

# Do They?

## *About the Possible Motive-related Influence on User Behavior in (Business-) Social Network Sites: A Theroretical State of Research*

Jana-Eva Dietel

*Work- and Organizational Psychology, University of Hamburg, Von-Melle-Park 11, 20146 Hamburg, Germany*

**Keywords:** Social Network Sites, Xing, LinkedIn, User Behavior, Motive Influence, Affiliation Motive, Achievement Motive, Power Motive.

**Abstract:** Social network sites (SNSs) - as an application of the Web 2.0 - play an important role in the redefinition of communication and social networking. Despite the massive influence of SNSs regarding our networking-behavior in terms of both, private and business matters, little is known about how motivational components (especially considering the affiliation-, achievement- and power motive) affect user behavior in SNSs. First studies like those of Hesel et al., (2015) showed first impressions of how a person's motivational setup influences the utilization of SNSs. However there is still a wide knowledge gap when applying the few findings to SNSs such as Xing and LinkedIn, which focus on business-relevant usability. This article intends to assess a theoretical overview, highlighting not only findings but also known gaps. We conclude with our planned steps of future examinations and a recommendation for further research of the motive-related influence on user behavior in (business-) SNSs.

## 1 INTRODUCTION

Web 2.0 has become an inherent part of everyday life and opened up significant new ways of accumulating information, entertainment and also means of communication and social networking (Hesel et al., 2015; Richter and Koch, 2008; Schaefer, 2008). In conjunction with these newly defined means of online-communication, there was also a shift in quality and quantity of social networks, having them remarkably evolving due to the rise of Web 2.0. This evolution is accurately summarized by Di Gennaro and Dutton (2007: 591) when they state that "*Internet plays an important role in reconfiguring the social networks of many users*".

The basis of this reconfiguration of social networking in Web 2.0 is provided mainly by social network sites (SNSs) (Boyd and Ellison, 2007; Schaefer, 2008). According to Richter et al., (2011), SNSs offer a type of social software used in accordance with the bottom-up approach, since users partly define content, rules and reasons for using a certain platform (Richter et al., 2011). Additionally, SNSs act as an agent in connecting people, as well as providing the means to maintain these

connections (Enders et al., 2008; Richter and Koch, 2008; Schaefer, 2008).

Summarizing the statements above, SNSs can be defined as interactive platforms: their concept is based on interaction and participation of their users who, in turn, generate virtual contacts and contexts (Enders et al., 2008; Richter et al., 2011; Richter and Koch, 2008).

Despite the massive influence of SNSs regarding our networking-behavior in terms of both, private and business matters, little is known about how motivational components of the user's personality (especially considering the 'Big Three motives') affect user behavior.

This is, in fact, surprising, since motives are widely accepted, well researched personality marks with clear influence on our behavior and actions (Koestner and McClelland, 1992; Schultheiss, 2008; Schultheiss et al., 1999; Spangler et al., 2004; Spangler, 1992; Winter, 1991).

Frankly, motives present an ideal way to thoroughly assess user behavior when it comes to SNSs.

Studies like those of Hesel et al., (2015) offer first impressions of how a person's motivational setup influences their utilization of SNSs. There is a

huge blank space, though, when applying these findings to SNSs with a focus on career-relevant usability.

This article intends to assess a theoretical overview, highlighting findings but also known gaps regarding the function of motives when using (business) SNSs. Based on this assessment, we convey first relevant implications which are illustrated in the article's end.

The article itself is structured into three parts: The first part is an overview of the theoretical framework of SNSs, with focus on their functional groups and their intended private and business-related use. Following that, we, in accordance with the 'uses-and-gratification-approach', present results of studies that support theories connecting personality-influence in terms of SNSs utilization. To cast a solid foundation for our research's implications, the second part of this article focuses on an important personality trait: motives. Here, we especially emphasize on affiliation, achievement and power motive as assessed by Hester et al., (2015). We conclude with our planned steps of future examinations and a recommendation for further research of the motive-related influence on user behavior in (business-) SNSs.

## 2 SOCIAL NETWORK SITES – NEW WAYS OF PRIVATE AND BUSINESS-RELATED NETWORKING

There is a multitude of SNSs and each service provides a different approach on private (e.g. Facebook, StudiVZ) or business-related intention of use (see Table 1) (Enders et al., 2008; Richter and Koch, 2008; Skeels and Grudin, 2009). For a better differentiation, SNSs with a business-related intention of use will be called social business network sites (SBNSs) in the context of this article.

