

# A high implicit affiliation motive does not always make you happy: A corresponding explicit motive and corresponding behavior are further needed

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**Abstract** Satisfaction of the implicit affiliation motive is known to be positively related to emotional well-being, whereas the frustration of the implicit affiliation motive leads to impairment of well-being. In the present research we specified two conditions that are responsible for the satisfaction and frustration of the implicit motive. Referring to research on the congruence of implicit and explicit motives, we assumed that a corresponding explicit affiliation motive leads to satisfaction of the implicit motive. Corresponding affiliation behavior constitutes the second condition. Three studies confirmed the hypothesis that both conditions must be fulfilled in order to positively connect the implicit affiliation motive to emotional well-being. Participants with high implicit and explicit affiliation motives and who additionally showed a large amount of affiliation behavior reported the lowest negative affectivity and the highest life satisfaction compared to participants who lacked one of the conditions.

**Keywords** Affiliation motive · Need satisfaction · Implicit motives · Explicit motives · Social sharing of emotions

## Introduction

The implicit affiliation motive is defined as the desire to “form friendship and association. To greet, join and live

with others. To co-operate and converse sociably with others. To love, to join groups” (Murray 1938, p. 83) and as the desire “to establish and/or maintain warm and friendly interpersonal relations” (French and Chadwick 1956, p. 296) (for an overview of the affiliation motive see Sokolowski 2008). This positive description of the affiliation motive already intuitively suggests that a high implicit affiliation motive is linked to positive well-being. Empirical research affirmed and proved that the *satisfaction* of a high implicit affiliation motive is positively related to emotional well-being (Argyle 1987; Baumeister and Leary 1995, Deci and Ryan 2000; Maslow 1954; McClelland 1985). But research also showed that the *frustration* of a high implicit affiliation motive causes impairment of emotional well-being, such as anxiety and somatization (Baard, Deci and Ryan 2000) or uncertainty and low gratification (McAdams and Bryant 1987).

Present research aims at contributing to the research on the relationship between a high implicit affiliation motive and emotional well-being. We do this by specifying two conditions that determine whether a high implicit affiliation motive is related to either positive or negative emotional well-being. First, referring to research on the relationship between implicit and explicit (affiliation) motives (e.g., Brunstein et al. 1998; Kasser and Ryan 1996), we hypothesized that the implicit affiliation motive must have a corresponding high explicit affiliation motive to result in well-being. Second, following research on the relationship between implicit motives and motive-relevant behavior, we argue that the implicit affiliation motive must be transformed into affiliation behavior to enable satisfaction of the need. We took both research approaches one step further by assuming that both conditions have to be met (rather than only one condition) to connect a high implicit affiliation motive with emotional well-being. That is, we

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hypothesized that the implicit affiliation motive needs a corresponding explicit affiliation motive as well as corresponding affiliation behavior to lead to well-being. Before describing both conditions in detail, we review the effects of the satisfaction and frustration of the implicit affiliation motive on emotional well-being.

#### Satisfaction and frustration of the implicit affiliation motive and emotional well-being

Evidence for the effects of the implicit affiliation motive on emotional well-being mainly comes from two affiliation motive approaches. The first approach understands the implicit affiliation motive (called *need for affiliation*) as a personality trait that varies among individuals (personality approach; McAdams 1980; McClelland 1985; Murray 1938). The second approach sees the implicit affiliation motive (called *need for relatedness*) as a basic need which is universal and innate and thus this approach does not focus on variations among individuals (basic need approach; Deci and Ryan 2000; Ryan and Deci 2000). Besides this difference, the conceptualization of the affiliation motive and its hypothesized effects on emotional well-being are quite similar. In the following we briefly introduce both affiliation motive approaches. The personality approach on affiliation motivation was initially based on the assumption that affiliative behavior is primarily determined by the fear component of the affiliation motive, so experiments were designed which activated fear-of-rejection (Atkinson et al. 1954). Later, the hope-of-affiliation motive was taken into consideration (e.g., French 1958; Mehrabian 1970) after recognizing that affiliative behavior is not only performed in order to avoid unpleasant states but also to generate pleasant situations. Today, research focuses either on the hope or on the fear component, or it considers both components of the affiliation motive (see Sokolowski 2008). In the present research we focus on the hope component of the implicit affiliation motive. The implicit affiliation motive is associated with a strong desire to feel related to others and interact harmoniously with others (McClelland 1985) and its satisfaction leads to happiness (McAdams and Bryant 1987). On the other hand, the frustration of high implicit motives, among them the implicit affiliation motive, have negative consequences for emotional well-being (McClelland 1985; Murray 1938).

According to the basic need approach anchored in the Self-Determination Theory (SDT) by Deci and Ryan (1985, 1991), the affiliation motive (need for relatedness) is defined as the desire to feel close and connected to others and to establish a sense of mutual respect and reliance with others (Baumeister and Leary 1995; Deci and Ryan 2000). Deci and Ryan (1985, 1991) assume that the satisfaction of the need for relatedness and two other basic needs (need for

autonomy, need for competence) are essential for personal well-being (Ryan and Deci 2000, p. 68). The authors examined the relations of people's reports of need satisfaction and different indicators of well-being in various settings (Reis et al. 2000; Ryan and Deci 2000; Sheldon et al. 1997). They found that the satisfaction of need for relatedness (and the other basic needs) predicted overall well-being (Illardi et al. 1993; Kasser and Ryan 1996). On the other hand, frustration of the need for relatedness (and the other basic needs) is assumed to lead to non-optimal human functioning, less personal growth and undermining of personal well-being (Kasser and Ryan 1996; Ryan and Deci 2000). To summarize, two different approaches on the affiliation motive showed that the *satisfaction* of the implicit affiliation motive is positively related to well-being, whereas the *frustration* of the implicit affiliation motive contributes to pathology and ill-being. Therefore, it seems worthwhile to consider the conditions that lead to the satisfaction and frustration of the affiliation motive. One condition is suggested by research on the relationship between implicit motives and corresponding explicit motives. The other condition is suggested by research on the relationship between implicit motives and motive-corresponding behavior.

