td>.42</td>
<td>.42</td>
</tr>
<tr>
<td>It is important for me to be accepted by close others</td>
<td>.25</td>
<td>.62</td>
<td>.27</td>
</tr>
<tr>
<td>I like to be absorbed in relationships</td>
<td>.24</td>
<td>.47</td>
<td>.32</td>
</tr>
<tr>
<td>It is important for my self-image to have personal relations with others</td>
<td>.24</td>
<td>.62</td>
<td>.38</td>
</tr>
<tr>
<td>I like to be valued by others who are important for me</td>
<td>.31</td>
<td>.63</td>
<td>.21</td>
</tr>
<tr>
<td>It is important for me to maintain social relations with others</td>
<td>.35</td>
<td>.68</td>
<td>.25</td>
</tr>
<tr>
<td><strong>Collective identity orientation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to describe myself as a member of the groups to which I belong</td>
<td>.05</td>
<td>.28</td>
<td>.66</td>
</tr>
<tr>
<td>When making important decisions I am inclined to follow the judgment of the groups to which I belong</td>
<td>-.13</td>
<td>.19</td>
<td>.56</td>
</tr>
<tr>
<td>It is very important to my identity to belong to a group</td>
<td>-.02</td>
<td>.38</td>
<td>.72</td>
</tr>
<tr>
<td>When I meet other people, I like them to know to which groups I belong</td>
<td>.01</td>
<td>.17</td>
<td>.62</td>
</tr>
<tr>
<td>In my thoughts I mostly focus on groups to which I belong</td>
<td>-.01</td>
<td>.31</td>
<td>.69</td>
</tr>
<tr>
<td>I like to be absorbed in the group</td>
<td>.05</td>
<td>.40</td>
<td>.48</td>
</tr>
<tr>
<td>It is important for my self-image for me to belong to a group</td>
<td>-.01</td>
<td>.43</td>
<td>.66</td>
</tr>
</tbody>
</table>

As Table 2.5 shows, the internal reliability for all scales was satisfactory. Furthermore, scale intercorrelations for the identity orientation subscales were examined to assess whether the different components were sufficiently independent. Although the existence of three separate factors was clearly supported by the data, the relational identity orientation scale was found to be somewhat interrelated with both the personal identity orientation and collective identity orientation scales.
Table 2.5 - Cronbach's alpha and scale intercorrelations of the identity orientation measures for the population sample (N = 1011).

<table>
<thead>
<tr>
<th></th>
<th>Relational</th>
<th>Collective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal identity orientation</td>
<td>.36**</td>
<td>.01</td>
</tr>
<tr>
<td>Relational identity orientation</td>
<td>-.44**</td>
<td></td>
</tr>
<tr>
<td>Collective identity orientation</td>
<td>.44**</td>
<td></td>
</tr>
</tbody>
</table>

** p < .01

Test-retest reliability

Stability over time was assessed in the third sub sample. We did not have control over the interval between the measurement moments, as subjects participating in the mass testing session were free to fill out all questionnaires in a two month time period. Based on information of the date and time of completion of the measures, we only included participants with an interval of at least one week between the two measures in our analysis (N = 153). The test-retest reliabilities for IOS appeared to be satisfactory (personal identity orientation: r = .62; relational identity orientation: r = .58; collective identity orientation: r = .72).

Relations with other constructs

To further test the construct validity of the IOS we examined if our measure of self representation was related to the related self construal concepts. First, we expected that the relational interdependent self measure was related to our measure of relational identity orientation. As can be derived from Table 2.6, the RISC correlated clearly higher with the relational identity orientation subscale (r = .61; p < .001) than to the other two subscales of the IOS. Second, collectivism was expected to be particularly related to our measure of collective identity orientation. Indeed, the Collectivism Scale showed its highest correlation with the collective identity orientation sub scale (r = .43; p < .001). Finally, as in Study 1, we examined the relationship between our measure of self representation and Singelis' (1994) independent/ interdependent self construal. As predicted, and in line with Study 1, the measure of independent self revealed the highest correlation with the personal identity orientation subscale (r = .66, p < .001). The measure of interdependent self correlated with both the relational identity orientation (r = .37, p < .001) and the collective identity orientation (r = .48, p < .001). Based on the classification of the interdependent items as either 'relational' or 'collective', we again examined whether interdependent relational self items correlated more with our measure of relational identity orientation and interdependent collective self items correlated more with our measure of collective identity orientation.
Table 2.6 - Correlations of the IOS with other related self construal constructs.