Intention of use, of course, also influences the consumer; as Enders et al., (2008: 204) state, SBNSs are "[...] *active only in a business context, the target group is limited to those willing to do business online*".

SBNSs are, for example, LinkedIn or Xing. Depending on account settings, users may create profiles with CV-relevant information, create or join theme-groups, use contact links, look for professional employees or post job openings (Enders et al., 2008; Schaefer, 2008) (see Table 1).

Table 1: Intention of use of popular SNSs and SBNSs (Enders et al., 2008; Richter and Koch, 2008).

Name	Intention of use	Origin
Facebook	private	USA
StudiVZ	private	Germany
LinkedIn	business	USA
Xing	business	Germany

### 2.1 Functional Groups and Reasons using SNSs and SBNSs

Independent of the intention of use, there are, according to Richter and Koch (2008), similar functional groups in all SNSs. Though similar, their specifications remain in tune with the SNS's intention of use (private or business-related) (Richter and Koch, 2008).

*Functional Group 1 'Identity Management'*. Identity management is a basic function of any SNS/SBNS and, according to Richter und Koch (2008), it is one of the most significant reasons for users to log in (regularly) to a certain network. The function offers a controlled and directed presentation of personal data through a user-created profile that is only shown to a personally defined group of people (Richter and Koch, 2008). The (tuned) profile and the user's contained data isn't the only factor in regards of identity management: there are even more functions supporting a specific self-presentation (Richter and Koch, 2008; Schaefer, 2008). For example, users can join groups to represent personal outlooks or interests (Richter and Koch, 2008); total amount of contacts, sharing content or specific likes and uploading pictures (of the user's choice) contribute to identity management as well (Richter and Koch, 2008).

*Functional Group 2 '(Expert-) Search'*. This function enables SNS/SBNS users to search for specific criteria (e.g. names, job experience, company, position, or recommendations of other contacts) in order to find matching persons or companies (Richter and Koch, 2008). Contact opportunities of interest will also be suggested automatically by the network itself (Richter and Koch, 2008). While this functional group has a rather secondary role in private networks, it is frequently used in SBNSs (Richter and Koch, 2008).

*Functional Group 3 'Context Awareness'*. Human relationships are defined and shaped by trust (Richter and Koch, 2008). To quickly establish trust between two people, essentially strangers, via an SNS/SBNS, mutual contacts will be visualized by, for example, communication paths (Richter and

Koch, 2008). Accordingly, trust and a potential relationship are supposed to be established by highlighting a shared personal context (Richter and Koch, 2008). Connections of this quality are ultimately beneficial to both, network (i.e. in the fact that more connections bolster the platform's overall value) and user (i. e. in sense of the 'strength-of-weak-ties-theory') (Richter and Koch, 2008).

Granovetter (1973: 1361) defines "*the strenght of a tie [...]*" as "[...] a (probably linear) combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie". The theory of 'strength-of-weak-ties' postulates that ties to loose contacts (weak ties) also mean a vast pool of information and thus an edge in terms of relevant information gathered. The crucial dynamic in this case originates from the fact that close contacts or friends often share a similar milieu and thus also a very similar pool of information (Granovetter, 1983; Granovetter, 1973; Richter and Koch, 2008).

Loose contacts, however, have other contextual frames and access to different pools of information (Richter and Koch, 2008). Or, as Granovetter (1983: 209) states: "*Weak ties provide people with access to information and resources beyond those available in their own social circle [...]*", though also adds "*but strong ties [...] are typically more easily available*" (Granovetter 1983: 209). This advantage of strong ties, however, is at least partly compensated in SNSs/SBNSs due to easily accessible relationships even between strangers and loose contacts. This way, the benefits of weak ties can still be utilized (Richter and Koch, 2008).

*Functional Group 4 'Contact Management'*. The functional group 'contact management' defines all functions connected to maintain and manage one's own network. This manifests, for example, in categorizing personal contacts, restricting certain information to close contacts or customizing contact information (Richter and Koch, 2008).

*Functional Group 5 'Network Awareness'*. 'Network awareness' is the automatic, consecutive status information (e.g. career changes, likes, birthdays) of a network user's personal contacts (Richter and Koch, 2008). According to Richter and Koch (2008), 'network awareness' is a crucial factor in terms of time spent interacting with a social online network and thus the network's success.