#### Implicit and explicit affiliation motive congruence and implicit affiliation motive satisfaction

The differentiation between implicit and explicit motives can be traced back to McClelland et al. (1989) who suggested independent motivational systems that guide human behavior. Implicit motives are conceptualized as non-conscious affective preferences for particular groups of incentives. For example, preferring situations that allow *feeling* closely related to other people and *enjoying* the presence of others (e.g., McClelland 1985) characterizes an implicit affiliation motive. Explicit motives or goals on the other hand are cognition-based; they are consciously made evaluations of a person's self-concept (McClelland et al. 1989; Weinberger and McClelland 1990). For example "I am a person who likes to socialize" describes an explicit affiliation motive.

The conceptual independence of the implicit and explicit motive system implicates that these motive systems can be either *congruent* or *incongruent*. Several studies showed that motive congruence has positive effects on emotional well-being, whereas motive incongruence causes impairment of emotional well-being (e.g., Brunstein et al. 1998; Brunstein et al. 1999; Hofer and Chasiotis 2003). Brunstein et al. (1998) measured the implicit affiliation-, achievement- and power-motives of students by using a TAT-like procedure and assessed the explicit motive system by asking participants for their goals. The authors found that

students who made progress toward implicit motive-congruent goals reported a higher amount of emotional well-being compared to students who made progress toward implicit motive-incongruent goals. Kehr (2004) assessed the motive congruence among managers and found a positive relation of motive congruence and emotional well-being. Cross-cultural studies suggested that the beneficial effects of motive-congruence and the negative effects of motive-incongruence effects are universal (Hofer and Chasiotis 2003; Hofer et al. 2006). There are two explanations accounting for the negative effects of motive incongruence. First, a lacking explicit motive means that an implicit motive is unsatisfied and this motive frustration results in negative emotional well-being. Second, the motive incongruence itself directly impairs emotional well-being by arousing a psychological conflict between the implicit motive and the way people see themselves (explicit motive) (Kehr 2004). Baumann et al. (2005) described the psychological conflict as a “hidden” source of stress which permanently influences the individual. Following the motive incongruence research, we assume that a corresponding high explicit affiliation motive is one condition for the satisfaction of a high implicit affiliation motive and thereby emotional well-being. Vice versa, the absence of a corresponding high explicit affiliation motive is expected to frustrate the high implicit affiliation motive, leading to a psychological conflict which impairs well-being.

#### Affiliation behavior and implicit affiliation motive satisfaction

Another research domain suggests that affiliation behavior is a pre-condition for the satisfaction of the implicit affiliation motive. Several researchers agree that human motives are satisfied by engaging in actions that offer an opportunity to satisfy these motives (e.g., McAdams and Bryant 1987; McClelland 1985). For example, according to McClelland (1985), motive satisfaction does not take place within the person, but emerges from person-environment transactions. Accordingly, the SDT predicts that a social environment which enables to feel affiliated satisfies the implicit affiliation motive (need for relatedness) (Baard et al. 2000; Illardi et al. 1993). That is, individuals have to act in their social environments (i.e., at least bring themselves into the company of others) to get their implicit affiliation motive satisfied. SDT researchers argue that the need for relatedness as well as other basic needs “can be satisfied while engaging in a wide variety of behaviors that may differ among individuals and be differentially manifest in different cultures, but in any case their satisfaction is essential for the healthy development and well-being of all individuals regardless of culture” (Ryan and Deci 2000, p. 231). Examples of the wide variety of affiliation behavior mentioned by the authors

are getting to know people, trying to please others, showing affection (see Sokolowski 2008), resolve differences, cooperate and maintain harmony (Murray 1938), being in the company with others, talking to others (Constantian 1981), making private phone calls and visiting friends or writing letters to them (Lansing and Heyns 1959).

Apart from the theoretical agreement of the importance of motive-corresponding behavior (e.g., McAdams and Bryant 1987; McClelland 1985), there is empirical evidence that affiliation behavior is an important condition of the affiliation need satisfaction and well-being, whereas the lack of affiliation behavior is a condition of dissatisfaction and impaired well-being (e.g. Jemmott 1982). For example, a study by McAdams and Bryant (1987) showed that women with a high intimacy motive who could not translate their motive into action (i.e., who lacked opportunities for intimacy in their everyday life) reported less well-being than women with a low intimacy motive.

#### The present research

In order to specify the conditions under which a high implicit affiliation motive is related to positive or impaired emotional well-being, the present research integrates the motive congruence motive satisfaction approach and the affiliation behavior motive satisfaction approach described above. We do this by referring to a process of motive satisfaction that has been proposed by different authors (e.g., Brunstein et al. 1998; Elliot et al. 2006). The rationale of this process is the following. As a “stable preference for a broadly defined class of incentives” (McClelland 1985) the implicit affiliation motive is on a very high level of abstraction and is far away from the low abstraction level of concrete behavior, both theoretically and practically. The motive does not provide instructions as to how exactly it may be fulfilled. An intermediate step is necessary that bridges the different levels of abstraction. According to goal theorists (Brunstein et al. 1998; Elliot et al. 2006; Emmons 1986) this intermediate step is a consciously represented preference for desired outcomes. This preference can either be expressed by self-reported affiliation motives or by affiliation goals which we subsume under the term *explicit motives* for reason of simplification. These explicit affiliation motives have the function to relate the abstract implicit affiliation motive to concrete affiliation behavior. Taken together, the implicit affiliation motive is satisfied by affiliation behavior which again is initiated by the explicit affiliation motive.

