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## Editorial

We are pleased to welcome you to the 11th European Conference on Psychological Assessment (ECPA2011) of the European Association for Psychological Assessment (EAPA), to be held in Riga, Latvia and hosted by the University of Latvia, Department of Psychology, in partnership with the Union of Latvian Psychologists. The conference will be held August 31st to September 3rd and it promises to continue the previous traditions of EAPA conferences, offering a scientific programme of high quality, representing significant state-of-the-art issues in psychological assessment. The program will include topics of psychological assessment across the developmental life-span, including various aspects of cognitive, emotional, social, personality and psychopathological functioning. The formal and informal settings will provide opportunity to meet interesting colleagues and to establish important international contacts.

The venue of the 11th European Conference on Psychological Assessment will be the University of Latvia main administrative building, which is located precisely in the centre of Riga, near to the historical Old Riga, the National Opera and other notable sites. Riga is a charming city on the Baltic Sea coast, founded in 1201, a former member of the Hanseatic League, and internationally recognized for its extensive Jugendstil (Art Nouveau) architecture. The conference registration fee includes a Gala Dinner for all conference participants in one of the elegant historical buildings of Riga, associated with the early strivings for freedom at the turn of the last century. Riga provides many fine hotels for comfortable accommodation.

**Welcome! See you in Riga, 31 August – 3 September 2011!**

Detailed information: <http://www.ecpa11.lu.lv/>

**Sandra Sebre**

Co-president of the ECPA2011

**Malgozata Rascevska**

Co-president of the ECPA2011

## EMPIRICAL STUDIES

### **The Relationship between Self-Reported Transformational Leadership and Social Identification in the Military**

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The study investigates the relationship between self-reported transformational leadership and soldiers' social identification with their unit. The aim of the paper is to carry out the empirical test in order to find out whether self-reported leadership behavior differs among the levels of military hierarchy and how self-reported transformational leadership is related to social identification in the military. The participants were 203 members of the international military forces in a conflict area. The results show differences among military ranks in the reported leadership behavior. In addition, self-reported leadership behavior is related to social identification with military unit. Theoretical and methodological implications of these findings for transformational leadership and social identification research in the military are discussed.

**Keywords:** transformational leadership, military leadership, social identification.

## **Introduction**

### **Transformational leadership in military context**

Leadership implementation is a field of study garnering a special interest in military organizations. Requirements of military leadership are higher than elsewhere because in the battlefield conditions not only the leader is responsible for achieving the set of military targets, but the very survival of their subordinates may depend on the commander's leadership skills. *Military leadership* is defined as influencing people by providing purpose, direction, and motivation, while operating to accomplish the mission and improve the organization (Headquarters Department of the Army, 2007). Recent studies of military leadership are controversial, as the results have depended on the context of research in different countries and different samples (Schyns, Felfe & Blank, 2007). The war in Iraq and international operations in Afghanistan, Kosovo and Bosnia have shown that the context in which leadership takes place can significantly alter the contents of leadership behavior and its perception by subordinates and the leaders themselves. Wong, Bliese, and McGurk (2003) have pointed out the dynamic nature of the leadership construct in the military and stressed the necessity of clear definition of leadership

depending on various contexts. These authors indicate that studies of military leadership need to focus on multi-level leadership model, which identifies three leadership levels: system, organization, and direct or face to face leadership (Hunt, 1991). The highest level of military leadership is the realization of political power in the military field: security maintenance and military conflicts. The lowest level of military leadership involves day-to-day interactions and it is the decisive factor determining many people's life or death. The present study focuses on the lowest level of leadership. In particular, it examines self-reported leadership behavior in the field conditions of military action.

The studies of transformational leadership (Bass & Avolio, 1990, 1991, 1993; Avolio, Bass & Jung, 1996; Bass, 1996, 1997, 1998; Bass & Yammarino, 1991; Hater & Bass 1998) are a relatively new direction in military leadership research. Generally speaking, leadership can be characterized as either transactional or transformational. *Transactional leadership* is defined by setting up and defining agreements to achieve specific work objectives; it focuses on the actively setting standards. Conversely, the *transformational leaders* inspire the belief of followers so that they are potentially united in the pursuit of higher goals, the realization of which is tested by the achievement of a significant change (Avolio & Bass, 1990). Four components of transformational leadership have been described: charismatic leadership (or idealized influence), inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1998). In addition, *laissez-faire leadership* is characterized as a non-leadership style, which is synonymous with leadership failure in the military context.

Bass (1990) generally argued that the principles of transformational leadership apply at all levels of hierarchy, and that one may expect similar levels of variation in transformational leadership both: for higher- and lower-level leaders. However, some empirical studies (Kane & Tremble, 2000) have shown differences in transformational leadership effects at different levels of the army. Another group of authors (Antonakis, Avolio & Sivasubramaniam, 2003) indicate that, when measuring transformational leadership, it is necessary to control for the context in which leadership is taking place, as it can be influenced by the subordinates' expectations, national culture and individual differences, including the level of hierarchy of the leader.

Some previous research results indicate that transformational leadership is more inherent in senior officers than in junior officers (Kane & Tremble, 2000), whereas company and battalion commanders indicate more transformational leadership, platoon commanders more often demonstrate pronounced transactional leadership behavior focused on management by passive exceptions and contingent reward leadership. These results contradict Bass' assertion that transformational leadership should be observable at all hierarchy levels (Bass, 1990). However, other studies have found no differences among the levels of hierarchy. A meta-analysis by Lowe, Kroeck, and Sivasubramaniam (1996) concluded that transformational leadership is not more characteristic of higher-level leaders than lower-level leaders, and the relation between the transformational leadership and leader effectiveness is not moderated by the level of hierarchy. The results cited above suggest that in the military context the relation between transformational leadership behavior and the level of hierarchy may be stronger than in other, non-military contexts.

In addition, simply identifying the main effect of the transformational leadership differences among various levels of military hierarchy does little to explain the relation between the specific military context and the leadership behavior at various levels of the military system (system, organization and direct leadership levels, see Hunt, 1991), and the military sub-culture environment (Wong, Bliese, & McGurk, 2003). It is vital to understand how the leadership behavior varies at various levels of the strategic, operational and tactical command in peace-time situations and in the situations of military action. It means that the studies of transformational leadership in various contexts are vital both: for theory-building of military leadership and for the practical purposes of increasing the military leadership efficacy and training of military leaders. The present study is aimed at increasing the base of existing knowledge. The first aim of this study was to examine the differences among the levels of military hierarchy in self-reported transformational leadership behavior in field setting during a military campaign.

As the previous leadership studies in the military have found differences in transformational leadership among levels of hierarchy and because we expected that the context of real military action will make the hierarchical differences more salient, we proposed the following hypothesis:

**Hypothesis 1.** Higher-ranking military personnel will demonstrate higher self-reported transformational leadership behavior than lower-ranking military personnel.

### **Social identification**

Identification refers to a relatively enduring state that reflects an individual's readiness to define him – or herself as a member of a particular social group (Haslam, 2001). Van Knippenberg (2000) argued that identification is associated with motivation to achieve goals because it induces individuals to take the identification target's perspective and to experience the target's goals and interests as their own. Perceived identification helps individuals to maintain a consistent view of self that is distinct from others, while enhancing self-esteem.

According to Shamir and colleagues (Shamir, House, & Arthur, 1993) the leaders transform the behavior of their followers: they built personal and social identification among unit members according to the mission and the goals of the leader and organization. The leaders' confidence in their leadership abilities influences the performance of the subordinates, and is likely to raise their efficacy beliefs. In the military, soldiers' ability to identify with their unit is probably the most important component of good motivation for combat (Shamir, Brainin, Zakay, & Popper, 2000). These authors report empirical evidence linking transformational leadership to subordinates' identification with their unit.

The link between social identification and transformational leadership at an individual level is studied less. Hogg (2007) argues that prototypical leaders find their group central and important to their self-definition and therefore should show a stronger identification with the group. Higher identification means that leaders are more likely to behave in group-serving ways, have greater investment in the welfare of the group, follow and embody the group norms more closely and, generally, act in the ways to promote the interests of the group. Such behavior models confirm the leader's membership

credentials and the leader prototypically in the subordinates' perception, and increase the followers' trust. Thus high identification with the group helps the leader in creation of a shared reality among the group members (Hogg, 2007; c.f. Echterhoff, Higgins, & Levine, 2009). Creation and maintenance of such shared reality is essential factor for effective leadership and any visionary or transformational activity, and management of the group identity as well (Reicher & Hopkins, 2003).

In this study we the predicted link between the self-perceived transformational leadership behavior and group identification have been tested. We speculate that the high-risk conditions of combat will make the group membership salient and thus strengthen this link. In this aspect the following hypothesis has been proposed:

**Hypothesis 2.** There will be a positive correlation between the military personnel's self-reported transformational leadership behavior and their identification with a military unit.

### **Operationalization of leadership behavior**

Unlike many previous studies of leadership behavior both in military and non-military context that have used peer or subordinates' evaluations for leadership behavior measurement, the present research focuses on the self-reported leadership behavior. This aspect of the study was determined largely by practical considerations because the military procedures related to security requirements severely limited the possibilities of collecting peer-rating or subordinate-rating data. However, for the purposes of our study this is only a minor limitation. The previous research has shown a considerable overlap between the self-ratings and peer-ratings of leadership behavior and only small levels of self-enhancement in leader self-ratings in comparison with peer or subordinate ratings (Livi, Kenny, Albright, & Pierro, 2008; Paunonen, Lonnqvist, Verkasalo, Leikas, & Nissinen, 2006). In addition, the modest level of bias in self-ratings of leadership is comparable with biases that are observable in peer or subordinate ratings (Livi et al, 2008; Uleman, 1991). In summary, previous research demonstrates that self-ratings constitute a reasonably valid and reliable measure of leadership behavior. We do use the term "self-reported leadership behavior" to distinguish our approach from most studies where leadership is measured through peer ratings. However, this construct as theoretically and conceptually similar to the general construct of leadership behavior.

## **Method**

### ***Participants***

The study was carried out in the field conditions of the military conflict area. The sample consisted of 203 soldiers from International Security Assistance Force operational area in Afghanistan in 2008. The soldiers were selected from nine different nations: HRV – 21 %, DEU – 51 %, SWE – 9 %, FIN – 1 %, LVA – 6 %, HUN – 5 %, ITA – 1 %, USA – 5 %, and FRA – 1 %. Participants were asked to note their rank in three main military leadership levels: officers, non-commissioned officers and privates. 91 were officers (OF), 89 were non-commissioned officers (NCO) and 23 were privates (OR). One hundred and three soldiers had previous military mission experience. 190 soldiers were male and 13



were female. The age of participants was recorded in four intervals: 40 % of participants were 20 to 30 years old, 37 % were 31 to 40 years old, 19 % were 41 to 50 years old, and 4 % older than 51 years.

### *Measures*

*Multifactor Leadership Questionnaire.* (MLQ; Leader Form 5X Short; Bass & Avolio, 1995) is a measure of transformational leadership that is widely used in both: leadership development and research. Avolio, Bass, and Jung (1995) have reported the evidence of high reliability, inter-correlations, convergent and discriminate validity of the MLQ-5X dimensions. This study utilized the self-report questionnaire which consists of 45 items assessing the frequency of transformational leadership behaviors on a 4-point scale ranging from 0 (not at all) to 4 (frequently, if not always). The internal reliability of the Multifactor Leadership Questionnaire Transformational leadership subscale was adequate: Cronbach's  $\alpha = .87$  and the same is true for Laissez-faire leadership subscale,  $\alpha = .71$ . The reliability of the Transactional leadership subscale was lower,  $\alpha = .48$ . Therefore, the results related to the transactional leadership construct should be treated with caution.