*Functional group 6 'Exchange (Communication)'*. When it comes to exchange, SNSs/SBNSs utilize a variety of tools like chats, newsfeeds or access to contact data relayed through a user's profile (Richter

and Koch, 2008).

Depending on intention of use (private or business-related) as well as different specifications of functional groups, the reasons for using a network vary. Maintaining contacts, reactivating contacts and searching for contacts are viable reasons for both, private and business-related networks, as is self-presentation (Schaefer, 2008). Reasons clearly allocated to SBNSs are, for example, job offers, job search, or the search for professionals (Richter and Koch, 2008).

## 2.2 Personality and Use – Theories of Technologic Determinism in a New Light

The reasons for using SNSs/SBNSs have been thoroughly analyzed since the emergence of the corresponding platforms (Brandtzæg and Heim, 2009; Schaefer, 2008; Skeels and Grudin, 2009). Having acquired a sophisticated foundation, research now focuses on more in-depth analyses, for example by examining socio-psychological principles, like user personality, more closely (Heser et al., 2015).

This is a logical development, since Web 2.0 and its applications (like SNSs/SBNSs) are no mere artificial virtual reality, but can be understood as an extension of the real world. In this extension, social paradigms of human interaction (e.g. the discriminating distinction between in-group and out-group) are just as present as they are in the 'offline-world' (Janneck et al., 2013).

To utilize user personality and how it is influenced as a basis for research is no novelty either: Early theories like the 'uses-and-gratification-approach' have shown that socio-psychological principles can influence individual media-use and its outcome (Katz et al., 1973). "[...] *the selection of media and content, and the uses to which they are put, are considerably influenced by social role and psychological predisposition*", Katz et al., (1973: 165) explain this. How and if media is used, is no automatic process, but happens individually and is also shaped by the personality of any user (Amichai-Hamburger and Vinitzky, 2010; Janneck et al., 2013; Kalmus et al., 2011; Orr et al., 2009).

It is considerably self-explanatory, why the theories of the 70s could not be taken into consideration in terms of using SNSs or SNBSs. Studies of today still show potential to be retro-fitted to Web 2.0's platforms (Amichai-Hamburger and Vinitzky, 2010; Heser et al., 2015; Kalmus et al., 2011; Schaefer, 2008). Orr et al., (2009), for example, proved that shy individuals had

significantly less Facebook friends but spend proportionally more time visiting Facebook than people who were not shy. Other authors also found “*A strong connection [...] between personality and Facebook behavior*” (Amichai-Hamburger and Vinitzky, 2010: 1289).

It should be noted, though, that the term personality on its own is no baseline for a generalizing conclusion. After all, personality is “[...] *conceptualized from a variety of theoretical perspectives, and at various levels of abstraction or breadth*” (John and Srivastava, 1995: 102).

Thus it makes sense, not only for economic reasons, to utilize accepted and clearly distinct personality traits for any assessment that is supposed to turn out valid, reliable and objective.

Consecutively, the influence of personality traits on the use of SNSs has been researched mainly with the ‘Big Five personality traits’: extraversion, agreeableness, conscientiousness, neuroticism and openness (Correa et al., 2010; Gosling et al., 2011). As Correa et al., (2010: 250) stated “*People with higher levels of extraversion tend to be heavier users of social media*” as well as Gosling et al. (2011) who illustrated that extraversion is positively connoted to the use of SNSs (like Facebook).

### 3 MOTIVES AS DETERMINING FACTOR REGARDING THE USE OF SNSs AND SBNSs?

Studies like those of Correa et al., (2010) and Gosling et al., (2011) indicate that the ‘Big Five personality traits’ can serve as a baseline explanation for certain areas of SNSs use (Heser et al., 2015).

Yet, some authors prefer different personality traits to explore even deeper layers of SNSs use (Heser et al., 2015; Ross et al., 2009). Heser et al. (2015) refer to Ross et al., (2009: 578), who, concerning the ‘Big Five’, discovered that “[...] *personality factors were not as influential as previous literature would suggest*”.

Following this chain of thought, Ross et al., (2009: 578) postulate that motivational factors are more practical to examine SNSs user behavior with more extend and significance and eventually conclude: “*It is suggested that different motivations may be influential in the decision to use tools such as Facebook*” (see also Heser et al., 2015). One element of these motivational factors are motives which are a central aspect of our article.