<table>
<thead>
<tr>
<th>Measure</th>
<th>personal</th>
<th>relational</th>
<th>collective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interdependent relational self (Cross, 2000)</td>
<td>.27***</td>
<td>.61***</td>
<td>.45***</td>
</tr>
<tr>
<td>Collectivism (Yamaguchi, 1994)</td>
<td>.00</td>
<td>.27***</td>
<td>.43***</td>
</tr>
<tr>
<td>Independent / interdependent self (Singelis, 1994)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent self</td>
<td>.66***</td>
<td>.44***</td>
<td>.02</td>
</tr>
<tr>
<td>Interdependent self</td>
<td>.08</td>
<td>.37***</td>
<td>.48***</td>
</tr>
<tr>
<td>- Interdependent relational self</td>
<td>.11*</td>
<td>.41***</td>
<td>.34***</td>
</tr>
<tr>
<td>- Interdependent collective self</td>
<td>-.01</td>
<td>.18***</td>
<td>.40***</td>
</tr>
</tbody>
</table>

* p < .05  ** p < .01  *** p < .001

In line with Study 1, the interdependent relational self measure seemed indeed more strongly related to our measure of the relational identity orientation ($r = .41, p < .001$) than to our measure of collective identity orientation ($r = .34; p < .001$). A comparison between the Fisher Z transformed correlations showed that this difference was marginally significant ($Z = 1.25, p < .10$; one-sided). Moreover, the interdependent collective self measure appeared to be significantly stronger related our measure of the collective identity orientation than to our measure of the relational identity orientation ($r = .40, p < .001$ vs. $r = .18; p < .001$; $Z = 3.72, p < .001$; one-sided), which is in line with the findings of Study 1 as well. Taken together, these patterns of inter correlations clearly suggest that the subscales of the IOS tap into different constructs.

Gender differences in identity orientation

We expected that males would score higher on the personal identity orientation subscale than females, whereas females would score higher on the relational identity orientation subscale than males. The gender difference with respect to personal identity orientation was replicated from Study 1. As can be derived from Table 2.7, male participants scored higher on personal identity orientation compared to female participants ($t (1008) = 4.81, p < .001$; one-sided). Furthermore, in line with our expectations, gender differences with regard to the relational identity orientation were found. Female participants scored higher on the relational identity orientation subscale compared to male participants ($t (1008) = 4.43, p < .001$; one-sided). Again, no significant differences between male and female participants were found with regard to the collective identity orientation ($t (1008) = .41, n.s.$).
Table 2.7 - Means and standard deviations for the different subscales of the IOS.

<table>
<thead>
<tr>
<th>Identity Orientation</th>
<th>Personal</th>
<th>Relational</th>
<th>Collective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male (N = 254)</td>
<td>5.35 (0.71)</td>
<td>5.33 (0.88)</td>
<td>3.88 (1.00)</td>
</tr>
<tr>
<td>Female (N = 723)</td>
<td>5.10 (0.72)</td>
<td>5.60 (0.72)</td>
<td>3.91 (1.05)</td>
</tr>
</tbody>
</table>

Discussion

This study examined the development of an individual difference measure of identity orientation (Identity Orientation Scale - IOS) that distinguishes between individual, relational, and collective components, as proposed by Brewer and Gardner (1996). Confirmatory factor analysis and analysis of intercorrelations with scales from related instruments provide moderate to strong support for the internal structure and validity of the IOS. More specifically, in Study 1 we found that our 21-item measure of identity orientation indeed taps into three factors and showed good internal reliability. An examination of the IOS’s associations with related psychological constructs showed that most correlations between the different levels of self representation and related personality variables were in the predicted direction. Our measure of the personal identity orientation was most strongly correlated with the Big Five Factor Autonomy and with the indicator of independent self. The relational identity orientation measure was most strongly related to communal orientation and to indicators of relational interdependent self and correlated also moderately with the Big Five factors Agreeableness and Extraversion. Finally, our measure of the collective identity orientation was most strongly related to measures of collectivism, the identity dimension of collective self esteem and with the indicator of collective interdependent self. Confirmatory factor analysis in Study 2 replicated the distinction between three different identity orientations, providing further support for the internal validity of the IOS. In addition, the IOS appeared also to be moderately stable over time.

It is important to note that in both studies the relational and collective identity orientation subscales appeared not to be fully independent, as these subscales correlated moderately with each other. This correlation can be explained by taken into account that both constructs encompass an overlapping social component: individuals may feel attracted to groups because they are oriented towards collectives, but also for the opportunities for close relationships it provides. Support for this argument can be derived from the experimental studies in Chapter 3 in which we primed the different identity orientations by asking subjects to write a story about either themselves as unique individuals (personal
identity orientation), the relationships they have with others (relational identity orientation) or the groups to which they belong (collective identity orientation). Content analysis of the stories showed that referring to the social groups to which they belong some of the subjects in the collective orientation condition particularly wrote about their friends and the friendships they have in these groups.

However, dependency between factors of our IOS scale seemed considerably lower compared to earlier attempts to construct self representation scales based on the three self foci (e.g., Kashima & Hardie, 2000). In addition, both explanatory and confirmatory factor analyses clearly distinguished between personal, relational and collective components of the self. Furthermore, relationships with the other personality trait variables showed different patterns for each identity orientation: communal orientation and relational interdependent self construal were mainly linked to a relational identity orientation, whereas measures of collective self esteem and collectivism were mainly linked to a collective identity orientation. Thus, despite the moderate overlap between the relational and collective identity orientation measures, these studies support the notion that defining yourself as either an individual related to other people or as part of social groups can be regarded as distinct constructs. To our knowledge, the IOS is the first measure of self representation that is moderately successful in disentangling individual differences in the personal, relational and collective self.