One might assume that the explicit motive is not needed to predict well-being when the motive-satisfying behavior is shown due to other reasons than the explicit motive (e.g., simply initiated by the social environment). However, research on motive incongruence has suggested that the

incongruence between implicit and explicit motives itself is a source of conflict which impairs well-being (e.g., Baumann et al. 2005). Thus, the implicit affiliation motive might be satisfied by affiliation relevant behavior, while emotional well-being is still impaired because of the conflict of behaving in a way that does not fit one's self-reportable motives. To summarize, we hypothesized that participants with a high implicit affiliation motive report a high amount of emotional well-being when their explicit affiliation motive is high and they frequently show affiliation behavior. In contrast, participants with a high implicit affiliation motive, but no corresponding high explicit affiliation motive or corresponding affiliation behavior, are expected to report impaired emotional well-being.

Our hypotheses are focused on participants with a high implicit affiliation motive, because only for them the mechanism of an implicit motive needing an explicit motive to initiate motive-congruent behavior has a theoretical basis. In contrast, we know nothing about individuals with a low affiliation motive. For example, it is unclear whether they have a low implicit affiliation motive but instead have a high power motive or whether they are low motivated in general. Also, it is unclear how such characteristics might be associated with well-being. To summarize, we have no theoretical framework to make predictions for low implicit affiliation motivated individuals and thus restrict our analyses on high implicit motivated individuals.

In the present research we used *social sharing* as prototypical affiliation behavior. Social sharing means talking about and disclosing emotions to other people. This meets the aim of the implicit affiliation motive that Murray described as follows: "The aim of the need affiliation is to form a synergy: a mutually enjoyed, enduring, harmoniously co-operation and reciprocating relationship with another person" (Murray 1938, p. 175). Additionally, social sharing of emotions seems to influence social relationships that implicit affiliation motivated individuals strive for: In a meta-analytic review about self-disclosure and liking Collins and Miller (1994) found that individuals who disclose intimate topics to others are more liked and also liked their listeners more than individuals who disclose less. Pennebaker et al. (2001) used a statement to describe the long-term consequences of sharing emotions, which is totally in accordance with the aim of implicit affiliation motivated individuals aiming to establish and maintain interpersonal relationships (see above, French and Chadwick 1956). They stated the following: "[ ] the sharing of an intense emotional experience can decrease the physical distance between two persons. The decrease of interpersonal distance can have lasting consequences for the relationship between the sharer and the listener. In this sense, sharing emotions may contribute to the development and maintenance of close relationships" (p. 527). Thus,

social sharing is a prototype of affiliation behavior which, we assume, contributes to the satisfaction of the implicit affiliation motive. To test our assumption, we conducted three studies. In order to demonstrate the independence of the hypothesized effect from the way of measurement, we used different methods to measure implicit and explicit affiliation motives and affiliation behavior (= social sharing).

## Study 1

Study 1 tested the hypothesis that a high implicit affiliation motive will lead to negative affect. A high implicit affiliation motive accompanied by a high explicit affiliation motive and corresponding affiliation behavior was expected to lead to low negative affect.

## Method

### *Participants and procedure*

Participants were students aged 20–47 ( $M = 26.53$ ,  $SD = 6.3$ ) who were recruited for the study in an elementary course on emotion psychology. At the end of a course lecture participants filled in the implicit motive measure, the emotional well-being measure and the questionnaire concerning self-disclosure. Two days later they were contacted via email and filled in the explicit motive questionnaire using a web-survey. Fifty-two participants (42 women and 10 men) filled in all questionnaires and their data could be used in the following analyses.

*Implicit affiliation motive* The Multi-Motive Grid (MMG; Sokolowski et al. 2000) measures different motives using a semi-projective procedure. In the present study we used the MMG to assess the hope and fear components of the implicit affiliation motive (hope for affiliation and fear of rejection). The MMG consists of 14 line drawings of everyday situations which are presented along with a set of statements describing typical thoughts, feelings, and action-tendencies. Statements assessing hope for affiliation describe the inclination to have thoughts about being with others and about action to make social contacts. Statements assessing fear of rejection describe the inclination to have thoughts about possible rejection by other people. Excellent retest-reliability, internal consistency and validity of the MMG have been demonstrated repeatedly (e.g., Gable et al. 2003; Kehr 2004; Langens and Schmalt 2002; Sokolowski et al. 2000). In order to get an overall measure for the affiliation motive, we subtracted fear of rejection from hope of affiliation to get an implicit affiliation motive index (for this procedure see also Puca 2005; Puca and Schmalt 2001).



**Explicit affiliation motive** The affiliation scale of a German version of the Personality Research Form (Jackson 1984; German Version by Stumpf et al. 1985) was used to measure the explicit affiliation motive. The scale consists of 12 statements (e.g. “I try to be in the company of friends as much as possible”) which can either be accepted or rejected. After recoding the revised items, an explicit affiliation motive index was computed by summing up the items that were agreed with (Cronbach’s Alpha = .68).