### 3.1 Motives – Definitions and Distinctions

In contrast to the ‘Big Five personality traits’ which are situationally comprehensive, motives are situationally contextual: they have specific triggers (Köhler, 2009; Sokolowski and Schmalt, 2010).

Although motives are well researched, stable personality traits with a high degree of generalization which are also applicable to a wide spectrum of everyday situations (Köhler, 2009; Rozhkova, 2011; Schultheiss, 2008), little is known about their role in the use of SNSs (Heser et al., 2015) or SBNSs; this is a factor that is discussed again in point 4.

Motives can be defined as inner urges which (together with skills and values) nudge and control human behavior. Motives also influence selection of information to reach motive-specific goals (see Table 2) (Köhler, 2009; McClelland, Koestner and Weinberger, 1989; Spangler, House and Palrecha, 2004; Spangler, 1992).

To understand how motives work, it is not only recommended to define the term ‘motive’, but also separate it from a similar term: motivation. Though often used synonymously, motives are an aspect of motivation (Köhler, 2009; Lallez, 1980).

Motivation has two components (Köhler, 2009), as Lallez (1980: 58) postulates “[...] *All motivated behavior involves a motive and a drive*”. The first component is the motive, a stable personality trait, defining what drives a human being in terms of a goal. The second component consists of so called ‘motive-specific triggers’ which trigger the motive (Köhler, 2009; McClelland et al., 1989).

Motives can be divided into independent classes: implicit (unconscious) and explicit (conscious) motives (Heser et al., 2015; Spangler et al., 2004; Winter et al., 1998). Implicit motives manifest in impulsive actions, triggered without a noticeable influence, while explicit motives are controlled, conscious actions, triggered by objective stimuli (Heser et al., 2015; Köhler, 2009).

#### 3.1.1 The ‘Big Three Motives’

The most frequently researched motives are the so called ‘Big Three motives’, the affiliation motive, the achievement motive and the power motive which can be triggered in almost all everyday situations and account for many aspects of behavior (Heser et al., 2015; McClelland, 1985; Spangler, 1992; Winter et al., 1998).

‘*The Affiliation Motive*’. Triggers concerning the

affiliation motive can be found in situations where a person interacts with strangers, loose contacts but also friends (Koestner and McClelland, 1992; Langens et al., 2005). A specific goal for the affiliation motive can be the establishment and upkeep of a positive, mutually beneficial and stable relationship (Heser et al., 2015; Koestner and McClelland, 1992). People with a distinct tendency towards the affiliation motive have a strong desire for warm, interpersonal relationships (McClelland et al., 1989). They feel comfortable in company, go to great lengths to maintain their networks, have more social contacts than others and try to avoid solitude and conflict, as well as competition (Koestner and McClelland, 1992; Köhler, 2009; Stumpf et al., 1985).

*'The Achievement Motive'*. Generally speaking, the achievement motive translates to "[...] *the incentive to do better [...]*" (McClelland and Koester, 1992: 146) than others.

Situations triggering the achievement motive when actions and their outcome can be labeled in terms of quality (e.g. success/failure) (Langens et al., 2005), or have competitive features. People motivated by achievement strive to master and prevail in challenging tasks (Schultheiss, 2008), or as McClelland et al., (1992: 154) put it "[...] *achievement goal is meant success in competition with some standard of excellence*" (McClelland et al., 1992: 154). They display a strong need for feedback and try to avoid failure (Schultheiss, 2008).

*'The Power Motive'*. According to Winter (1992a: 301), the power motive is best characterized as "[...] *the desire to have impact on other people, to affect their behavior or emotions*". Power-motivating situations are those offering the chance to control other people, be it through persuasion, impression-management, coercion or nurturance (Köhler, 2009; Langens et al., 2005; Winter, 1992a). People with an affinity for the power motive show a great craving for prestige (Winter, 1992b; Winter, 1991).

Prestige however is prone to a 'David vs. Goliath-effect' (Winter, 1992b). According to Winter (1992b: 317) prestige can "[...] *be scored if a lower-status person is trying to exert power against a higher-status person*".