*Measures of social identification.* For measuring the military personnel's social identification with their unit two questionnaires were used. The first one was Mael and Ashforth's (1992) six-item measure that has shown high inter-item reliability in the previous research, but it might be criticized for focusing on the affective aspects of identification at the expense of cognitive aspects. The measure was adapted to the military context by redefining the target of identification in such a way that the items were focused on the military unit (branch) to which the respondent belonged. Sample items were: "When someone criticizes my unit (branch), it feels like a personal insult", "I am very interested in what others think about my unit (branch)". The responses were measured on a 5-point Likert-type scale, with higher scores corresponding to higher identification.

The second measure was based on Doosje, Ellemers and Spears (1995) four-item measure of social identification. Sample items were: "I see myself as a member of the unit", "I am pleased to be a member of the unit". The responses were measured on a 7-point Likert-type scale, with higher scores corresponding to higher identification. The internal reliability of both measures in our study was quite high: for Mael and Ashforth's (1992) measure,  $\alpha = .76$ ; for Doosje et al.'s (1995) measure,  $\alpha = .84$ .

### *Procedure*

Data were collected by the first author who was deployed in the military action zone with a unit of National Armed Forces of Latvia. First, the author obtained the permission of the region commander and the national senior representatives of military units and agreed on the amount of demographic data that was permissible to collect due to different national military regulations and security requirements. Then, the author approached participants individually at their base locations by debriefing them about the study and asking for their participation. Participants had a free choice to participate or refuse to be involved. A time period for completing the survey was agreed. Every participant was asked to complete a self-report questionnaire about transformational leadership behavior and identification with their unit. The questionnaires were collected back

during the author's next meeting with the respondents, usually after one to two weeks. Due to technical difficulties regarding the coordination and execution of fieldwork in highly mobile units whose missions changed unpredictably, it was impossible to follow a strictly random sampling procedure. However, a maximum attempt was made to reach a representative sample of combat units and staff branches. Because of the security requirements, it was possible to collect only limited demographic data.

## Results

To assess whether military personnel at different hierarchy levels: officers, non-commissioned officers and privates differ in their self-reported leadership behavior, a multivariate analysis of variance were conducted with level of hierarchy and respondents' nationality as an independent variables, and the subscales of self-reported leadership behavior as dependent variables. Means and standard deviations for reported leadership factors and social identification in different hierarchy levels are depicted in Table 1. MANOVA results are summarized in Table 2.

*Table 1. Means and Standard Deviations for Multifactor Leadership and Social Identification Questionnaires at Different Levels of the Army (Military Service Ranks)*

Variable	Military service ranks					
	OF (n=91)		NCO (n=89)		OR (n=23)	
	M	SD	M	SD	M	SD
Idealized influence (attributed)	2.66	.60	2.71	.59	2.85	.64
Idealized influence (behavior)	2.84	.55	2.62	.61	2.71	.42
Idealized influence	2.75	.51	2.67	.53	2.78	.42
Inspirational motivation	2.81	.60	2.75	.56	2.88	.45
Intellectual stimulation	2.90	.47	2.92	.59	2.82	.61
Individualized consideration	2.97	.56	2.78	.68	2.65	.54
Contingent reward	2.87	.60	2.71	.52	2.39	.76
Management-by-exception (active)	2.14	.76	2.16	.79	2.53	.97
Management-by-exception (passive)	1.11	.64	1.15	.59	1.32	.73
Laissez-faire leadership	.75	.61	.95	.73	.84	.94
Social identification Mael and Ashforth's (1992) scale	3.60	.71	3.56	.60	3.91	.58
Social Identification Doosje et al.'s (1995) scale	5.78	.94	5.80	1.01	5.89	1.35

*Note.* Military service ranks: OF – officer, NCO – non-commissioned officer, OR – private (soldier)

As one can see from Table 2, there was a significant main effect of Rank for three subscales of the Multifactor Leadership Questionnaire: Idealized influence (behavior), Individual consideration, and Contingent reward. LSD Post Hoc tests showed that significant differences emerged between officers and non-commissioned officers on the one hand, and privates on the other hand for the self-reported indicators of Individual consideration and Contingent reward. On both subscales the scores for the privates group were significantly lower than the scores of the two other groups. Furthermore, the results indicated

a significant difference between officers and non-commissioned officers in self-reported Idealized influence (behavior). The officers evaluated themselves higher than the non-commissioned officers. One should note that the latter result is more reliable than the former result due to the small number of privates in the sample.

*Table 2. Effects of Military Service Ranks and Nationality on Self-reported Leadership Behavior*

<i>Source</i>	<i>Dependent variable</i>	<i>df</i>	<i>F</i>	<i>η<sup>2</sup></i>	<i>p</i>
Rank	Idealized influence (attributed)	2	.91	.01	.404
	Idealized influence (behavior)	2	3.34	.04	.037
	Idealized influence	2	.78	.01	.458
	Inspirational motivation	2	.58	.01	.560
	Intellectual stimulation	2	.34	.00	.711
	Individualized consideration	2	3.21	.03	.042
	Contingent reward	2	5.84	.06	.003
	Management-by-exception (active)	2	2.26	.02	.107
	Management-by-exception (passive)	2	.38	.01	.386
	Laissez-faire leadership	2	.94	.02	.157
Nationality	Idealized influence (attributed)	8	1.45	.06	.177
	Idealized influence (behavior)	8	1.60	.06	.126
	Idealized influence	8	1.88	.07	.065
	Inspirational motivation	8	1.16	.04	.326
	Intellectual stimulation	8	3.19	.12	.002
	Individualized consideration	8	2.52	.10	.013
	Contingent reward	8	2.08	.08	.039
	Management-by-exception (active)	8	3.07	.12	.003
	Management-by-exception (passive)	8	5.19	.18	.000
	Laissez-faire leadership	8	3.24	.12	.002
Rank x Nationality	Idealized influence (attributed)	10	.27	.02	.986
	Idealized influence (behavior)	10	.22	.01	.995
	Idealized influence	10	.19	.01	.997
	Inspirational motivation	10	.56	.03	.846
	Intellectual stimulation	10	1.01	.05	.436
	Individualized consideration	10	1.09	.06	.367
	Contingent reward	10	.77	.04	.657
	Management-by-exception (active)	10	2.93	.05	.056
	Management-by-exception (passive)	10	1.64	.08	.098
	Laissez-faire leadership	10	.95	.05	.482
Error		199			

*Note.* Military rank effect on Self-reported leadership behavior is significant, Wilks'  $\Lambda = .78$ ,  $F(18, 372) = 2.86$ ,  $p < .001$ , multivariate  $\eta^2 = .12$   
 Nationality effect - Wilks'  $\Lambda = .40$ ,  $F(9, 186) = 2.40$ ,  $p < .001$ ,  $\eta^2 = .10$   
 Military rank \*nationality effect - Wilks'  $\Lambda = .60$ ,  $F(18, 372) = 1.02$ ,  $p = .05$ ,  $\eta^2 = .06$

There was also a Nationality main effect and Rank by Nationality interaction observable for several subscales, indicating that there were differences among the respondents from different nations in their self-reported leadership behavior. However, in this paper we do not examine and discuss any nationality effects in more details because of two

reasons. First, as one can see from the sample description, the nationality subgroups were very unequal in size and some of them were very small, which makes any results related to nationality differences unreliable. Second and more important, a publication of any nationality-specific information about military leadership was precluded by the military security considerations. The rationale for these restrictions is following: because the zones of responsibility in Afghanistan are divided among the nations of the International Security Assistance Force, any information about psychological properties or habits of those nations' representatives can theoretically be used by the enemy forces in planning their operations. The authors would be happy to share the data in this study with any researchers who might be interested in looking at cross-national differences in military leadership in a larger sample.

To test Hypothesis 2 that self-reported transformational leadership behavior is positively correlated with social identification, we calculated correlations between the scores on Mael and Ashforth's (1992) six-item measure and Doosje et al.'s (1995) four-item measure on one side, and self-reported leadership behavior on the other. The correlations are depicted in Table 3.

**Table 3. Correlation Coefficients between Social Identification and Self-reported Leadership Behavior**

<i>Leadership behavior</i>	<i>Social identification Mael and Ashforth's (1992) scale</i>	<i>Social Identification Doosje et al.'s (1995) scale</i>
1. Idealized influence (attributed)	.10	.26**
2. Idealized influence (behavior)	.14*	.20**
3. Idealized influence	.13	.27**
4. Inspirational motivation	.04	.21**
5. Intellectual stimulation	.13	.30**
6. Individualized consideration	.02	.12
7. Contingent reward	.04	.16*
8. Management-by-exception (active)	.09	.11
9. Management-by-exception (passive)	-.19**	-.20**
10. Laissez-faire leadership	-.17*	-.28**

\*  $p < .05$ ; \*\*  $p < .001$

For both measures of social identification there was a significant negative correlation between social identification on the one hand, and Management by exception (passive) and Laissez-faire leadership on the other. In addition, there was a significant positive correlation between the transformational leadership subscales (except for Individualized consideration subscale) and social identification as measured by Doosje et al (1995) scale.

## Discussion

The authors hypothesized that higher ranking officers would report more transformational leadership behavior than lower ranking officers and soldiers would. The hypothesis was partially confirmed. Significant differences were found for transformational

leadership individualized consideration and idealized influence (behavior) subscales, as well as transactional leadership contingent reward behavior between levels of the International Security Assistance Forces. These findings are in line with the previous research that has found differences in transformational leadership between different organizational levels (Kane & Tremble, 2000). At the same time, one should note that the differences were quite modest in size and were found largely between the self-reported leadership behavior of privates (who might have limited leadership experience) and officers (for whom leadership is a part of everyday work). In addition, there were a relatively small number of privates in the sample, thus limiting the reliability of the findings. Simultaneously for the idealized influence (behavior) factor, which is more related to leader charisma, the differences were found between the both officer groups.

In general, these results do not contradict Bass (1996), who generally argued that the principles of transformational leadership might be applied to all levels of hierarchy. Lack of differences between both officer groups in the reported leadership behavior are also in line with the so-called “domino effect” of transformational leadership (Bass et al., 1987) – transformational leadership can be passed down the organizational hierarchy with lower-level leaders being influenced by the transformational behavior of the higher-level leaders.

One important novel aspect of the present study is that the self-reported leadership behavior was measured in the field conditions of real military operations, whereas many of the previously published papers have used samples from military bases in home countries or military academies. The previous research has shown that combat experience serves as an important threshold for many officers moving the development of leadership skills to a qualitatively new level, and this threshold is especially important for the self-perceived leadership skills and potential (Larsson, et al., 2006). At least, in regard to the potential differences in transformational leadership among hierarchy levels, the obtained results show that the self-reported leadership behavior in field conditions is similar to the leadership behavior observed in the peaceful contexts.

Our results support the notion that the differences of transformational leadership among different levels of hierarchy are not essential in the military. In cases where such differences are found, they are likely to stem from the specific context in which the leadership is realized (c.f. Wong, Bliese, & McGurk, 2003), such as the specific leadership experience of the respondents. The Individualized consideration aspect of transformational leadership requires actual day-to-day contact and long-term interaction with the subordinates, which the respondents in the group of privates did not have. The other three components of transformational leadership, however, can be practiced on a situational, ad-hoc basis towards one’s peers (for example, if the conditions on the battle-field require a private to take over the command of a unit). The same argument can be used for the Contingent reward component of transactional leadership. Our data suggests that differences between higher and lower levels of hierarchy are more likely to appear in those components of leadership which require day-to-day supervision and familiarity with the management routines. On the other hand, for those components which rely more on the charisma of the leader, the differences are less pronounced and are more likely to appear at the higher levels of hierarchy.

The other aim of the present study was to expand current research on the underlying mechanisms of military personnel's social identification with units. The authors specifically examined the relation between soldiers' self-reported transformational, transactional and laissez – faire leadership and social identification. The results show that virtually all self-reported leadership behavior components are significantly related to soldiers' social identification. Both measures of social identification yielded different, though not contradictory, results. The four-point social identification scale, used previously by Doosje et al, was a more reliable measure of identification with unit in the military context and yielded more significant results. The results confirmed the hypothesis that transformational leadership is positively related to social identification not only for subordinates, but for the leaders themselves as well. Self-reported laissez-faire leadership negatively correlated with soldiers' identification with their unit.