**Affiliation behavior** The affiliation behavior was operationalized as the amount of social sharing with a significant person. For this we used the self-disclosure test SESI (German: Selbstenthüllungstest; Göhring 2002) which asks for the amount of emotional disclosure during the last weeks. The questionnaire contains a list of 16 different themes which refer to different emotions (e.g. “people I’m afraid of” or “happy moments in my life”) and participants were asked to indicate for each theme how often they have been talking about it lately with a close person, on a seven-point scale (1 = *talked very often* to 7 = *not talked at all*). An index of overall emotional disclosure was created by computing the mean.

**Impairment of emotional well-being** Negative affectivity was measured with the 10 negative affect items, as for example “upset” and “distressed” of the German version of Watson and Clark’s (1988) affect schedule (PANAS; Krohne et al. 1996). Participants were asked to indicate how they felt during the last few weeks and they rated each adjective on a 5-point response scale (1 = very slightly or not at all and 5 = extremely). A mean negative affect index was computed. Cronbach’s Alpha of the negative affect scale was sufficiently high ( $\alpha = .85$ ).

## Results

### *Preliminary analyses and descriptive statistics*

Preliminary *T*-tests revealed that women and men did not differ in any of the assessed variables. Correlation analyses showed that the implicit affiliation motive ( $M = 9.94$ ,  $SD = 2.78$ ), but not the explicit affiliation motive ( $M = 11.36$ ,  $SD = 2.78$ ) nor affiliation behavior ( $M = 4.78$ ,  $SD = .73$ ) was significantly associated with negative affect ( $M = 2.13$ ,  $SD = .59$ ), (implicit:  $r = -.39$ ,  $p < .01$ ; explicit:  $r = -.15$ , ns; behavior:  $r = -.08$ , ns). No further relationship reached significance.

### *Testing the two conditions of the high implicit affiliation motive impairment of well-being relationship*

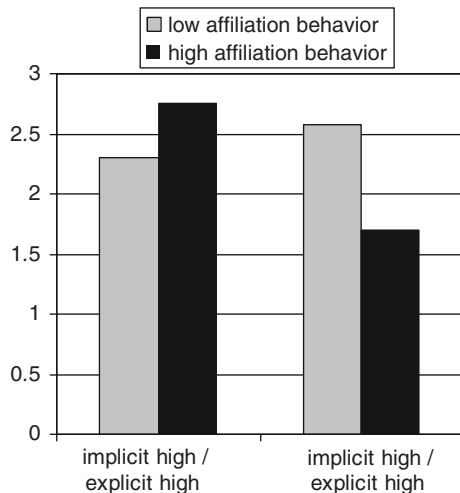
Because our hypothesis refers to a high implicit affiliation motive, participants with a high implicit affiliation motive were identified by conducting a median split of the implicit

affiliation score. In further analyses only participants who scored above the mean ( $N = 25$ ) were considered. This group had a mean negative affect score of 2.29 ( $SD = .70$ ) whereas participants who scored below the mean had negative affect scores of 1.99 ( $SD = .43$ ). The high implicit affiliation motivated participants were divided into two groups: people with a high explicit motive (scores above the median of the explicit motive measure) and people who have a low explicit motive (scores below the median of the explicit motive measure). The former group consisted of 12 participants and is referred to as the *high implicit/high explicit motive group*, whereas the latter group consisted of 13 participants and is referred to as the *high implicit/low explicit motive group*. The affiliation behavior score (social sharing) was then median-split into high versus low amount of affiliation behavior.

To test the hypothesis a 2 (high implicit/high explicit group versus high implicit/low explicit high group)  $\times$  2 (low versus high affiliation behavior) Analysis of Variance was conducted to predict negative affect.<sup>1</sup> The analysis revealed a significant interaction effect,  $F(1/21) = 7.35$ ,  $p < .05$  (see Fig. 1) indicating that participants with a high implicit affiliation motive and a high explicit motive (high implicit/high explicit group), and who additionally show a high amount of affiliation behavior reported the lowest negative affect. Post-hoc *T*-tests showed that those participants ( $M = 1.70$ ,  $SD = .50$ ) have significant lower negative affect than participants of the same group who reported a low amount of affiliation behavior ( $M = 2.57$ ,  $SD = .59$ ;  $t(11) = 2.85$ ,  $p < .05$ ).<sup>2</sup> Neither the main effect of the high implicit/high explicit versus high implicit/low

<sup>1</sup> We additionally tested whether these interaction effects (based on the analyses of variance that include only high affiliation motivated individuals) were supported by an analysis procedure that included the whole sample. Therefore, we conducted a hierarchical regression analysis in which we entered the *z* transformed scores for the implicit affiliation motive, the explicit affiliation motive and affiliative behavior into the regression equation (Step 1), followed by all 2 way interactions (Step 2) and the 3 way interaction implicit motive  $\times$  explicit motive  $\times$  affiliation behavior (Step 3). The 3 way interaction effect on negative affect ( $b = .35$ ,  $se_b = .14$ ,  $\Delta R^2 = .08$ ,  $\Delta F(1,44) = 6.03$ ,  $p < .05$ ) reached significance. Post hoc analyses showed that the interaction between the explicit motive and affiliative behavior is only significant for individuals high in the implicit affiliation motive ( $b = .92$ ,  $se_b = .18$ ,  $\Delta R^2 = .32$ ,  $\Delta F(1,21) = 24.57$ ,  $p < .001$ ), indicating that high implicit affiliation motivated individuals reported the lowest amount of negative affect when they had a high explicit motive and additionally reported a high amount of affiliation behavior. When the amount of affiliation behavior or the explicit affiliation motive was low, their negative affect was high. In contrast, the interaction pattern for individuals low in the affiliation motive was not significant and on a descriptive level was very different from that of the high implicit motivated individuals.