### 3.1.2 Motive – Hope and Fear, or Why They Are Acted Out; and Why Not

As elaborated, motives are stable personality traits which aim to satisfy within the parameters of their given goal and trigger (Schultheiss, 2008). Motives

are subject to a person's individual variety which is defined by two components: genetic predisposition (Rozhkova, 2011; Winter, 1992b) and learning experience (Schultheiss, 2008; Winter, 1992b).

This leads to motives that can't or won't be acted out, even if they're dominantly present. If, for example, somebody with an affinity for the achievement motive failed regularly in a competitive context, they also failed to 'be successful', an inherent requirement to satisfy achievement motive-relevant goals. Failure in this case causes personal inconsistency and thus negative emotion. The negative experience combined with inner turmoil may lead the affected person to avoid similar situations or cause them to look for easier challenges.

Table 2: Motives - Triggers, Goals and Components (Langens et al., 2005; Stumpf et al., 1985; Sokolowski et al., 2000; Sokolowski and Schmalz, 2010; Winter 1992a; Winter, 1992b).

Affiliation Motive			
Motive-specific triggers	Goal	Hope component	Fear component
Social situations, interaction	Establishing positive, stable relationships/ avoiding rejection	Hope of bonding	Fear of rejection
Achievement Motive			
Motive-specific triggers	Goal	Hope component	Fear component
Competitive situations, with clearly defined success/ failure outcomes	Successful appraisal of own actions/ avoiding failure	Hope of success	Fear of failure
Power Motive			
Motive-specific triggers	Goal	Hope component	Fear component
Situations with the chance to exert power over others	Controlling and influencing others/ avoiding loss of control	Hope of control	Fear of losing control

As a result, we can assume that motives are divided into two components: hope and fear (see Table 2) (Schultheiss et al., 2008; Sokolowski et al., 2000). The hope component has a tendency to gauge the motivationally desired condition and prospect for opportunities accordingly (Köhler, 2009; Langens et

al., 2005). Fear, as a component, focuses on possible failure and favors avoidance, as stated above (Köhler, 2009; Langens et al., 2005; Schultheiss, 2008). These components can vary, depending on person and situation (Köhler, 2009; Langens et al., 2005). A person with a distinct affiliation motive could be very outgoing when it comes to interaction with close friends, but could at the same time be rather shy and insecure when it comes to interaction with strangers (Köhler, 2009).

#### **4 WHAT OUR RESEARCH IMPLIES - MOTIVES AND THEIR USE IN SBNSs**

The importance of motives in different aspects of life (e. g. personnel assessment, career success) has been researched and documented for decades (McClelland and Boyatzis, 1982; Sokolowski et al., 2000). But even though motives are accepted, stable and genetically distinct personality traits which, beyond dispute, influence our perception and the way we act (Koestner and McClelland, 1992; Schultheiss, 2008; Schultheiss et al., 1999; Spangler et al., 2004; Spangler, 1992; Winter, 1991), there is an empirical lack regarding the role of motives in SNSs (Heser et al., 2015). A surprising circumstance, as the influence of other personality traits (the 'Big Five') has been thoroughly researched (e. g. Correa et al., 2010; Gosling et al., 2011). Ross et al. also postulated in 2009 that motivational factors could very well explain the behavior of SNSs users (see also Heser et al., 2015).

Following this concept, Heser et al., (2015) succeeded in empirically assessing first approaches. They studied the behavior of 57 Facebook and StudiVZ users, as well as their explicit and implicit motivational tendencies. Heser et al., (2015) have been able to provide evidence that the explicit power motive as well as affiliation motive were connected to different kinds of user-behavior regarding SNSs.

The study showed a positive correlation between the explicit power motive and the number of network-friends as well as the amount of pictures uploaded. The explicit affiliation motive has proven to be a solid indicator in terms of daily use and time spent on the network (Heser et al., 2015). However, there was no consistent correlation in terms of influence of implicit motives (Heser et al., 2015).

Up to this point, the possible motive-influenced use of SBNSs, like Xing or LinkedIn, has not been taken into account.

However, we think there is potential for influence. The intention of use is different regarding SNSs and SBNSs (private or business-related), but functional groups are similar, for example 'identity management' (Richter and Koch, 2008) which was correlated to explicit power motive (uploading pictures) in the study of Heser et al., (2015).