The findings support the proposition of a two-way relationship between transformational leadership behavior and social identification. Not only does leader's transformational behavior increase the social identification of the followers, but social identification is also related to the self-reported transformational leadership behavior at the individual level. The former relationship between the leaders' transformational leadership behavior and the subordinates' identification with their unit has been well established in the previous research (c.f. Kark & Shamir, 2002; Shamir et al., 1993, 2000). The latter relationship at the individual level, although predictable from theory and often presumed in practice, to our knowledge had not been tested empirically before. One may presume that transformational leadership is one of the ways how social identification is passed down the military hierarchy. If this presumption is true, our results would extend the findings by Shamir et al. (2000) who has found a "cascading effect of leadership" by which the leader's influence on more distant subordinates is partially mediated by his or her influence on more immediate subordinates. Alternatively, one should consider a possibility that both social identification and transformational leadership are related to some third, unmeasured variable, such as organizational culture. Shamir and colleagues (2000) suggest a causal link where leadership influences organizational culture, and culture in its turn affects identification. An alternative explanation could be that the culture of the military organizations favors both: high social identification and transformational leadership behavior at various levels of the hierarchy. In other words, in line with our results, organizational culture may be either a mediator between transformational leadership and social identification as Shamir and colleagues have suggested, or it can be the cause of the both: transformational leadership behavior and social identification. The additional research is needed to clarify the relations between these variables.

The social identity theory of leadership (Haslam, 2001; Hogg, 2007) suggests yet another causal link between transformational leadership and social identification. According to this perspective leaders' social identification can be considered a cause of transformational leadership behavior, which in its turn is aimed at increasing trust among the group members promoting group-serving behavior and creating a shared reality that is instrumental at achieving the group goals. Our results support also these theoretical assumptions.

The future research should focus on testing the causal relationship between social identification and transformational leadership at the individual level. In addition, the role of the contextual variables, such as organizational culture, should be examined in more details.

Some limitations of this study should be mentioned. First, due to conducting research in a military operations area in Afghanistan, self-report data was used for measuring leadership behavior instead of peer or subordinate ratings, which might have resulted in self-serving bias in the responses. We have addressed this limitation above and defended the reliability of the self-report measures. However, it would be very useful to replicate our findings in a similar field context by using the method of peer/subordinate ratings. A second potential limitation is related to the use of original methods in English. Because the sample consisted of representatives from nine different nations, one may assume that the respondents differed in their knowledge of English, which might have had some effect on the data reliability in this study.

The present study demonstrates the importance of studying leadership behavior in various military contexts by using diverse samples. It illustrates the incremental nature of the existing knowledge-base of military leadership behavior. In line with the theoretical framework suggested by Wong et al., 2003, leadership studies in specific contexts are likely to result in systematic deviations from the broad and general theoretical predictions derived from the leadership theories. Such studies are essential to understanding the application of leadership theories in specific contexts and in improving of the leadership efficiency and training of leadership skills in the military.

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## Job Search Intentions of the Unemployed in Latvia: The Role of Emotions, Motives and Prospects

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The study examined the role of emotions, job search motives, and job-finding prospects in job search intentions under conditions of high unemployment in Latvia. A between-subject design was applied with predicted emotions (Study 1 and 2), and with actual, positive and negative, emotions (Study 3) as independent variables and job search intentions as the dependent variable. Job search motives and job-finding prospects were surveyed. The participants were attendees of the State Employment Agency (Study 1, N = 94 and Study 3, N = 67), or unemployed recruited via social websites (Study 2, N = 90).

Predicted emotions did not predict job search intensity as expected, whereas both positive and negative actual emotions were related to job search intensity depending on job search settings. The perceived social pressure was the strongest predicative motive. Induced positive emotions predicted time and the job-finding prospects predicted both clarity and time allocated for job search.

**Keywords:** unemployed, job search, affect, emotion, motives, prospects.

### Introduction

Scholarly interest in the job search behaviour has increased in recent years (Brown, Cober, Kane, Levy & Shalhoop, 2006). Research has demonstrated that unemployment has a detrimental effect on the psychological well-being of the individuals involved (Creed & Macintyre, 2001). To design interventions that benefit job seekers, it is important to identify the key antecedents, mechanisms, and outcomes associated with the job search process (Brown et al., 2006).

In the recent economical recession unemployment levels had been growing considerably, with the Baltic States been amongst the worst hit by the global financial crisis (Eurostat, 2009; Nodarbinātības valsts aģentūra [NVA], 2010; Smith, 2010). However, a great body of job search and unemployment research has been conducted at the times and in countries of lower unemployment levels (e.g. Van Hooft, Born, Taris, Van der Flier & Blonk, 2004; Wanberg, Kanfer & Banas, 2000). In Latvia the psychological aspects of unemployment has not received much scholarly attention, with some exceptions as the study of the values of the unemployed (Austers, 1996) and currently Plaude's research on intelligence, coping with stress and psychological defence of the unemployed (Plaude, 2010). Social groups like re-entrants or senior unemployed are underrepresented in job search research (Kanfer, Wanberg & Kantrowitz, 2001). Research comparing job search behaviour for both employed and unemployed people (van Hooft et al., 2004; Kanfer, et al, 2001) has provided evidence that relations among variables in different job search

contexts and sample types may differ significantly. Therefore, it is important to investigate the role of known predictors, such as motives and demographic variables, of job search intentions under high unemployment conditions in Latvia.

Fleig-Palmer, Luthans and Mandernach (2009) encouraged researchers to explore positive variables that might assist in reemployment efforts. Isen's and colleagues work on emotions (see Isen, 2008, for review) and research initiated with Fredrickson's "broaden and build" theory (1998, 2001) has provided a convincing evidence of the benefits of positive affect in cognitive processes and behaviour. Affective factors are now attracting increased scholarly attention (Leus, 2010; Weber & Johnson, 2009); and they are acknowledged as influences upon behaviour, although the mechanism of influence is still being debated (Baumeister, Vohs, DeWall & Zhang, 2007). Growing evidence supports the significant impact of expected emotions on intentions and behaviour (Baumgartner, Pieters & Bagozzi, 2008; Wilson & Gilbert, 2003), but there is a relative shortage of affect research related to vocational behaviour (Rottinghaus, Jenkins & Jantzer, 2009).

## Job Search Intentions and Behaviour

Kanfer and colleagues (2001) have conceptualized job search behaviour as part of a self-regulatory process directed toward obtaining an employment goal, based on the complex interplay of employment motives and goals, personal, emotional, and social tendencies, and unique personal and situational conditions. According to Ajzen's (1991) theory of planned behaviour (TPB) human behaviour is best predicted by people's intentions to perform (or not to perform) the behaviour in question, therefore the most proximal determinant of job-search behaviour is the individual's intention to engage in job seeking that is in its turn predicted by people's attitudes towards job seeking and by the perceived social pressure to engage in job seeking. This model has been satisfactorily tested in several studies, although it has been suggested that in the context of job seeking the TPB variables may not be sufficient predictors of intentions (review by Van Hooft & De Jong, 2009).

Common measures of job search are frequency and effort of job search activity, activities engaged and quality of these activities. The intensity and effort invested into job search has been found positively related to finding employment across a variety of contexts measured by different outcome measures (e.g. employment status and number of offers), and negatively related to duration of unemployment (Kanfer et al., 2001). However, some researchers reported contradicting findings. Van Hoyer, van Hooft and Lievens (2009) for instance have suggested that the effectiveness of job search behaviours might be determined more by quality than by intensity. Kanfer et al. (2001) noted that intensity and effort measures of job search had showed an opposite pattern of relationships to several of the antecedent variables and suggested that intensity and effort measures of job search might capture only partially overlapping aspects of job search activity.

## Job Search Predictors

The extent to which individuals engage and persist in self-directed job search behaviour is influenced by their *motives* for obtaining employment (Kanfer et al., 2001). *Financial hardship* is job seekers' subjective sense that their current income does not meet their

personal and family needs adequately; it can strongly affect psychological well-being, thereby might promote more effortful job search (Van Hooft & Crossley, 2008). *Employment commitment* characterizes the importance of employment beyond its financial return (Saks & Côté, 2006). Studies (e.g., Wanberg, Kanfer & Rotundo, 1999) and meta-analytic findings (Kanfer et al., 2001) confirmed that higher levels of financial need and employment commitment were positively associated with job search behaviour. The TPB variables *attitude toward job seeking* and *subjective norm* (perceived social pressure to engage in job seeking) were significantly and positively related to job search intentions (Van Hooft et al., 2006; Van Hooft & De Jong, 2009). Furthermore, job seekers' personal attitude was more strongly related to intention among men than among women, and perceptions of social pressure were more strongly related to intention among women than among men (Van Hooft et al., 2006). A cultural group assumed to be collectivistic compared to a group assumed to be individualistic was motivated more by subjective norms, and less by personal job search attitudes (see Van Hooft & De Jong, 2009).

The mentioned research reviews provided evidence that financial hardship, employment commitment, job search attitude and subjective norm are established predictors of job search intentions. However, as job search context, sample type and cultural influence have shown a considerable effect on relations among the variables, the current study included these predictors.

Saka, Gati & Kelly (2009) suggested that perceiving a lack of control over the outcomes might decrease personal motivation. However, the empirical findings regarding whether *job seekers' perceived prospects of getting a job* predict job search intentions have been mixed (Van Hooft et al., 2004), which can partly be traced to differences in conceptualizations and samples. Kanfer et al. (2001) noted that although job search studies generally had included basic *demographic* characteristics, they had often been used only to describe the sample, and not as predictors. Meta-analysis showed that age was negatively related to job search behaviour; men and individuals with higher levels of education engaged in more job search activity than women and individuals with less education did, however, the relationships were rather weak.

There are no studies found examining *experienced or predicted affect* as predictor of job search, and a few studies have examined the role of affect in vocational behaviour but general findings in affect research have encouraged the consideration of the relations between personal-emotional and career factors (Rottinghaus et al., 2009). According to Baumeister et al. (2007), emotions exist in part to influence behaviour and this influence would have to be mainly benign and adaptive. Behaviour may also be chosen to pursue (or avoid) predicted emotional outcomes.

*Positive emotions* predict or contribute to many different life outcomes (Lyubomirsky, King & Diener, 2005). It can partly be accounted to their effect on cognitive processes. Fredrickson and Branigan (2005) found that experiencing distinct positive emotions broadened the scope of attention and induced more thought-action urges than experiencing no particular emotion. Positive affect promotes creative thought (Amabile, Barsade, Mueller & Staw, 2005) and preference for a wider range of options considered (Kahn & Isen, 1993). Induced positive affect increased expectancy motivation and led

people to try harder if there was a reason to try or it seemed that their effort would make a difference (Erez & Isen, 2002). Isen and Reeve (2005) demonstrated that positive affect fostered intrinsic motivation both when people were free to choose among activities and when there was work that needed to be done. A powerful way for cultivating positive emotions during a crisis is finding positive meaning (Fredrickson, Tugade, Waugh & Larkin, 2003). Positive emotions are instrumental also in career success (review by Boehm & Lyubomirsky, 2008). For instance, students who had reported high positive affect were more likely to be invited to follow-up interviews than those with low positive affect (Burger & Caldwell, 2000), and positive affect was positively correlated with job search clarity or the extent to which job seekers have clear job search objectives (Cote, Saks & Zikic, 2006, see Rottinghaus et al., 2009). However, Isen (2008) noted that overall the positive effect is related to a mild positive affect. Based on the reviewed findings it can be hypothesized that the unemployed experiencing positive emotions will consider wider range of job search options, have more clear intentions and intend to spend more effort on job search.