<sup>2</sup> Note that the group sizes in these *T* tests were low with the smallest size of  $N = 6$ .



**Fig. 1** The interaction of implicit and explicit affiliation motives and affiliation behavior on negative affect. (Study 1)

explicit groups  $F(1/21) = 2.63$ , ns) nor the main effect of the low versus high affiliation behavior  $F(1/21) = .69$ , ns) reached significance.

#### Brief discussion

The results of Study 1 support our assumption that participants with high implicit and explicit affiliation motives and who additionally behave in an affiliation motive relevant way (social sharing) reported less negative affect than all other participants who miss either the corresponding explicit motives or the corresponding behavior.

## Study 2

Study 1 asked for the *quantity* of social sharing. Because research on intimacy showed that not only the quantity, but also the *quality* of relatedness predicts well-being (Nezlek 2000) and because research on social sharing confirmed that the quality of social sharing is also an important factor in influencing well-being (e.g., Panagopoulou et al. 2006; for a summary see Pennebaker et al. 2001), Study 2 addressed the quality of social sharing by asking for the importance of the events which the participants share with a significant partner.

#### Method

##### *Participants and procedure*

Participants were 93 undergraduate students from different faculties of the University of Zurich and from the Swiss Federal Institute of Technology. The data reported here

were collected as part of a larger project on determinants and consequences of the achievement-, affiliation- and power-motive.<sup>3</sup> The participants filled in the measures of implicit motives, explicit motives, and negative affect in a group session. The social sharing questionnaire was filled in at home and was sent back during the following week. We received 85 complete sets of questionnaires (60 women and 15 men, average age 23.00 years,  $SD = 4.90$ ).

**Implicit motive** To assess participants' implicit affiliation motive we administered the Thematic Apperception Test (TAT, Murray 1943). According to the standard instructions used in motivation research (Atkinson 1958) participants wrote imaginative stories to four picture cues. These pictures displayed a ship's captain talking with another man, a man sitting at a desk, two female scientists in a laboratory and a man and a woman on a trapeze (Smith 1992). The content of the stories was coded according to Winter's (1991) *Manual for scoring motive imagery in running text*. Two independent coders rated the stories for affiliation motive imagery. They agreed with a Kappa of .81. Scoring disagreements were discussed fully in additional sessions. As the raw scores were correlated with the length of the written protocols ( $r = .26$ ,  $p < .01$ ) participants' motive scores were corrected by regression for protocol length (Smith et al. 1992).

**Explicit motive** To measure the explicit affiliation motive, participants were asked to write down a current personal affiliation goal. Following a procedure described by Brunstein et al. (1998), participants rated their goal concerning ten items on a scale ranging from 1 (*disagree strongly*) to 5 (*agree strongly*). Four items measured commitment to the goal (e.g., *identification*, *effort*) and six items measured the goal's attainability (e.g., *opportunity*, *manageability*). The commitment scores ( $M = 3.3$ ,  $SD = .70$ ) were multiplied with the attainability scores ( $M = 3.7$ ,  $SD = .58$ ) to create an index of explicit motive.

**Affiliation behavior** An adapted version of the questionnaire used in Study 1 was used to measure the quality of social sharing as an important affiliation behavior (SESI; Göhring 2002). The participants indicated the importance of the emotional events which they had been talking about to a significant partner.

**Impairment of emotional well-being** As in Study 1 negative affect was measured with the 10 negative affect items of the PANAS (Krohne et al. 1996) which were again rated using a 5-point response scale (1 = very slightly or not at all and 5 = extremely). Again, a mean score for negative affect was computed.

<sup>3</sup> The additional data (i.e., flow experience, action control, self regulation) were not relevant for the research question of the present research. From a theoretical as well as a methodological point of view it is very unlikely that the administration of any of the additional measures influenced the procedure or the results of the present study.

## Results

### *Preliminary analyses and descriptive statistics*

Exploratory analyses showed that neither gender nor age of participants had significant impact on the results reported below. As illustrated in Table 1, the implicit affiliation motive but not the explicit motive was positively related to affiliation behavior (implicit:  $r = .33$ ,  $p < .05$ ; explicit:  $r = -.02$ , ns).

### *Testing the two conditions of the high implicit affiliation motive impairment of well-being relationship*

In order to identify the participants with a high implicit affiliation motive we again conducted a median split of the implicit motive measure and only considered participants who scored higher than the median ( $N = 42$ ). They had a mean negative affect score of 1.88 ( $SD = .61$ ) whereas participants who scored below the mean had an average negative affect score of 1.76 ( $SD = .65$ ). Participants who scored higher than the median were again separated into those who had a high explicit motive (high implicit/high explicit group;  $N = 22$ ) and those who have a low explicit motive (high implicit/low explicit group;  $N = 20$ ). As in Study 1, the affiliation behavior measure was median-split into low amount of affiliation behavior (below the median) and high affiliation behavior (above the median). A 2 (high implicit/high explicit group versus high implicit/low explicit group)  $\times$  2 (low versus high affiliation behavior) Analysis of Variance tested for effects on negative affect.<sup>4</sup> The analysis revealed a significant interaction effect,  $F(1/35) = 5.55$ ,  $p < .05$ . This is very similar to the interaction pattern of Study 1. Those participants reported the