Also, motives do, due to their genetic basis, have a high potential for generalization and can be applied to a vast spectrum of everyday situations (Köhler, 2009; Rozhkova, 2011; Schultheiss, 2008). As mentioned, it is important that these situations provide corresponding motive-specific triggers (see Table 2) (Köhler, 2009; Langens et al., 2005; Sokolowski and Schmalt, 2010).

We assume in this case, that SBNSs in fact do provide these situational triggers.

Thus it is possible that people using SBNSs contact strangers, communicate and build a network. These are triggers for the affiliation motive (Koestner and McClelland, 1992; Langens et al., 2005; McClelland et al., 1989).

It's also perfectly possible to compete with other people, which is a trigger for the achievement motive (Langens et al., 2005; McClelland et al., 1992). In our opinion, it is conceivable to apply even standards of quality by taking career parameters or the total number of contacts into account, thus creating abstract success and failure benchmarks.

Triggers for a power motive are also possible. Direct identity management (concealment of unemployment) or contact management and inherent building of trust can be used to coerce others, influence or manipulate them.

The 'strength-of-weak-ties-theory' also supports that a vast network of loose contacts can give users an edge in terms of information and thus also (even subconsciously) strengthens one's own position.

Since explicit motives are connected to controlled actions, triggered by objective stimuli (Heser et al., 2015; Köhler, 2009), we postulate that the external 'Big Three motives' (affiliation, achievement, power) have different effects on the clearly visible, easily measurable behavior (e.g. number of contacts, daily time spent using the network) of SBNSs users.

Accordingly, we assume that different motive tendencies cause different application of the various functional groups like 'identity management' (Richter and Koch, 2008).

Here, we will start applying our research and apart from the visible user behavior regarding SBNSs, we will also, with the help of the German Personality Research Form of Stumpf et al., (1985),

take external motives components (including the ‘Big Three’) into account. This way, we want to gain first impressions regarding a possible influence of motives on SBNSs user behavior.

Furthermore we – even if Hester et al., (2015) could not provide any significant effects – think implicit motives may very well influence SBNSs user behavior. However, this can only be assessed by complex analyses. Analyzing networking behavior (e.g. with focus on contact quality) may be a promising approach in this case.

Winter (1992b), for example, states that the urge for prestige (as a part of the power motive) is defined by a lower status person who wants to exert power over a person of higher status. It is possible, that people with a distinct power motive prefer to connect with people of a higher status than themselves.

Additionally, in our opinion, implicit motive-tendencies could be assessed by rating motive-related keywords in postings or feeds.

We plan to begin further assessment here, in order to shed more light on a possible implicit side of motive-related SBNSs user behavior.

In conclusion we want to emphasize how important it is to extend this research. SBNSs, as well as SNSs play an important part in an economic as well as in a social context.

To assess the mechanics which influence these networks and their use, it is paramount to apply classic mechanisms as well.

In tradition of the ‘uses-and-gratification-approach’ and the current state of research, we, just like Ross et al., (2009) and Heser et al., (2015), think that accepted personality traits like the ‘Big Three motives’ can help significantly to thoroughly, empirically and soundly assess SBNSs and SNSs user behavior.