The results obtained by Kanfer et al. (2001) suggest that job search is more strongly related to positive than to negative affectivity. However, unemployment is inevitably associated with the experience of *negative emotions*. It has been admitted that negative emotions have been adaptive in instances that threaten survival in some way (Fredrickson, 1998), might they also exert a positive role in job search? This question has not been tested directly, but, for instance, Van Hooft and Crossley (2008) suggested that stress might be related to more active job search, at least, in the short term and especially among job seekers with an external locus of control and high perceived financial need. However, there are no known findings comparing the impact of actual positive and negative emotions on proximal job search behaviour.

Baumeister et al. (2007) suggests that *predicted emotion* may be more important in guiding behaviour than actual, felt emotion, particularly with regard to its longer duration and it provides salient feedback about one's actions. When considering how to act, anticipating emotional outcomes can help the person make a better decision. A person's decision of which goals to pursue is influenced by the predicted valence and the intensity and duration of their emotional reactions (Wilson & Gilbert, 2003). As noted by Vasquez and Buehler (2007), the idea that imagining a desired future might increase one's motivation and effort to attain it has guided decades of social psychology research. A review of empirical studies by Baumgartner et al. (2008) has shown that predicted emotions increase intentions, behavioural expectations, or desires to act. Greitemeyer (2009) found that people who were convinced that attaining a goal would make them happy and that failing to achieve a goal would make them unhappy were more eager to pursue and more likely to attain the goal. However, there is still an ambiguity regarding the influence of predicted emotions' valence on intentions. For instance, Bagozzi, Baumgartner and Pieters (1998) presented evidence that both positive and negative predicted emotions evoked by imagined success or failure experiences in pursuit of goals increased intentions and effort.

## Overview of the studies and the hypotheses

The purpose of the studies was to increase understanding of both actual and expected emotions' role in the job-search process, and to test the impact of recognized job search antecedents under high unemployment conditions in Latvia.

Study 1 tested the following hypotheses:

1. Both positive and negative emotional predictions (related to prospective job) by unemployed job seekers enhance intended job search intensity when compared to control group.
2. Positive experienced emotions positively predict intended job search intensity.

Study 1 also explored which emotional predictions, positive or negative, are more influential and whether negative experienced emotions predict the intensity of intended job search. The predictive strength of prominent job search motives and demographic factors was assessed.

Study 2 examined the robustness of the findings of Study 1 across different settings, testing the same hypotheses as Study 1.

In Study 3, separate dimensions of job search intention (intensity, effort, and clarity) were examined as dependent variables. The positive and negative emotions (correlated with job search intentions in Studies 1 and 2), and perceived job-finding prospects were assessed as predictors of job search intentions, testing the following hypotheses:

3. Positive emotions (interested, enthusiastic, determined, and attentive) positively predict job search intentions.
4. Negative emotions (distressed, nervous, jittery, and afraid) do not predict job search intentions.
5. Perceived job finding prospects positively predict job search intentions.

### Study 1

#### Method

##### *Participants*

Participants were unemployed individuals, recruited at State Employment Agency (NVA) Regional division in Riga (the capital of Latvia) in November and December 2009 when they attended an informative seminar about unemployment legislation issues, job search possibilities and NVA supporting activities. At the time of data collection, unemployment rate in Latvia was 16 percent and 12.1 percent in Riga (NVA, 2009).

Of the 94 participants in the final sample (attendees who were not eligible for study because of study being conducted in national language only and 23 returned empty questionnaires excluded) 58.2 percent were women. Their mean age was 33.51 years ( $SD = 11.20$ ). The majority of the participants had completed secondary education (65.4%), whereas 24.8% held a university degree (at least bachelor's), and 9.7 % had primary education. The average unemployment length was 6.24 months ( $SD = 9.58$ ).

##### *Design*

The study employed a between-subject design with predicted emotions (positive, negative and control condition) as an independent factor, while job search intentions served

as a dependent variable. Actual emotions, major job search motives and substantial demographic variables were investigated.

### *Materials and procedure*

The researcher wearing an identification badge approached participants upon their arrival at NVA, asked them to complete a survey about their emotional experiences as unemployed and their job search intentions, instructed those who volunteered about the study procedure and assigned the participants to positive, negative or control condition randomly distributing surveys containing a respective manipulation task. The participants completed the survey on the spot.

The participants reported their actual emotions prior to manipulation task using the Positive and Negative Affect Schedule (PANAS, Watson, Clark & Tellegen, 1988, translated into Latvian by Upmane, 2008; updated by Stokenberga, 2009), rating 10 positive and 10 negative emotion items on a 5-point scale (from *not at all* to *a great extent*). Positive and negative affect scores were calculated. Alphas were .84 for both positive and negative scale).

Predictions of emotions were generated by using an imaginary task (as e.g. Tamir & Robinson, 2007). The participants received the instruction to imagine in details either the most attractive job (positive condition) or the most unattractive job (negative condition) and to describe it in five to seven minutes. The participants in control condition did not receive this instruction, as it would be too complicated to describe a job that is neutral on all properties. After the manipulation, the participants reported their predicted emotions for the imagined job by a typical measure (Wilson & Gilbert, 2003), "Overall, how happy would you be if you got the described job?" rating from zero (*most unhappy*) to 100 (*there is no greater happiness than this*).

The participants described their intended job search intensity by writing down all job search activities they intended to do in the following two weeks. The open response format was preferred to adapting existing scales (e.g. Van Hoyer et al., 2009) in order to collect information about job search activities relevant to the Latvian contexts and actual socioeconomic situation.

The Work Involvement Scale (WIS; Warr, Cook & Wall, 1979), adapted for the unemployed by Nordenmark (1999), measures employment commitment. It consists of five statements about the psychosocial importance of employment, rated on a 5-point scale from one (*completely disagree*) to five (*completely agree*). The alpha of the scale was .75. Job search attitude and subjective norm were measured by indicating the perceived usefulness of job seeking in the next three months by a participant and by his or her most significant persons, respectively. Both items were adopted from Van Hooft et al, 2006, and were rated on a 5-point scale from one (*almost none*) to five (*a great deal*). Perceived financial hardship was measured by rating the difficulty of living on their current household income, on a 5-point scale ranging from one (*live in prosperity*) to five (*it is impossible to live on*). The important demographic variables generally recognized in job search and unemployment research, age, gender, education level, and unemployment length, were assessed at the end of the survey.

## Results

Table 1 presents the means, standard deviations, and correlations among the Study 1 variables.

*Table 1. Study 1 Variables' Means, Standard Deviations and Intercorrelations (Pearson's r)*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Positive affect	32.05	7.37	--									
2. Negative affect	24.58	7.86	-.32**	--								
3. Predicted happiness	57.87	35.17	.08	.22	--							
4. Job search intentions a	2.87	1.50	.26*	.05	-.02	--						
5. Employment commitment	20.60	3.52	.17	.09	.01	.20	--					
6. Job search attitude	3.54	1.19	.23*	-.24*	.08	.11	.15	--				
7. Subjective norm	3.98	1.14	.11	.09	.11	.25*	.21*	.46**	--			
8. Financial hardship	3.70	0.86	-.01	.08	-.02	.16	.10	-.10	.34**	--		
9. Age	33.51	11.20	-.16	.22	.07	-.30*	-.04	-.12	.06	-.01	--	
10. Education level	2.80	1.04	-.02	-.10	-.25	-.02	-.08	-.03	-.11	-.34**	.10	--
11. Unemployment length	6.24	9.58	.14	.02	.15	-.15	-.07	-.12	-.15	.09	.01	-.25*

<sup>a</sup> The intended job search activities ranged from 0 to 7

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

### *Predicted and actual emotions*

As expected, participants in the positive predicted emotion condition reported a greater predicted happiness ( $M = 79.43$ ,  $SD = 18.18$ ) compared with those in the negative condition ( $M = 20.15$ ,  $SD = 24.10$ ),  $t(53) = 10.36$ ,  $p < .001$ . A one-way ANOVA with condition (positive, negative, and control) as an independent variable on the intended job search intensity measure was conducted to test whether unemployed job seeker's positive and negative emotional predictions enhance intended job search intensity when compared to the control group (Hypothesis 1). The effect of condition was not significant,  $F(2, 70) = 0.49$ ,  $p > .05$ ,  $\eta^2 = .01$ . The group imagining most unattractive job and predicting unhappiness intended nonsignificantly more job search activities ( $M = 3.14$ ,  $SD = 1.46$ ) when compared to the control group ( $M = 2.78$ ,  $SD = 1.66$ ); and the group imagining most attractive job and predicting happiness reported almost the same levels of job search intention as the control group ( $M = 2.74$ ,  $SD = 1.46$ ). The simple linear regression analysis showed that the level of unemployed job seeker's predicted happiness, related to prospective job, did not predict intended job search intensity ( $F = 0.03$ ,  $B = -0.002$ ,  $SE B = 0.006$ ,  $\beta = -.36$ ,  $p > .05$ ).



Simple regression analysis was applied to test Hypothesis 2. As expected, actual positive emotions positively predicted intended job search intensity explaining 6.9% of variance ( $F = 4.47$ ,  $B = 0.05$ ,  $SE B = 0.03$ ,  $\beta = .26$ ,  $p < .05$ ). Negative actual emotions (assessed by separate simple regression analysis) did not predict intended job search intensity ( $F = 0.15$ ,  $B = 0.01$ ,  $SE B = 0.03$ ,  $\beta = .05$ ,  $p > .05$ ).

Correlations between specific actual emotions and intended job search intensity were evaluated to find emotions related to job search activities. Significant correlations were found with several positive emotions, namely, *interested* ( $r = .29$ ), *enthusiastic* ( $r = .24$ ), *determined* ( $r = .29$ ), and *attentive* ( $r = .30$ ),  $p < .05$ , and none of negative emotions.

### *Job search motives*

To examine the predictive strength of job search motives, a stepwise regression analysis (backward method) was applied, regressing job search intensity on the predictors financial hardship, employment commitment, job search attitude and subjective norm<sup>1</sup>. Only subjective norm predicted job search intentions explaining 6.2% of variance ( $F = 4.52$ ,  $B = 0.35$ ,  $SE B = 0.16$ ,  $\beta = .25$ ,  $p < .05$ ).

### *Demographic variables*

A stepwise regression analysis (backward method) was applied, regressing dependent variable intended job search intensity on the following predictors: age, gender, education level and unemployment length. Age negatively predicted job search intentions, explaining 10.1% of variance ( $F = 7.79$ ,  $B = -0.05$ ,  $SE B = 0.02$ ,  $\beta = -.33$ ,  $p < .01$ ). Other demographic variables did not predict job search intentions.

The participants reported relatively high ratings of employment commitment and positive emotions; that suggests a possible influence of social desirability. In addition, the visit to NVA might have some unique influence on motivation and emotions that is not persistent in everyday conditions of the unemployed. Therefore, the study was replicated under different settings.

## Study 2

Study 2 tested the same hypotheses and research questions as Study 1. The experiment was run on Internet. Experimenting and data collection via Web in comparison with frontal data collection reduces social desirability and brings experimental conditions closer to reality as participants fill in the survey at a familiar place and a convenient time (Reips, 2002; Stanton, 1998).

### Method

#### *Participants*

Participants were 90 unemployed individuals, recruited via popular Latvian social internet portals in January 2010, when the unemployment rate in Latvia was 16.6% (NVA, 2010). Of the 94 participants in the final sample, 92% were women. Their mean age was 31.92 years ( $SD = 6.71$ ). The majority of the participants (70.7%) had a university degree (at

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<sup>1</sup> For the sake of brevity, only the main conclusions from regression analyses were reported in the paper. Full results of the regression analyses can be obtained from the author.

least bachelor degree) whereas 28% had completed secondary schooling, and only 1.3%, primary education. The average period of unemployment was 12.73 months ( $SD = 16.6$ ).

### Materials and design

The same materials and design were used as in Study 1.

### Procedure

Random distribution of the participants, experimental manipulation, and data gathering were done via online web server. The recruiting message contained information of selection criteria, purpose of the study, contact information of the researcher, and confidentiality of the participants. The participants filled the online form in time and place of their choice.