Some interesting results were found with regard to gender differences. In both studies, we found that male participants scored higher on the personal identity orientation than did female participants, which is in line with earlier research on gender differences in how the self is defined (e.g., Cross & Madson, 1997; Wainryb & Turiel, 1994). Furthermore, some moderate support was found that women are more relationally oriented than men. This finding is in line with Cross et al. (2000; 2002) who found that women are more likely to define themselves in terms of their close relationships than would men. These gender differences in identity orientation may imply differences in preferences for social situations. For example, men’s self conception in terms of their uniqueness compared to others might prevail in a tendency to engage in competition situations, in which they can contrast themselves with other individuals. On the other hand, based on the preference to conceive themselves in terms of relationships with others, women might prefer situations in which they can assimilate with others and build up harmonious relationships with them. In a similar way, the same social situation may be perceived by men and women in a different way. Men may regard playing golf with friends as an opportunity to win a game, whereas women may particularly focus on the ability to get deeper involvement in the relationships with the friends they are playing with.
Interestingly, no differences between men and women were found with regard to the collective identity orientation. Some authors have claimed and shown that men are more collectively oriented than women (e.g. Baumeister & Sommer, 1997; Gabriel & Gardner, 1999; Kashima & Hardie, 2000). Their argument is that men share the same motivation for connectedness as women, but that this motivation is expressed by having a higher number of large group associations instead of more intimate dyadic relationships. These group associations provide men opportunities for gaining status and power compared to others in the group, as expressions of status and power do not take place in a social vacuum but require a social context (Baumeister & Sommer, 1997). However, our conception of a collective identity does not adequately seem to fit into this notion. Collectively oriented individuals describe themselves in terms of group memberships and characteristics that belong to the group (which is also reflected in the items for this subscale of the IOS). This depersonalized representation of the self does not match with the motivation to dominate others in the group. Although collective identities may trigger status and power processes, these processes will likely take place between groups rather than within (cf. Brewer and Gardner, 1996). Therefore, the motivation to dominate others seems to reflect the conception of a personal identity orientation better, as these individuals aim for a strong sense of uniqueness compared to others and have a strong tendency to contrast the self from others in (social) comparison situations. Our findings that men are more personally oriented than women but not more collectively oriented are in line with the previous reasoning.

Implications
There has been much speculation about how viewing oneself may influence behavior, but research on how the three different self representations relate to each other in predicting how individuals think, feel and act is still in its infancy. The ability to clearly distinguish the concepts of self representation and measure these, enable us to link individual differences in identity orientation with motives and behavior. Vos and Van der Zee (2005) showed that individual differences in identity orientation were associated with the extent to which work group members identify themselves with other workgroup members who shared or did not share the same nationality. Individuals who scored high on the relational identity orientation identified themselves with both ‘same-nationality’ and ‘other-nationality’ work group members, whereas individuals who scored high on the collective identity orientation identified themselves only with ‘same-nationality’ group members. The results of this study suggest that positive inter(sub)group relations might be dependent on how individuals define themselves. In this way, individual differences in identity orientation can provide more insight in assessing to what extent individuals are able to work efficiently together with other
individuals from different backgrounds, which is an issue diverse organizations are increasingly faced with nowadays. The identity orientation scale may thus be useful as a diagnostic tool in the context of recruitment and selection of employees for those organizations.

Furthermore, it would be interesting to assess how individuals’ identity orientation would effect behavior in situations which misfit their orientation. For example, how would personally oriented individuals behave when they attend a soccer match in which their country is playing for the World Cup against another country? Will the need to be distinct from others still be prevalent, or will the situation, which may trigger a sense of connectedness to the collective (cf. Brewer & Gardner, 1996; Stapel & Van der Zee, 2006), overrule this personal identity orientation? In a similar way, how would relationally oriented individuals react to a situation in which other individuals try to compete with them? The situation might trigger a personal identity orientation, in which competitive behavior is followed by a competitive response. Will trait based tendency to assimilate and strive for harmonious relationships with others be overruled by assimilation to the competitive situation by responding with competitive behavior? Or will they display trait identity orientation corresponding behavior, such as trying to bend the competitive situation into a situation in which they can cooperate with each other? Further research might give more insight on the consequences of the interplay between individual differences in identity orientation and identity orientations triggered by a specific situation or another person.

Conclusion

Although some research has been done with regard to disentangling the self concept and developing measurement tools for self representations, the IOS is to our knowledge the first scale that reasonably distinguishes between personal, relational, and collective self representations. The intercorrelations with similar measures, showed that it is feasible to make a distinction between a personal self - which reflects individual uniqueness compared to others – a relational self – which stresses relationships and connectedness with other individuals - and a collective self - which refers to connectedness with social groups, as components of an individual’s identity. In this way, we regard our measure of identity orientation as an extension of existing measures of independent and interdependent self. The use of the identity orientation scale in future research may further help us to understand individual differences in how individuals define themselves and what influence these differences in self representations have on cognition, emotions and behavior in social interaction situations.