## REFERENCES

- Amichai-Hamburger, Y. and Vinitzky, G. (2010) ‘Social network use and personality’ *Computers in Human Behavior*, vol. 26, no. 6, November, pp. 1289-1295.
- Boyd, D. and Ellison, N. B. (2007) ‘Social Network Sites: Definition, History, and Scholarship’, *Journal of Computer-Mediated Communication*, vol. 13, pp. 210–230.
- Brandtzæg, P. B and Heim, J. (2009) ‘Why people use social networking sites’, *Proceedings of the HCI International 2009. San Diego, CA, USA, 19-24 July* in Ozok, A. A. and Zaphiris, P. (Eds.) *Online Communities, LNCS*. Berlin, Heidelberg: Springer-Verlag, pp. 143–152.
- Correa, T, Hinsley, A. W. and De Zuniga, H. G. (2010) ‘Who interacts on the Web?: The intersection of users’ personality and social media use’, *Computers in Human Behavior*, vol. 26, no. 2, pp. 247-253.
- Di Gennaro, C. and Dutton, W. H. (2007) ‘Reconfiguring Friendships: Social relationships and the Internet’, *Information, Communication & Society*, vol. 10, no. 5, pp. 591-618.
- Enders, A., Hungenberg, H., Denker, H.-P. and Mauch, S. (2008) ‘The long tail of social networking: Revenue models of social networking sites’, *European Management Journal*, vol. 26, no. 3, June, pp. 199-211.
- Gosling, S. D., Augustine, A. A., Vazire, S., Holtzman, N. and Gaddis, S. (2011) ‘Manifestations of personality in online social networks: Self-reported Facebook-related behaviors and observable profile information’, *Cyberpsychology, Behavior and Social Networking*, vol. 14, no. 9, September, pp. 483-488.
- Granovetter, M. S. (1973) ‘The Strength of Weak Ties’, *American Journal of Sociology*, vol. 78, no. 6, May, pp. 1360-1380.
- Granovetter, M. S. (1983) ‘The Strength of Weak Ties: A Network Theory Revisited’, *Sociological Theory*, vol. 1, pp. 201-233.
- Heser, K., Banse, R. and Imhoff, R. (2015) ‘Original Communication. Affiliation or Power. What Motivates Behavior on Social Networking Sites?’, *Swiss Journal of Psychology*, vol. 74, no. 1, January, pp. 37–47.
- Janneck, M., Bayerl, P. S. and Dietel, J.-E. (2013) The Minimal Group Paradigm in Virtual Teams, in Holzinger, A., Ziefle, M., Hitz, M. and Debevc, M. (Eds.) *Human Factors in Computing and Informatics Lecture Notes in Computer Science*, Berlin, Heidelberg: Springer Verlag, pp. 457-476.
- John, O. P. and Srivastava, S. (1995) The Big Five Trait Taxonomy: History, Measurement, and Theoretical Perspectives, in Pervin, L.A. and John, O.P. (Eds.) *Handbook of Personality. Theory and Research*, 2<sup>nd</sup> edition, New York, London: The Guilford Press, pp. 102-138.
- Kalmus, V., Realo, A. and Sjibak, A. (2011) ‘Motives for Internet Use and their Relationships with Personality Traits and Socio-Demographic Factors’, *Trames. A Journal of the Humanities and Social Sciences*, vol. 15, no. 4, pp. 385-403.
- Katz, E., Gurevitch, M. and Haas, H. (1973) ‘On the Use of the Mass Media for Important Things’, *American Sociological Review*, vol. 38, no. 2, pp. 164-181.
- Köhler, A. (2009) ‘Zur Validität reaktionszeitbasierter Motivmessung im Kontext der Personalauswahl’, PhD Thesis, Helmut-Schmidt-Universität, Hamburg.
- Koestner, R. & McClelland, D. C. (1992) ‘The Affiliation Motive’, in Smith, C. P. (Ed.) *Motivation and Personality. Handbook of thematic content analysis*, New York, Victoria: Cambridge University Press, (pp. 205-210).
- Lalenz, R. (1980) ‘The elements of motivation: the psychologist's viewpoint’, *European Journal of Engineering Education*, vol. 5, no. 1, pp. 53-68.