## Results

Table 2 presents the means, standard deviations, and correlations among the Study 1 variables. Affect variables were related to subjective norm and financial hardship (positive affect – negatively, negative affect – positively). As in Study 1, subjective norm related to all other motivational variables.

Table 2. Study 2 Variables' Means, Standard Deviations and Intercorrelations (Pearson's  $r$ )

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Positive affect	25.91	7.55	--									
2. Negative affect	26.50	10.29	-.38**	--								
3. Predicted happiness	48.75	36.76	-.15	.06	--							
4. Job search intentions <sup>a</sup>	1.84	1.40	-.13	.33**	.24	--						
5. Employment commitment	17.24	4.66	-.23	.27*	.02	.24	--					
6. Job search attitude	2.80	1.29	.11	-.08	.11	.12	.28*	--				
7. Subjective norm	2.89	1.55	-.23*	.37**	-.04	.32*	.41**	.43**	--			
8. Financial hardship	2.91	1.12	-.46**	.53**	.03	.28*	.25*	.08	.46**	--		
9. Age	31.92	6.71	-.04	.07	.04	-.12	-0.05	-.33**	-.11	-.10	--	
10. Education level	3.75	0.95	.19	-.18	-.10	-.08	-0.11	-.03	-.04	-.38**	.05	--
11. Unemployment length	12.73	16.60	.15	.17	-.01	.01	-.39**	-.19	-.02	-.02	.04	.01

<sup>a</sup> The intended job search activities ranged from 0 to 8

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

### *Predicted and actual emotions*

As expected, participants in the positive predicted emotion condition reported significantly more positive predicted happiness ( $M = 80$ ,  $SD = 14.42$ ) compared with those in the negative condition ( $M = 11.82$ ,  $SD = 11.8$ ),  $t = 17.71$ ,  $p < .001$ . A one-way ANOVA with condition (positive, negative, and control) as an independent variable on the intended job search intensity measure was conducted to test whether unemployed job seeker's positive and negative emotional predictions enhanced the intensity of the intended job search when compared to the control group (Hypothesis 1). The effect of the condition was not significant,  $F(2, 61) = 1.69$ ,  $p > .05$ ,  $\eta^2 = .05$ . The group imagining the most attractive job and predicting happiness intended only nonsignificantly more job search activities ( $M = 2.26$ ,  $SD = 1.82$ ) when compared to the control group ( $M = 1.60$ ,  $SD = 1.23$ ). The group imagining the most unattractive job and predicting unhappiness reported almost the same levels of job search intention as the control group ( $M = 1.58$ ,  $SD = 0.84$ ). In addition, simple linear regression analysis showed that the level of unemployed job seeker's predicted happiness, related to prospective job, did not predict intended job search intensity ( $F = 1.69$ ,  $B = 0.009$ ,  $SE B = 0.006$ ,  $\beta = .24$ ,  $p > .05$ ).

The results of simple linear regression analysis did not comply with Hypothesis 2 nor with the findings for Study 1. Actual positive emotions did not predict the intensity of the intended job search ( $F = 1.03$ ,  $B = -0.02$ ,  $SE B = 0.02$ ,  $\beta = -.13$ ,  $p > .05$ ). Unexpectedly, actual negative emotions positively predicted the intensity of the intended job search explaining 10.6% of variance ( $F = 7.13$ ,  $B = 0.05$ ,  $SE B = 0.02$ ,  $\beta = .33$ ,  $p = .01$ ). Positive correlations regarding job search intentions were found with several negative emotions, namely, *distressed* ( $r = .40$ ), *nervous* ( $r = .35$ ), *jittery* ( $r = .37$ ), and *afraid* ( $r = .35$ ), and negative correlation with positive emotion *excited* ( $r = -.33$ ),  $p < .01$ .

### *Job search motives*

A stepwise regression analysis (backward method) was applied, assessing the effect of dependent variable of intended job search intensity on the following four predictors: financial hardship, employment commitment, job search attitude and subjective norm. As in Study 1, only subjective norm significantly predicted job search intentions explaining 10.1% of variance ( $F = 6.74$ ,  $B = 0.35$ ,  $SE B = 0.16$ ,  $\beta = .25$ ,  $p < .05$ ). When each of the motive variables was assessed by simple linear regression, financial need also predicted job search intentions, explaining 8% of variance ( $F = 5.06$ ,  $B = 0.36$ ,  $SE B = 0.16$ ,  $\beta = .28$ ,  $p < .05$ ).

### *Demographic variables*

A stepwise regression analysis (backward method) was applied, assessing dependent variable intended job search intensity on the demographic variables as predictors (age, gender, unemployment length and education level). None of the demographic variables predicted job search intentions.

### *The differences between study 1 and Study 2 variables*

To compare the results of Study 1 and Study 2, the differences between study variables were assessed. Participants in Study 2 intended fewer job search activities ( $M = 1.84$ ,  $SD = 1.40$ ) compared to Study 1 ( $M = 2.87$ ,  $SD = 1.50$ ),  $t(131) = 4.08$ ,  $p < .001$ . Higher

levels of positive affect were reported in Study 1,  $t(171) = 5.4, p < .001$ , with differences in all emotions except *excited*. Negative affect did not differ between studies,  $t(171) = -1.37, p > .05$ , but participants in Study 2 reported higher levels in emotion *scared*. No differences were found in expected emotions,  $t(101) = -1.29, p > .05$ . Participants in Study 1 reported higher motivation levels across all measured dimensions - job search attitude,  $t(165) = 3.86$ , subjective norm,  $t(165) = 5.21$ , employment commitment,  $t(167) = 5.18$ , and financial hardship  $t(164) = 5.33, p < .001$ . Study 2 sample had more female participants,  $\chi^2 = 24.05, p < .001$ , they were more educated,  $t(166) = 6.14, p < .01$ , and had been unemployed for longer time,  $t(161) = 3.11, p < .05$ , but the samples did not differ in mean age,  $t(164) = -1.1, p > .05$ .

Considering the contradicting findings concerning relationship of experienced affect and job search intentions, as well as differences between Study 1 and Study 2 demographic variables, the data of both studies were merged to assess the general impact of demographic variables and additional variable was added to assess the impact of study setting (whether it was carried out in a salient job search context, Study 1, or in everyday context, Study 2). A stepwise regression analysis (backward method) was applied; assessing dependent variable intended job search intensity on the predictors age, gender, education level, unemployment length, study setting, and both positive and negative affect. Results showed that both positive and negative affect, and study setting positively predicted job search intentions and age negatively predicted job search intentions (see Table 3).

**Table 3. Summary of Regression Analysis for Variables Predicting Intended Job Search Activities in the Study 1 and Study 2**

Variable <sup>a</sup>	B	SE B	$\beta$
Positive affect	0.04	0.02	.20*
Negative affect	0.06	0.02	.31***
Study setting	0.92	0.28	.29***
Age	-0.04	0.02	-.23**

Note.  $R^2 = .24, F = 9.01, p < .001$

<sup>a</sup> variables removed in Step 1: gender, education level, unemployment length

\*  $p = .05$ ; \*\*  $p < .01$ ; \*\*\*  $p = .001$

### Study 3

Study 3 tested the influence of specific positive and negative emotions on job search intentions, as well as the relationship of perceived job-finding prospects to job search intentions, applying extensive measures of job search intentions (intensity, effort, and clarity).

#### Method

##### Participants

Participants were unemployed individuals, recruited at NVA (as in Study 1) in March and April 2010. At the time of data collection, unemployment rate in Latvia was 17.3%

and 12.9% in Riga (NVA, 2010). Of the 67 participants in the final sample (attendees who were not eligible for study because of study being conducted in national language only and 16 returned empty questionnaires excluded), 68.7% were women. The mean age was 34.85 years ( $SD = 10.96$ ). The majority of the participants had either a university degree (at least bachelor degree, 46.2%) or had completed secondary school (46.2%), whereas 7.5 % had primary schooling. The average length of unemployment was 4.98 months ( $SD = 5.76$ ).

### *Design*

The study applied a between-subject design with positive or negative emotions as independent factor, and job search intentions (measured as quantity, time, and clarity of job search activities) as target dependent variable. Perceived job-finding prospects and demographic variables were surveyed.

### *Materials and procedure*

The recruitment and instruction of participants was conducted in the same manner as in Study 1. The researcher assigned the participants either to negative or positive emotion condition by randomly distributing surveys containing the respective manipulation task. The participants received the instruction to recall a recent event (as in Tamir & Robinson, 2007), that had made them feel at least some of the positive (*interested, determined, attentive and enthusiastic*) or negative (*distressed, nervous, jittery and afraid*) emotions, and to spend five minutes writing about it. The emotions from previous studies that correlated positively with job search activities in Studies 1 and 2 were chosen for this study. Several leading questions were asked to ensure focusing on the event and on the emotions. The manipulation of emotions was reinforced and measured with respective PANAS items; the participants indicated how they felt thinking about the situation they described (on 5-point scale ranging from *very slightly or not at all* to *extremely*).

The participants described their job search intentions on five measures. A list of 21 activity items was created from the reported activities in Studies 1 and 2. The participants marked the activities they intended for (a) the next day and (b) the next two weeks; two *intensity* ratings were computed as counts of the marked job search activities. The participants marked those intended job search activities that were clear for them as a *clarity* measure. Job search *effort* was measured in open format as the total number of hours allocated to job search, both on the next day and in two weeks.

The participants rated their perceived job-finding prospects with one item, "In your opinion, what are your chances of finding and acquiring a job in the following three months?" on a 5-point scale from one (*none*) to five (*great*) and they provided demographic data at the end of the survey.

## **Results**

### *Emotion manipulation*

Five participants were excluded from analysis because they were not able to recall the appropriate emotional event, leaving 29 participants in positive emotion group and 33 in negative emotion group. Alphas were .80 for positive affect scale and .61 for negative affect scale. All emotions varied from minimum to maximum values that allowed

assessing the impact of an emotion on the dependent variables. The means were 3.38 to 3.62 for positive emotions, 2.12 to 2.67 for negative emotions, and participants' recalled positive emotional experiences were more intense than the negative ones,  $t(60) = 3.83$ ,  $p < .001$ .

### *Emotions as predictors of job search intentions*

Separate single linear regression analyses were applied to assess the impact of positive and negative affect (as sum of the respective emotion scores) on five dimensions of job search intentions (Hypotheses 3 and 4). First, positive affect was entered as the predictor and each of job search intention variables was entered as a dependent variable. The results of regression analyses only partly supported Hypothesis 3: The impact of positive affect was significant in one dimension of job search intentions - time intended for job search the next day, accounting for 20.6% of variance ( $F = 5.70$ ,  $B = 0.16$ ,  $SE B = 0.07$ ,  $\beta = .41$ ,  $p < .05$ ). To assess the impact of separate positive emotions on this dimension, all of the positive emotions, - interested, determined, attentive and enthusiastic, - were entered as predictors in a stepwise regression analysis (backward method), and the time intended for job search on the next day was assessed as the dependent variable. Only one emotion (*interested*) was significant in the model accounting for 19.6% of variance ( $F = 5.37$ ,  $B = 0.23$ ,  $SE B = 0.10$ ,  $\beta = .45$ ,  $p < .05$ ). Positive affect did not account for other aspects of job search intentions (count of intended activities, clarity of intended activities and intended time for job search the next two weeks). Negative affect was also tested as the predictor and each of job search intention variables as dependent variable. Negative affect did not predict job search intentions as was expected in Hypothesis 4, based on Study 1 findings.

### *Job-finding prospects*

Job-finding prospects were entered as the independent variable and each of the job search intention variables, as dependent variables in separate single regression analyses. Hypothesis 5 was partially supported: Although job-finding prospects did not predict intended activities, they did predict both clarity and time intended for job search, as shown in Table 4.