**Table 1** Descriptive statistics and associations (Pearson correlation) among variables of Study 2 ( $N = 85$ )

|  | 1 | 2   | 3    | 4   | <i>M</i> | <i>SD</i> |
|--|---|-----|------|-----|----------|-----------|
| 1 Implicit affiliation motive <sup>+</sup> | 1 | .16 | .33* | .17 | .09      | 1.05      |
| 2 Explicit affiliation motive              |   | 1   | .02  | .04 | 12.56    | 3.94      |
| 3 Affiliation behavior                     |   |     | 1    | .12 | 1.71     | .20       |
| 4 Negative affect                          |   |     |      | 1   | 1.82     | .63       |

<sup>+</sup> Because the  $z$  scores were used to correct the TAT raw scores for protocol length, the table contains  $z$  scores

\*  $p < .05$

<sup>4</sup> When including the whole sample in a regression analysis (see also footnote 1), the 3 way interaction between implicit motive  $\times$  explicit affiliation motive  $\times$  affiliation behavior failed to reach significance. On a descriptive level, the interaction pattern for high implicit motivated individuals is rather similar to the interaction patterns of high implicit motivated participants of Study 1 and different from the interaction pattern for low implicit affiliation motivated individuals.

lowest negative affect who have a high implicit affiliation motive as well as a high explicit affiliation motive (high implicit/high explicit group) and who additionally show a high amount of affiliation behavior.  $T$ -tests showed that those participants ( $M = .45$ ,  $SD = .27$ ) showed less negative affect than participants of the same group who reported a low amount of affiliation behavior ( $M = 1.10$ ,  $SD = .47$ ;  $t(20) = 4.02$ ,  $p < .05$ ). None of the main effects reached significance.

### Brief discussion

In line with Study 1, Study 2 showed that a high implicit affiliation motive leads to negative affect when either a corresponding explicit motive or a high amount of affiliation behavior is missing. It is important to note that the results fully replicate the results of Study 1, although different methods to measure affiliation motives and affiliation behavior were used.

## Study 3

In order to also consider a positive component of emotional well-being we measured positive as well as negative affect (Diener et al. 1999) in Study 3. Additionally, we examined participants' life satisfaction (see also Hofer et al. 2006). Life satisfaction differs from the emotional well-being in so far that the latter represents people's on-line *affective* evaluation of the events that occur in their lives, whereas life satisfaction represents a *cognitive* evaluation, a more global judgment of one's life (Diener et al. 1999, p. 277).

In order to demonstrate that the hypothesized effects were independent of the way of measurement, Study 3 used different measures of the implicit and explicit affiliation motive. Affiliation behavior was measured using a dyadic coping questionnaire (Bodenmann 1990) which contains important facets of emotional sharing within intimate relationships, for example talking about the emotional impact of stressful events.

### Method

#### *Participants and procedure*

By means of flyers 102 participants (51 females) with a mean age of 26.17 years ( $SD = 7.01$ ) were recruited at the University of Osnabrück, Germany. Participants received a questionnaire booklet and were asked to return the completed questionnaires within the next days. They either were paid 15 Euro or got course credits for their participation.

**Implicit motive** The Operant Multimotive Test (OMT; Kuhl and Scheffer 1999) was administered to assess the implicit affiliation motive. Using a modified TAT technique, participants were presented with 15 pictures and were asked to invent a story (without having to write down the story) and give their spontaneous associations to the following questions: (1) “What is important for the person in this situation and what is the person doing?” (2) “How does the person feel?” (3) “Why does the person feel this way?” (4) “How does the story end?” The OMT differentiates five components for the affiliation motive (e.g., having fun with others, working on relations, desire for or feeling of security). For the purpose of the present studies, the sum of the components was computed to assess the implicit affiliation motive. The OMT has a sufficient internal consistency, even according to indices based on classical test theory:  $\alpha = .74$  and sufficient retest stability of  $r = .72$  (Kuhl et al. 2003; Scheffer 2005). The scoring was carried out by well-trained assistants who had reached sufficient reliability across several studies.

**Explicit motive** As a self-report measure of affiliation motive the participants filled in the Personal Values Questionnaire (McClelland 1991). It consisted of 36 sentences which had to be evaluated according to their personal importance along a scale from 0 (*not important for me*) to 6 (*exceedingly important for me*). Explicit affiliation motive, explicit achievement motive and explicit power motive are described by 10 items each. Six items are filler items. The affiliation items (e.g., having plenty of time to spend with my friends or family) were summed up to create an explicit affiliation motive score (Cronbachs Alpha = .76).

**Affiliation behavior** The Stress Communication Scale from the *Fragebogen zur Erfassung des Dyadischen Copings als Tendenz* (English translation: *Questionnaire to assess dyadic coping as a tendency*; FDCT-N; Bodenmann 1990) was taken as an indicator for social sharing. The Stress Communication Scale consists of 4 items (e.g., I am frank with my partner, telling him when I am stressed and when I need his/her emotional support) which were rated on a scale ranging from 0 (never) to 4 (very often). A sum score was computed to create an overall affiliation behavior score. According to Bodenmann (1990), dyadic coping has two primary goals: the reduction of stress for each partner and the enhancement of relationship quality. This assumption is in accordance with our line of argumentation that social sharing is a kind of affiliation behavior that facilitates the quality of interpersonal relationships.