- Langens, T. A., Schmalt, H.-D. and Sokolowski, K. (2005) 'Motivmessung: Grundlagen und Anwendungen', in Vollmeyer, R. and Brunstein, J. C. (Eds.) *Motivationspsychologie und ihre Anwendung*, Stuttgart: Kohlhammer, pp. 70-89.
- McClelland, D.C. (1985) 'How Motives, Skills, and Values Determine What People Do', *American Psychologist*, vol. 40, no. 7, July, pp. 812-825.
- McClelland, D.C., Atkinson, J.W., Clark, R.A. and Lowell, E.L. (1992) 'A scoring manual for the achievement motive', in Smith, C.P. (Ed.) *Motivation and Personality. Handbook of thematic content analysis*, New York, Victoria: Cambridge University Press, pp. 153-178.
- McClelland, D. C. and Boyatzis, R. (1982) 'Leadership motive pattern and long-term success in management', *Journal of Applied Psychology*, vol. 67, no. 6, pp. 737-743.
- McClelland, M. C. and Koestner, R. (1992) 'The achievement motive', in Smith, C.P. (Ed.) *Motivation and Personality. Handbook of thematic content analysis*, New York, Victoria: Cambridge University Press, pp. 143-152.
- McClelland, D. C., Koestner, R. and Weinberger, J. (1989) 'How Do Self-Attributed and Implicit Motives Differ?', *Psychological Review*, vol. 96, no. 4, pp. 690-702.
- Orr, E. S., Susic, M., Ross, C., Simmering, M. G., Arseneault, J.M. and Orr, R.R. (2009) 'The influence of shyness on the use of Facebook in an undergraduate sample', *CyberPsychology & Behavior*, vol. 12, no. 3, June, pp. 337-340.
- Richter, A. and Koch, M. (2008) 'Functions of Social Networking Services', *Proceedings of the 8th International Conference on the Design of Cooperative Systems*, Carry-le-rouet, France, pp. 87-98.
- Richter, D., Riemer, K. and vom Brocke, J. (2011) 'Internet Social Networking. Research State of the Art and Implications for Enterprise 2.0.', *Business & Information Systems Engineering*, vol. 3, no. 2, pp. 89-101.
- Ross, C., Orr, E. S., Susic, M., Arseneault, J. M., Simmering, M. G. and Orr, R. R. (2009) 'Personality and motivations associated with Facebook use', *Computers in Human Behavior*, vol. 25, no. 2, March, pp. 578-586.
- Rozhkova, M. (2011) 'Measurement of the implicit and explicit Achievement Motive: New Perspectives', PhD Thesis, Ludwig-Maximilians-Universität, Munich.
- Schaefer, C. (2008) 'Motivations and Usage Patterns on Social Network Sites', *Proceedings of the 16th European Conference on Information Systems (ECIS 2008)*, Galway, Ireland.
- Schultheiss, O. C. (2008) 'Implicit Motives', in John, O. P., Robins, R. W. and L. A. Pervin, L. A (Eds.) *Handbook of Personality. Theory and Research*, New York: The Guildfort Press, pp. 603-633.
- Schultheiss, O. C., Campbell, K. L. and McClelland, D. C. (1999) 'Implicit Power Motivation Moderates Men's Testosterone Responses to Imagined and Real Dominance Success', *Hormones and Behavior*, vol. 36, June, pp. 234-241.
- Skeels, M. and Grudin, J. (2009) 'When Social Networks Cross Boundaries: A Case Study of Workplace Use of Facebook and LinkedIn', *Proceedings of the ACM 2009 international Conference on Supporting Group Work*, Sanibel Island, USA.
- Sokolowski, K. and Schmalt, H.-D. (2010) 'MMG-C. Das Multi-Motiv-Gitter für Anschluss, Leistung und Macht in der Computerdarbietung, Mödling: Schuhfried.
- Sokolowski, K., Schmalt, H.-D., Langens, T. A. and Puca, R. M. (2000) 'Assessing Achievement, Affiliation, a Power Motives All at Once: The Multi-Motive Grid (MMG)', *Journal of Personality Assessment*, vol. 74, no.1, pp. 126-145.
- Spangler, W. D. (1992) 'Validity of Questionnaire and TAT Measures of Need for Achievement: Two Meta-Analyses', *Psychological Bulletin*, vol. 112, no. 1, July, pp. 140-154.
- Spangler, W. D., House, R. J., and Palrecha, R. (2004) 'Personality and leadership', in Schneider, B. and Smith, B. (Eds.) *Personality and organizations*, Mahwah, NJ: Erlbaum, pp. 251-290.
- Stumpf, H., Angleitner, A., Wieck, T. Jackson, D. N. and Beloch-Till, H. (1985) *Deutsche Personality Research Form (PRF)*, Göttingen: Hogrefe.
- Winter, D. G. (1991) 'A Motivational Model of Leadership: Predicting Long-Term Management Success from TAT Measures of Power Motivation and Responsibility', *Leadership Quarterly*, vol. 2, no. 2, pp. 67-80.
- Winter, D. G. (1992a) 'Power motivated revisited', in Smith, C. P. (Ed.) *Motivation and Personality. Handbook of thematic content analysis*, New York, Victoria: Cambridge University Press, pp. 301-310.
- Winter, D. G. (1992b) 'A revised scoring system for the power motive', in Smith, C.P. (Ed.) *Motivation and Personality. Handbook of thematic content analysis*, New York, Victoria: Cambridge University Press, pp. 311-418.
- Winter, D. G., John, O. P., Stewart, A. J., Klohnen, E. C. and Duncan, L. E. (1998) 'Traits and Motives: Toward an Integration of Two Traditions in Personality Research', *Psychological Review*, vol. 105, no. 2, April, pp. 230-250.