**Table 4. Summary of Regression Analyses for Variables Predicted by Job-finding Prospects**

<i>Dependent variable<sup>a</sup></i>	<i>R<sup>2</sup></i>	<i>B</i>	<i>SE B</i>	<i>β</i>
Clarity of planned activities	.14*	0.91	0.39	.38*
Time the next day	.24***	1.21	0.31	.50***
Time the next two weeks	.08*	6.74	3.22	.29*

<sup>a</sup> Only significant relationships were included in the table

\*  $p < .05$ , \*\*\*  $p < .001$

In summary, neither positive nor negative emotional predictions (related to prospective job) by unemployed job seekers enhance intended job search intensity when compared to control group, so Hypothesis 1 was not supported. Hypothesis 2 was partly supported as positive experienced emotions positively predicted intended job search intensity in salient job searching conditions (Study 1), but not in everyday conditions (Study 2).

Hypothesis 3 was also partly supported as the selected positive emotions positively predict just one aspect of job search intentions (time intended for job search the next day), but did not predict the intended intensity and clarity. As expected in Hypothesis 4, selected negative emotions did not predict job search intentions in salient job searching conditions. Hypothesis 5 was partially supported: job-finding prospects did not predict intended activities, they did predict both clarity and time intended for job search.

## Discussion

The present study contributes to the research by exploring both experienced and predicted emotions as predictors of job search intentions as well as investigating established predictors' relationships to job search intentions under different cultural and socioeconomic conditions.

Based on previous research on predicting emotions it was hypothesized that unemployed job seeker's emotional predictions would enhance the intensity of intended job search. The expected effect, however, was not found in Studies 1 or 2 - neither positive nor negative predicted emotions increased the intensity of the intended job search. Although Baumeister et al. (2007) suggested that predicted emotions might be more important in guiding behaviour than actual emotions, in the present study, regarding behavioural intentions, only actual emotions had predictive power. However, the generality of the above finding should be further investigated by varying and extending manipulation tasks for expected emotions and regarding actual behaviour.

It was hypothesized that positive experienced emotions would positively predict intended job search intensity. Consistent with research on the impact of positive emotions, the unemployed reporting higher levels of positive affect did indeed intend more job search activities in Study 1; furthermore in Study 3 the participants after induced positive affect intended to spend more time on job search the next day whereas negative affect was not related to job search intentions in either study. Positive affect, experienced as selected positive emotions in Study 3, explained greater variance than general positive affect in Study 1 and emotion *interested* explained nearly all of the variance, suggesting that some specific emotions are more significant for job search intentions, than general positive affect.

In contrary, the pattern was reversed in Study 2: The participants reporting higher levels of negative affect intended more job search activities whereas positive affect was not related to job search intentions. The analysis of merged data suggests the importance of both positive and negative actual emotions depending on job search setting. The results of negative actual emotions predicting intended job search intensity in Study 2 might be explained in line with the notion that negative emotions are useful when survival is threatened (Fredrickson, 1998). Unlike Studies 1 and 3, the participants in Study 2 were in their everyday settings when responding to the survey, therefore the negative consequences of the unemployment might have been more salient for them, as negative affect highly correlated with financial hardship and subjective norm. However, the relationship between emotions and job search intentions may not be linear, and emotions may be motivating action only up to some point as suggested by Isen (2008)

who attributed the benefits of positive emotions principally to a mild positive affect. The anchors and boundaries of mild and intense affect still remain to be defined.

In summary, the study adds to unemployed job search literature the evidence that positive actual emotions predict job search intentions in a salient job search context, but negative actual emotions predict job search intentions in everyday conditions. Not all emotions, however, are equally important, as positive emotions *enthusiastic, determined, attentive and, especially, interested*, and negative emotions *distressed, nervous, jittery, and afraid* are more related to job search intentions.

The results of Study 3 are in line with previous suggestions (Kanfer et al., 2001) that the measure of job search intentions might influence the obtained data and the subsequent relationship among variables. The discrepancies between the results of Studies 1 and 3 might also be explained by differences between job search intensity measures (open vs. restricted). The differences between the relationships of the two time measures of both intensity and effort of job search are to be interpreted with caution, as they might also be attributed to prediction biases (see Wilson and Gilbert, 2003).

The study confirms the influential role of subjective norm (as perceived influence of unemployed individual's relevant person) in explaining job search intensity. The results were consistent across two demographically different samples of job seekers in two settings suggesting that this relationship is quite robust in the Latvian unemployed population.

Job-finding prospects, a construct previously neglected in job search literature, did not predict the intended activities, but they did predict clarity of planned activities and time intended for job search. Unemployed individuals who perceived that their chances of finding and acquiring a job in the following three months were better, reported more clarity regarding intended job search activities and intended to spend more effort on these activities both in short term and in longer time. The results suggest that job-finding prospects are salient and very important in high unemployment conditions; however, the relationships between job-finding prospects and job search intentions might be reciprocal.

### ***Practical Implications***

The results of the study may be helpful for career counsellors and employment officers trying to assist job seekers in job search. In line with Rottinghaus and colleagues (2009), practitioners are encouraged to consider personal and emotional dimensions in job search assistance.

The findings regarding relationship of positive emotions and job finding prospects to job search intentions suggest that augmenting positive emotions, particularly interest and meaning making would be beneficial. Positive information about employment situation as well as positive feedback are to be communicated when applicable, to increase the perceived job finding prospects and decrease the perception that it is not worth investing in the job search process. To assist job seekers in finding employment counselling should attempt to incorporate support from referent persons of the unemployed, as their perceived support to engage in job search is an important motive of job search intentions.



The results regarding the negative impact of age on intended job search activities are consistent with general findings in job search research (Kanfer et al., 2001). Taking into account the considerable proportion of the unemployed in more senior age groups, one might suggest that they need additional psychological and vocational assistance.

### *Limitations of the Study and Implications for Further Studies*

As participation was voluntary, self-selection of participants possibly biased the obtained data. The data set contained occasionally missing values that limited the actual number of valid cases. As most of the reviewed studies in job search literature, the study relies on self-report measures. Including data from multiple or different sources (e.g., systematic observations by employment counsellors) and measuring actual job search behaviour would be beneficial. Assessing job search behaviour and its outcomes longitudinally was intended in Study 1, however too few participants gave their consent to report their subsequent job search behaviour and their job search outcomes. The short time period assessed on intentions does not pretend to be sufficient to represent the complete job search pattern. Researchers should apply additional resources to motivate the unemployed to spend their time and effort, especially in a more extensive study (e.g., monetary reward).

The correlational nature of part of the study data did not allow the determination of causation. Future studies should attempt to manipulate job-finding prospects experimentally as well as apply complex analyses methods as SEM-analyses. In addition, the impact of negative emotions needs further investigation, as a higher base rate of negative emotions than reported in Study 3 is desirable for research purposes.

The generalizability of the results to Latvian population is limited because the samples differed from the population of unemployed individuals in Latvia (NVA, 2010). The most significant differences are that only Latvian speaking participants were included, because of the language used in the study, whereas almost half of the unemployed in Latvia are of other ethnicities, and participants from rural areas where unemployment levels are especially high were not represented.

In further analysis and application of the present results, it should be kept in mind that at the time of data collection, the unemployment rate in Latvia was high. Many industries and organizations had a hiring freeze that made finding a new job difficult, and the perceived likelihood of reemployment success was low.

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# Attributions for Poverty, Attitudes Toward the Poor and Identification with the Poor Among Social Workers and Poor People

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The aim of this study is to examine the relationship between identification with the poor, attributions for poverty and attitudes toward the poor, and to examine these associations separately for poor people ( $n = 102$ ) and social workers ( $n = 100$ ). In the study, the attributions for poverty factors (individualistic, structural, family/fatalistic) were evaluated as mediators between identification with the poor and attitudes toward the poor. The results show that attributions for poverty factors do not mediate the relationships between identification with the poor and attitudes toward the poor. It was found that higher identification with the poor predicts stronger structural attributions and family/fatalistic attributions, which is consistent with group-serving bias, whereas more weakly rated individualistic attributions predict more positive attitudes toward the poor, which confirms the results of previous studies. The study's results show that, for both poor people and social workers, stronger individualistic attributions predict more negative attitudes toward the poor, whereas, for poor people, higher identification with the poor predicts stronger structural attribution. In addition, we found that social workers and poor people explain poverty in accordance with an in-group/out-group perspective. Social workers expressed mainly negative attitudes toward the poor, in accordance with Social Identity Theory, whereas poor people explained poverty contrary to Social Identity Theory.

**Keywords:** attributions for poverty, attitudes toward the poor, identification with the poor.

## Introduction

There are many studies on attributions for poverty but only a few on attitudes toward the poor. Previous studies on attributions for poverty and attitudes toward the poor were based on assessment of objective characteristic within social groups, without consideration of whether an individual identifies himself/ herself with a specific social category, which may in turn significantly affect formation of attributions for poverty and attitudes toward the poor.

There are studies assessing social workers' attribution for poverty (Bullock, 1999, 2004), but very few studies assessing social workers' attitudes toward the poor (Rehner, Ishee, Salloum, & Velasques, 1997; Bullock, 2004). There are also studies assessing attributions for poverty of poor people (Shek, 2004), but poor people's attitudes toward other poor people remain unknown. The results of the aforementioned studies show

that social workers' and poor people's attributions for poverty indicators are inconsistent with an in-group/out-group perspective.

It is known that while a group of people may meet the criteria for a certain social group, they may not identify themselves with this group, and a person may identify himself/herself with a group to which, according to objective indicators, he/she does not belong. It is essential to assess social workers' and poor people's identification with the poor in relation to attributions for poverty and identification with the poor in relation to attitudes toward the poor.

### **Attributions for poverty**

Attributions for poverty are individuals' perceptions of the causes of poverty (Feagin, 1972a). Feagin (1972a) initiated research on the attributions for poverty, and based on his approach a large number of further studies on the attribution for poverty have been conducted in various countries: Australia (Feather, 1974); China (Shek, 2004); Russia (Muzdibayev, 2001); the United Kingdom (Furnham, 1982) and the United States (Klugel & Smith, 1986).

The previous studies of attributions for poverty have identified three core causal explanations: individualistic, structural and fatalistic (Feagin, 1972a, 1972b, 1975; Furnham, 1982; Hunt, 1996). Bullock (2004) defines these causal explanations as follows: "Individualistic attributions emphasize personal deficiencies that place the burden of responsibility for poverty on the poor. Structural explanations focus on macro level economic and social conditions. Fatalistic attributions emphasize bad luck and poor health" (p.572). She has expanded the understanding of the attributions for poverty by incorporating modern interpretations into the attribution scale, which has revealed a four-factor solution: individualistic, family/ fatalistic and two structural factors (economic/structural, and prejudice/structural). The economic/structural factor focuses on the role of the economic factors that create poverty, whereas the prejudice/ structural factor focuses on prejudice and discrimination against the poor.

Previous studies show that there is a relationship between the attributions for poverty and demographic variables: age (Feagin, 1972a; Feather, 1974), gender, religion (Feagin, 1972a; Feather, 1974, Furnham, 1982), nationality (Feather, 1974), ethnicity (Hunt, 1996) and income level (Feagin, 1972a; Feather, 1974). Attributions for poverty also have correlations with political orientation (Zucker & Weiner, 1993), belief in the Protestant work ethic (Furnham, 1984), beliefs in a just world (Cozzarelli et al., 2001) and attitudes toward the poor (Cozzarelli et al., 2001; Zucker & Weiner, 1993).

There are studies evaluating attributions for poverty among members of various income level groups. Previous studies reveal that high and middle income groups incline towards the individualistic explanation of poverty (Feagin, 1975; Klugel & Smith, 1986). In the United States, representatives from low- income group explain poverty by structural attributions (Bullock, 1999; Feagin, 1975; Klugel & Smith, 1986). Poor people in Russia explain poverty not only by structural but also by fatalistic causes (Muzdibayev, 2001). The individualistic attribution is significant among respondents in China (Shek, 2004). These studies have demonstrated that representatives from low-income groups in different countries explain poverty differently.