**Emotional well-being** Positive and negative affect were measured with 3 items of an adjective checklist (e.g., joyful, helpless). The items were rated according to how intensively they were experienced using a scale from 1 (not

at all) to 4 (very). Positive and negative affect was aggregated to an affect index by subtracting the negative from the positive affect scores. *Life satisfaction* was measured with the five items of the Satisfaction with Life Scale (SWLS; Diener et al. 1985). The items (e.g., “I am satisfied with my life”) had to be rated on a scale ranging from 1 (total disagreement) to 7 (total agreement) and were summed up to a life satisfaction score (Cronbach Alpha = .85).

## Results

### *Descriptive statistics and intercorrelation of variables*

*T*-tests revealed that women and men differ in their stress communication behavior. Women ( $M = 7.76$ ,  $SD = 1.17$ ) show affiliation behavior more often than men ( $M = 6.59$ ,  $SD = 1.04$ ). Because gender did not influence the effects reported below, we do not further elaborate on sex-differences. Table 2 shows the descriptive statistics and correlations between the variables of Study 3.

### *Testing the two conditions of the high implicit affiliation motive well-being relationship*

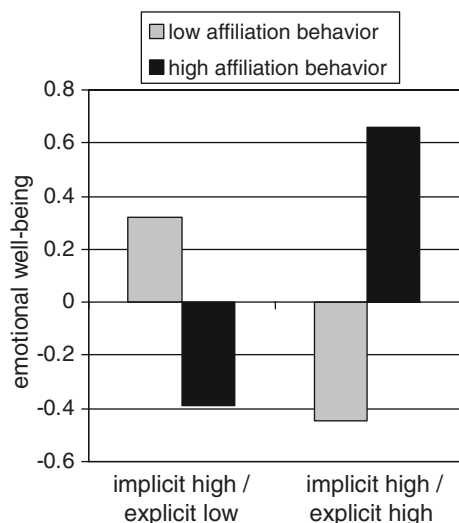
Again, the analyses only refer to participants who scored high in the implicit motive measure (i.e., who scored above the median,  $N = 62$ ). These participants had a mean affect index of .06 ( $SD = 1.67$ ) while participants who scored below the mean had an average affect index of  $-1.10$  ( $SD = 1.53$ ). The high implicit motivated individuals were separated into either the high implicit/high explicit group ( $N = 32$ ) or into the high implicit/low explicit group ( $N = 30$ ) depending whether they scored above or below the median of the explicit motive measure. Again, the social sharing measure was median-split into high amount versus low amount of affiliation behavior. The 2 (high implicit/high explicit versus high implicit/low explicit group)  $\times$  2 (low versus high affiliation behavior) ANOVA again revealed a significant interaction effect,

**Table 2** Descriptive statistics and associations (Pearson correlation) among variables of Study 3 ( $N = 102$ )

|                               | 1 | 2   | 3     | 4   | 5     | <i>M</i> | <i>SD</i> |
|-------------------------------|---|-----|-------|-----|-------|----------|-----------|
| 1 Implicit affiliation motive | 1 | .13 | .13   | .11 | .12   | 2.97     | 1.46      |
| 2 Explicit affiliation motive |   | 1   | .39** | .09 | .19   | 38.04    | 5.56      |
| 3 Affiliation behavior        |   |     | 1     | .18 | .22*  | 7.0      | 1.35      |
| 4 Affect index                |   |     |       | 1   | .51** | 0.00     | 1.61      |
| 5 Satisfaction with life      |   |     |       |     | 1     | 25.46    | 5.68      |

\*  $p < .05$ , \*\*  $p < .01$

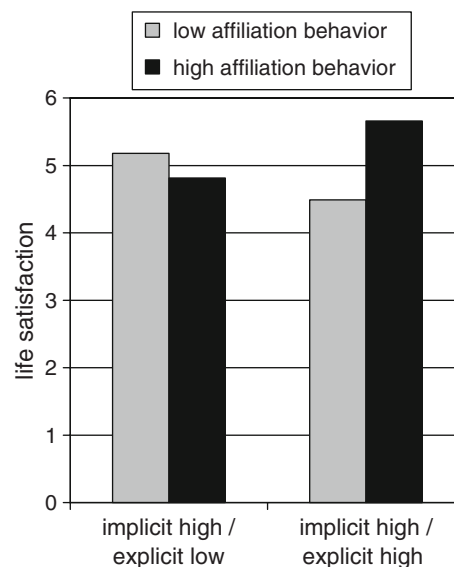




**Fig. 2** The interaction of implicit and explicit affiliation motives and affiliation behavior on emotional well being (affect index: positive negative affect) (Study 3)

$F(1/58) = 4.89, p < .05$  (see Fig. 2).<sup>5</sup> Participants in the high implicit/high explicit motive group who additionally reported a high amount of affiliation behavior showed the highest affect index. Post-hoc  $T$ -tests showed that those participants reported higher affect indexes than participants of the same group who reported a low amount of affiliation behavior,  $t(30) = -1.87, p = .07$ . None of the main effects reached significance.

In order to test the differences in life-satisfaction, the same  $2 \times 2$  ANOVA as reported above was conducted with life-satisfaction as the dependent variable. The results showed a significant interaction effect ( $F(1/58) = 6.70, p < .05$ ) which is illustrated in Fig. 3.  $T$ -tests showed that participants of the high implicit/high explicit group who additionally report a high amount of affiliation behavior ( $M = 28.31, SD = 4.76$ ) were more satisfied with life than participants of the same group who lack affiliation behavior ( $M = 22.44, SD = 7.26; t(30) = -2.71, p < .05$ ). No main effect reached significance.