In a study based on Hofstede's cultural dimensions in Latvia, Huettinger (2008) concluded that Latvia may be characterised as an individualistic culture. Individualistic cultures tend to apply internal attributions while collectivistic cultures tend to apply external attributions (Nisbett, 2003). However, while Russia and China may both be characterized as collectivistic cultures, people from these countries explain poverty differently. This indicates that culture is not always the key explanation for poverty. It should be noted that in the previous studies membership in an income group was determined in accordance with the objective characteristics of the social group without examining respondents' identification with the group.

Analyzing poverty in the intergroup context and comparing middle class and welfare recipients' attributions for poverty, Bullock (1999) found that the welfare recipients endorsed structural explanations for poverty while the middle class participants expressed support for individualistic attributions. Comparing attributions for poverty by social workers and welfare recipients, it was found that both groups explain poverty by economic/structural attributions (Bullock, 2004). In this study Bullock (2004) did not analyze why welfare recipients and social workers explain poverty similarly.

Bullock's research show that middle class respondents tend to have a group-serving bias where the in-group members attribute their failure to external causes, while the out-group members explain the in-group failure due to internal causes. The social workers do not show the group-serving bias. Bullock did not analyse why middle class and social workers as out-group members explain poverty differently. We assume that out-group members explain poverty depending on how close or weak their relationships are with the welfare recipients. If the relationships are close, out-group members may not show group-serving bias, whereas if the relationships are weak out-group members may show group-serving bias.

Since the results of the study are inconsistent within the low-income group and the social workers' sample, relying exclusively upon the objective characteristics of the groups is insufficient for analysis of attribution for poverty. The authors believe that as yet little attention has been paid to the evaluation of the relationship between identification with the poor and attribution for poverty among poor people and social workers.

### **Attitudes toward the poor**

In addition to investigation of attributions for poverty, studies have been carried out regarding attitudes toward poverty and the poor. Researchers have assessed attitudes toward the poor differently by emphasizing one of the three components of attitudes: affective and behavioral (Zucker & Weiner, 1993), affective and cognitive (Cozzarelli et al., 2001, 2002) and behavioral (Hine & Montiel, 1999).

Prior research has shown that attitudes toward the poor tend to be negative in comparison with the middle-income group (Cozzarelli et al., 2001). Rehner et al. (1997) have concluded that a number of factors including length of service, training and experience of social workers in working with the poor are correlated with positive attitudes toward the poor. Older social workers and those with more practical work experience particularly aim to create more favorable attitudes toward the poor. The attitudes of different social groups toward the poor have been analyzed in several studies, but no research has been performed assessing poor people's attitudes toward the poor.

## **Attributions for poverty and attitudes toward the poor**

There are several studies regarding attributions for poverty that are focused on people's explanations on why a person is poor (Feagin, 1972a; Feather, 1974; Smith & Stone, 1989), but there are few studies regarding the relationship between attributions for poverty and attitudes toward the poor (Cozzarelli et al., 2001; Zucker & Weiner, 1993).

Zucker and Weiner (1993) related attribution for poverty to specific affective reactions (pity, anger) and specific behavioral intentions (personal help, welfare). The authors reported that the individualistic causes of poverty correlate positively with anger but are negatively associated with pity, help and welfare. The societal or structural causes of poverty correlated positively with pity, help and welfare but did not correlate with anger. The fatalistic attributions correlated positively with help and welfare but did not correlate with pity and anger.

Cozzarelli et al. (2001) investigated the relationships between attributions for poverty on the one hand, and cognitive and affective components of attitudes toward the poor on the other. Authors showed that the affective component holds feelings about the poor, while the cognitive component holds negative and positive stereotypes of the poor. The authors concluded that more positive feelings towards the poor and positive stereotypes about the poor were both associated with a greater tendency to make external attributions for poverty and a decreased tendency to make internal attributions. In contrast, more negative stereotypes were associated with a strong tendency to make internal attributions. Negative stereotypes and external attributions were unrelated.

Other studies (e.g. Zucker & Weiner, 1993) show that positive feelings towards the poor and the emotional reaction of pity correlate positively with structural/ external attribution, whereas the emotional reaction of anger correlates positively with individualistic attribution. In summary, positive attitudes toward the poor relate to structural attributions, while negative attitudes toward the poor relate to individualistic attributions.

## **Group identification with the group in the intergroup context**

Group identification can be explained by Social Identity Theory (Tajfel & Turner, 1979; 1986) and the Self-Expansion Model (Aron & Aron, 1986). In Social Identity Theory (Tajfel & Turner, 1979), group identification is explained as internalisation of group membership within the self-concept (Tajfel & Turner, 1986). In the Self-expansion model, identification is defined as the degree to which the in-group is included in the self (Tropp & Wright, 2001; Wright, Aron, & Tropp, 2002).

Social Identity Theory (Tajfel & Turner, 1979) posits that, if the positive social identity of an individual is threatened, identity maintaining strategies can be used (individual mobility, social creativity, social competition) to increase the person's self-esteem. Identification with the group decreases when an individual experiences social mobility. On the other hand, identification with the group increases when an individual experiences social competition. Typically, such identity maintaining strategies are exercised by individuals belonging to a low-status group.

Aron et al. (2004) stress that the Self-Expansion Model covers two key principles: "a central human motivation is expansion of the self and the way how people seek



such expansion is through close relationships in which each includes the other in the self” (p.103). When the out-group members are included in the self, their group identity may be included in the self as well (Aron et al., 2004). As Wright et al. (2002) indicate, the out-group identification can occur independently of the existing in-group identification.

In accordance with Social Identity Theory, an individual may have objective characteristics of the group but the person may not feel as part of the group. In line with the Self-expansion model, an individual may have no objective characteristics of the group, but the person may feel as part of the out-group, while maintaining identification with the in-group.

### **Attributions and attitudes in relation to group identification in the intergroup context**

Studies investigating the relationship between group identification and attribution reveal that people with strong identification with the group use more group-serving attributions than people who do not identify themselves as strongly with the group (Cremer, 2000; Hewstone, 1990).

Several studies have found relationships between group identification and intergroup attitudes (Duckitt & Mhuthing, 1998; Pettigrew, 1997, 1998). Social Identity Theory (Tajfel, & Turner, 1986) proposes that in-group identification is related to positive attitudes toward the in-group and negative attitude or prejudice towards the out-group. The Contact hypothesis (Allport, 1954) suggests that intergroup contact reduces negative intergroup attitudes. The Self-expansion model indicates that the positive affect associated with intergroup friendship is important in reducing prejudice between social groups and promotes identification with the out-group (Petigrew, 1997, 1998). Duckitt and Mphuthing (1998) found that in-group identification was associated with more negative attitudes to out-groups when relations between the groups are characterised by perceived threat but not when inter-group relations are characteristically non-threatening.

Previous studies have shown that poor people sometimes explain poverty contrary to the group-serving bias (Shek, 2004). Therefore, we conclude that they may have lower identification with the poor, whereas social workers explain poverty contrary to group-serving bias and express relatively positive attitudes toward the poor. It is possible that social workers identify themselves with the poor.

### **The present study**

Contrary to what could be expected from Social Identity Theory, poor people explain poverty by individualistic attributions (Shek, 2004), whereas social workers use structural attributions (Bullock, 2004). This contradicts the group-serving bias where the in-group members explain their failure by structural attribution while the out-group members explain the in-group’s failure by individualistic attribution. Social workers also tend to have positive attitudes toward the poor, whereas poor people’s attitudes toward other poor people remain unknown.

Reduction of the group-serving bias of the poor could be explained by Social Identity Theory, when an individual belonging to a low-status group may not feel to be part

of the group. In the sample of social workers, reduction of the group-serving bias and formation of positive attitudes toward the out-group can be explained by the close relationship between the social workers with the poor. In line with the Self-Expansion Model, close relationships may reduce negative attitudes toward the out-group and promote identification with the out-group.

The aim of this study is to examine the relationships between the identification with the poor, attributions for poverty and attitudes toward the poor, and to examine these relationships separately for social workers and poor people. This study proposes that attributions for poverty factors mediate the relationship between identification with the poor and attitudes toward the poor. The following questions are raised: 1) Does identification with the poor predict attributions for poverty factors? 2) Do attributions for poverty factors predict attitudes toward the poor? 3) Does identification with the poor predict attitudes toward the poor?

## **Method**

### *Participants*

A total of 202 Latvian women participated in the study as respondents (100 social workers and 102 poor people). Poor people were defined as clients of the social service agency whose income per family member over the last three months did not exceed 50% of the minimum wage. The social workers ranged in age from 21 to 62 ( $M = 41.04$ ,  $SD = 10.26$ ). Their working experience in the social service agency was from 6 months to 16 years ( $M = 5.75$ ,  $SD = 4.35$ ). Ninety three percent of social workers reported having tertiary education, while 7 % reported having secondary education.

The poor people ranged in age from 20 to 82 ( $M = 54.28$ ,  $SD = 13.69$ ). The status of the poor in social service agency was from 6 months to 16 years ( $M = 2.84$ ,  $SD = 3.45$ ). Twelve percent of the poor people reported having higher education, 70 % reported secondary education, 17 % reported elementary education and 1 % had no elementary education.

### *Instruments*

For purposes of this study, Group Identification Scale, Attributions for Poverty Questionnaire, Attitudes toward Poverty and the Poor Questionnaire were adapted. Initially the questionnaires were translated by two independent translators. Two language experts examined the translation and agreed on the best Latvian wording of the statements in the questionnaires. The language experts had good knowledge of both English and Latvian and of psychology terminology. The questionnaires were administered to a group of nine people (five social workers and four poor persons) in order to analyse whether the terms used in the questionnaires are appropriate for Latvia's welfare system. Minor linguistic clarifications were made to the final questionnaire by a proofreader, who was a Latvian language specialist.

The *Group Identification Scale* (Brown et al., 1986) was designed to assess social identification with the poor. The scale contains four items which reflect both positive and negative statements about poor people. Respondents rated their level of support for

each statement using a five-point Likert scale with one indicating strong disagreement and five indicating strong agreement. The scores ranged from four to 20 with the higher scores representing a higher identification with the poor group. The Cronbach's alpha for the four items was .78.

*Attributions for Poverty Questionnaire.* The 30-item Attributions for Poverty Questionnaire contained items that were adapted from previously tested scales (Bullock, William, & Limbert, 2003; Bullock, 2004). The scale items were designed to assess a broad range of explanations for poverty including family/fatalistic, individualistic and structural attributions. The respondents rated their level of support for each statement using a five-point Likert scale, with one indicating strong disagreement and five indicating strong agreement.

Principal axis factor analysis with varimax rotation was conducted to assess the underlying structure for the 30 items of the Attributions for Poverty Questionnaire. Three factors were requested based on the fact that the items were designed to index three constructs: family/fatalistic, individualistic, structural. After rotation, the first factor accounted for 15 %, the second factor accounted for 10.68 % and the third factor accounted for 8.52 % of variance.

To assess the internal reliability of each factor, Cronbach's alpha was computed. The alpha coefficients for each factor were as follows: family/fatalistic ( $\alpha = .86$ ); individualistic ( $\alpha = .79$ ); and structural ( $\alpha = .77$ ).

*Attitudes toward Poverty and the Poor Questionnaire.* Attitudes toward the poor were assessed using a ten-item scale adapted from the Attitudes toward Poverty and the Poor Questionnaire (Atherton et al., 1993). This questionnaire contains statements that reflect both positive and negative attitudes toward the poor. Respondents rated their level of support for each statement using a five-point Likert scale, with one indicating strong disagreement and five indicating strong agreement. The scores range from five to 50, with higher scores representing more positive affective attitudes toward the poor. The Cronbach's alpha for this scale was .75.

### *Procedure*

Data for this study were collected at the social service agency between July and October 2009. Social workers completed the questionnaires at their workplaces while the poor people completed them while using the assistance services of the municipality: homeless shelters, *soup kitchens and day-care centers*.

## **Results**

Table 1 contains the means and standard deviations for identification with the poor, attributions for poverty and attitudes toward the poor.

### *Correlational analyses*

Correlational analyses were conducted to assess the relationship between identification with the poor, attributions for poverty and attitudes toward the poor (see Table 1) for social workers and poor people separately.