**Fig. 3** The interaction of implicit and explicit affiliation motives and affiliation behavior on life satisfaction (Study 3)

#### Brief discussion

Study 3 replicated and extended the result-pattern of Study 1 and Study 2 using different methods to measure motives and social sharing. Participants whose high implicit affiliation motive was accompanied by a high explicit affiliation motive and who additionally behaved in an affiliation motive relevant way reported the highest emotional well-being and more life-satisfaction than participants who missed either the corresponding explicit motives or the corresponding affiliation behavior.

#### General discussion

With the present research we demonstrated that a high implicit affiliation motive not always promotes happiness. Under some circumstances a high implicit affiliation motive even impairs well-being. We assumed that two pre-conditions have to be fulfilled in order to link a high implicit affiliation motive with high positive and low negative well-being. The process of motive satisfaction starts with translating the implicit motive into a corresponding explicit motive. In a second step it is translated into motive satisfying behavior (e.g., Brunstein et al. 1998). For our studies on the affiliation motive, we hypothesized that the explicit affiliation motive as well as the affiliation behavior (social sharing) are necessary conditions for the positive relationship between the implicit affiliation motive and emotional well-being. The results strongly support our hypothesis. Study 1 revealed that participants with a high implicit affiliation motive, but who lack either the

<sup>5</sup> Hierarchical regression analyses with the whole sample (see footnote 1) revealed a significant 3 way interaction effects on the affect index ( $b = .37, se_b = .19, \Delta R^2 = .03, \Delta F(1,94) = 3.87, p < .05$ ) and life satisfaction ( $b = .25, se_b = .12, \Delta R^2 = .04, \Delta F(1,94) = 4.53, p < .05$ ). Post hoc analyses showed that the interactions between the explicit motive and affiliative behavior are only significant for individuals high in the implicit affiliation motive (affect index:  $b = .76, se_b = .27, \Delta R^2 = .12, \Delta F(1,58) = 7.75, p < .01$ ; life satisfaction:  $b = .43, se_b = .17, \Delta R^2 = .09, \Delta F(1,58) = 6.06, p < .05$ ), indicating again that they reported the highest affect and life satisfaction when they had a high explicit motive and additionally reported a high amount of affiliation behavior.

corresponding high explicit affiliation motive or affiliation behavior, show higher negative affect. On the other hand, participants with a high explicit motive paired with a high amount of affiliation behavior reported the lowest amount of negative affect. Study 2 replicated these results using a different method to measure implicit motives (TAT instead of MMG), explicit motives (Goals instead of PRF) and behavior measures (quality instead of quantity of social sharing). Study 3 confirmed the effects using an affect index including positive as well as negative affect and again different motive measures (OMT and PVQ). Additionally, Study 3 revealed that participants with a high implicit affiliation motive paired with a high explicit affiliation motive as well as affiliation behavior reported the highest amount of life satisfaction. The fact that the studies revealed the same pattern of interaction despite different measurements of affiliation motives and affiliation behavior is impressive evidence for the validity of the hypothesized assumption. This methodological convergence underlines the robustness of the effects we found.

The found pattern of interaction in this article is in line with the personality systems interaction (PSI-) theory of Kuhl (2000). According to this integrative theory of personality, affects and affect regulation play an important role for the congruence of implicit and explicit motives and the behavioral output (Baumann et al. 2005; Kuhl et al. 2006). Inhibited negative affect facilitates access to the so-called “extension memory”. The extension memory is providing implicit representations of extended semantic networks. This psychological system is necessary to have an overview of integrated self-representations (e.g., explicit motives), relevant episodes experienced and extended semantic fields. “Access to extension memory makes a great number of preferences and action alternatives simultaneously available so that a person can easily feel priorities and choose goals that satisfy multiple constraints” (Baumann et al. 2005, p. 138). The reduced negative affect of high implicit/high explicit individuals who show affiliation behavior can be the *consequence* of this pattern, and according to negative affect modulation assumption of the PSI-theory, the *condition* under which motive congruity and suitable affiliative behavior can be shown. Long-term studies with the possibility of causal investigation of the found pattern as well as individual differences in affect-regulation will have to be the aim of future research.

In the present research we focused on the affiliation domain. If the broader assumption also holds true that the congruence between implicit and explicit motives and motive-relevant behavior in general promotes well-being, the results should be transferable to other domains of human life, for example to the achievement domain. In that case, well-being should depend on the congruence between

the implicit and explicit achievement motive and achievement relevant behavior, for example acting in challenging achievement situations that allow a realistic feedback about one’s competences (McClelland et al. 1953). Like in the affiliation domain the achievement motive relevant behavior must be expressed instead of suppressed to guarantee the positive effects on well-being. Research by Langens (2007) on achievement motivation provided first evidence for this supposition. He found that *activity inhibition* moderates the relationship between the congruence of implicit and explicit achievement motives on emotional well-being. Although Langens (2007) measured activity inhibition rather than motive-relevant behavior, the result can be interpreted as a first indication in the achievement domain. In addition to a corresponding explicit motive, a high implicit motive also needs low activity inhibition (i.e., corresponding behavior) to lead to emotional well-being.

Present research measured a prototype of affiliation behavior, namely the social sharing of emotions which contributes to the satisfaction of the implicit affiliation motive. Several further examples of affiliation behavior (e.g., pleasing others, cooperating, talking to others, visiting friends) could also be used to operationalize affiliation behavior, but will have to be the aim of future studies. Anyhow, the fact that our results occurred with only a limited domain of affiliation behavior (social sharing) is an even stronger support for the significance of the results. It can be assumed that some non-explained variance in our studies could be ascribed to the fact that other kinds of affiliation behavior were not measured and that enlarging the variety of affiliation behavior would improve the precision of the prediction.

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