**Table 1. Means and standard deviations and Pearson correlations of Attributions for poverty factors, Attitudes toward the poor and Identification with the poor (n = 202)**

Variable	M	SD	1.	2.	3.	4.	5.
Family/fatalistic attributions	3.25	0.83	-	.24***	.29***	-.25***	.33***
Individualistic attributions	3.60	0.81		-	.04	-.31***	-.05
Structural attributions	3.76	0.80			-	-.10	.36***
Attitudes toward the poor	2.84	0.74				-	-.15*
Identification with poor	3.63	1.02					-

\*p &lt; .05; \*\*\*p &lt; .001

The results for the sample of social workers showed that identification with the poor was related to attitudes toward the poor,  $r = .23$ ,  $p < .05$ . Identification with the poor was not significantly related to family/fatalistic attributions, individualistic attributions or structural attributions, whereas attitudes toward the poor was related to family/fatalistic attributions,  $r = -.23$ ,  $p < .01$ , and individualistic attributions,  $r = -.44$ ,  $p < .001$  (see Table 2).

**Table 2. Means and standard deviations and Pearson correlations of Attributions for poverty factors, Attitudes toward the poor and Identification with the poor of social workers (n = 100)**

Variable	M	SD	1.	2.	3.	4.	5.
Family/fatalistic attributions	2.94	0.73	-	.39***	.38***	-.23**	.04
Individualistic attributions	3.77	0.69		-	.07	-.44***	-.19
Structural attributions	3.63	0.72			-	0	.21
Attitudes toward the poor	2.95	0.69				-	.23*
Identification with poor	2.79	0.76					-

\*p &lt; .05; \*\*p &lt; .01; \*\*\*p &lt; .001

The results for the sample of poor people showed that identification with the poor was not significantly related to family/fatalistic attributions or individualistic attributions. Identification with the poor was related to attitudes toward the poor,  $r = -.15$ ,  $p < .05$ . Attitudes toward the poor were associated with family/fatalistic attributions,  $r = -.20$ ,  $p < .01$ , and individualistic attributions,  $r = -.29$ ,  $p < .01$  (see Table 3). Identification with the poor was related to structural attributions,  $r = .37$ ,  $p < .001$ .

**Table 3. Means and standard deviations and Pearson correlations of Attributions for poverty factors, Attitudes toward the poor and Identification with the poor of poor people (n = 102)**

Variable	M	SD	1.	2.	3.	4.	5.
Family/fatalistic attributions	3.56	0.81	-	.33***	.16	-.20**	.11
Individualistic attributions	3.43	0.88		-	.08	-.29**	.12
Structural attributions	3.88	0.86			-	-.14	.37***
Attitudes toward the poor	2.74	0.77				-	-.15*
Identification with poor	4.09	0.84					-

\*p &lt; .05; \*\*p &lt; .01; \*\*\*p &lt; .001

Correlational analysis revealed that social workers and poor people have a strong tendency to make family/fatalistic attributions and individualistic attributions related to more negative attitudes toward the poor. Poor people's higher identification with the

poor was related to a stronger tendency to make structural attributions, whereas in the social worker sample there was no relation between identification with the poor and attribution for poverty factors. Assessing the relationship between identification with poor persons and attitudes toward the poor, the results showed that poor people's higher identification with the poor correlated with negative attitudes toward the poor, while social worker's higher identification with the poor correlated with positive attitudes toward the poor.

**Multiple Mediation analysis**

The Sobel test was applied to clarify whether the attributions for poverty factors mediate identification with the poor and attitudes toward the poor. The Sobel test revealed no significant evidence attesting mediation by individualistic attributions,  $z = .59$ ,  $p = .55$ , structural attributions,  $z = -.37$ ,  $p = .71$ , or the family/ fatalistic attributions,  $z = -1.64$ ,  $p = .09$ .

The causal steps strategy (Baron & Kenny, 1986), which estimates individual paths in the multiple mediation models using the regression analysis, was conducted to assess whether identification with the poor predicts attributions for poverty factors (individualistic attributions, structural attributions, family/fatalistic attributions) [path A]; whether attributions for poverty factors predict attitudes toward the poor [path B], and whether identification with the poor predicts attitudes toward the poor [path C].

**Table 4. Regression analysis of individual paths in the mediation model for Identification with the poor, Attributions for poverty factors and Attitudes toward the poor (N = 202)**

Variable	$\beta$	SE	t	p
Path A. Identification with the poor predicting attributions for poverty				
Family/fatalistic attributions	.27	.06	4.37	.00
Individualistic attributions	-.04	.06	-0.59	.55
Structural attributions	.29	.06	4.81	.00
Path B. Attributions for poverty predicting attitudes toward the poor				
Family/fatalistic attributions	-.13	.07	-1.75	.08
Individualistic attributions	-.25	.07	-3.54	.00
Structural attributions	-.03	.07	-0.36	.71
Path C. Identification with the poor predicting attitudes toward the poor				
Identification with the poor	-.07	.06	-1.22	.22

As shown in Table 4, attributions for poverty factors were predicted from identification with the poor [path A], revealing that identification with the poor significantly predicts structural attributions,  $\beta = .29$ ,  $p < .001$ , and family/fatalistic attributions,  $\beta = .28$ ,  $p < .001$ . Next, attitudes toward the poor were predicted from the attributions for poverty factors [path B]. The results showed that individualistic attributions,  $\beta = -.25$ ,  $p < .001$ , predict attitudes toward the poor. Finally, identification with the poor, predicting attitudes toward the poor, was assessed [path, C]. It was proved that identification with the poor does not predict attitudes toward the poor.

The results showed that attributions for poverty factors do not mediate the relationships between the identification with the poor and attitudes toward the poor. It was

discovered that higher identification with the poor predicts stronger structural attributions and family/fatalistic attributions whereas weaker individualistic attributions predict more positive attitudes toward the poor.

The same procedure was performed to test whether attributions for poverty factors mediate the relationship between identification with the poor and attitudes toward the poor in a sample group of social workers and poor people.

The Sobel test did not reveal any significant evidence for social workers on mediation of identification with the poor or attitudes toward the poor by individualistic attributions,  $z = 1.34$ ,  $p = .18$ , structural attributions,  $z = .35$ ,  $p = .73$ , or family/fatalistic attributions,  $z = -.01$ ,  $p = .99$ .

The results of regression analysis within the framework of the causal steps strategy showed that attitudes toward the poor are predicted from the individualistic attribution,  $\beta = -.44$ ,  $p < .001$ , for social workers (see table 5).

**Table 5. Regression analysis of individual paths in the mediation model for Identification with the poor, Attributions for poverty factors and Attitudes toward the poor of poor people and social workers**

Group	Variable	$\beta$	SE	t	p
Poor people	Path A. Identification with the poor predicting attributions for poverty				
	Family/fatalistic attributions	.11	.09	1.15	.25
	Individualistic attributions	.12	.10	1.18	.24
	Structural attributions	.38	.09	4.02	.00
	Path B. Attributions for poverty predicting attitudes toward the poor				
	Family/fatalistic attributions	-.10	.10	-1.00	.31
	Individualistic attributions	-.21	.09	-2.38	.02
	Structural attributions	-.07	.09	-0.75	.45
	Path C. Identification with the poor predicting attitudes toward the poor				
Identification with the poor	-.06	.09	-0.66	.51	
Social workers	Path A. Identification with the poor predicting attributions for poverty				
	Family/fatalistic attributions	.03	.13	0.27	.19
	Individualistic attributions	-.19	.13	-1.43	.15
	Structural attribution	.21	.13	1.56	.12
	Path B. Attributions for poverty predicting attitudes toward the poor				
	Family/fatalistic attributions	-.00	.14	-0.00	.99
	Individualistic attributions	-.44	.12	-3.54	.00
	Structural attributions	.04	.12	0.34	.73
	Path C. Identification with the poor predicting attitudes toward the poor				
Identification with the poor	.11	.11	1.03	.31	

The Sobel test did not reveal any significant evidence for poor people on the mediation of the identification with the poor or attitudes toward the poor by individualistic attributions,  $z = -1.07$ ,  $p = .44$ , structural attributions,  $z = -.75$ ,  $p = 0.45$ , or family/fatalistic attributions,  $z = -.76$ ,  $p = .44$ . Regarding the poor people, the results showed that identification with the poor is predicted by structural attributions,  $\beta = .38$ ,  $p < .001$ .

Individualistic attributions,  $\beta = -.21$ ,  $p < .01$ , predicted attitudes toward the poor (see table 5).

The results obtained indicate that weaker individualistic attributions by social workers and poor people predict more positive attitudes toward the poor. Higher identification with the poor by poor people is predictive of stronger structural attributions.

## Discussion

Referring to the goals of this study, attributions for poverty factors were not found to mediate the relationship between identification with the poor and attitudes toward the poor, in the samples of social workers and poor people.

Mediation analysis revealed relationships between the following variables assessed in three steps: the influence of identification with the poor and attributions for poverty factors, the influence of attributions for poverty factors and attitudes toward the poor, and the influence of identification with the poor and attitudes toward the poor.

It was found that higher identification with the poor predicts stronger structural attributions and family/fatalistic attributions, which is consistent with group-serving bias. The obtained results on how attributions for poverty factors predict attitudes toward the poor confirm the results of previous studies (Cozzarelli et al., 2001; Zucker & Weiner, 1993), with weaker individualistic attributions predicting more positive attitudes toward the poor. The results showed that identification with the poor does not predict attitudes toward the poor.

To answer the questions raised in this study, the relationship between identification with the poor, attributions for poverty and attitudes toward the poor was examined for the in-group (poor people) and out-group (social workers).

The results of the study showed that regardless of membership of the in-group or out-group, stronger individualistic attributions predict more negative attitudes towards the poor, while only poor people with a higher identification with the poor predict the more typical structural attributions.

The study also showed, that the poor explain poverty by structural attributions, which is consistent with group-serving bias, whereas poor people with higher identification with the poor have more negative attitudes toward other poor people. Such indicators are inconsistent with Social Identity Theory, which proposes that in-group identification is related to positive attitudes toward the in-group. Negative attitudes of poor people toward other poor people may be explained by the fact that membership of the poor group is assigned while social status for the poor is granted. Thus 'poor' is a real existent status that is difficult for poor people to deny. We suggest that one of the ways that the poor protect their positive social identity is by disassociating from in-group members by means of a negative attitude towards them.

Social workers explain poverty by individualistic attributions and indicate more negative attitudes toward the poor. The obtained results are in line with group-serving bias, but they are inconsistent with the results of previous studies in which poverty is explained by economic/structural factors (Bullock, 2004) and more positive attitudes towards the poor are formed (Rehner et al., 1997).

Social workers' individualistic attributions of poverty and their resulting, more negative attitudes towards the poor impede, according to the Self-expansion model, their identification with the poor, whereas, as correlation analysis has shown, social workers' higher identification with the poor is associated with positive attitudes toward the poor. Such a correlation between identification and attitude confirmed our expectation that, by identifying themselves with the in-group, out-group members tend to form more positive attitudes toward the poor.

In summary, the results of the study show that social workers and poor people explain poverty in accordance with in-group/out-group perspective. In reference to the attitudes toward the poor, the results show that social workers indicate mainly negative attitudes toward the poor, which is in accordance with Social Identity Theory. Social workers with higher identification with the poor have more positive attitudes towards the poor. The poor form negative attitudes toward other poor people, which is inconsistent with Social Identity Theory. Moreover, those poor who have higher identification with the poor have more negative attitudes toward the poor. We conclude that identification with the poor is related to attitudes toward the poor for both the in-group and out-group.

There are several limitations to the present study. The age of the respondents as well as the social workers' working experience in social service agencies and poor people's poor status in social service agencies was not taken into account in this study. The participants in this study were Latvian-speaking women. In Riga a large number of poor people are males and Russian-speaking persons, therefore it is recommended a broader range of respondents be included in further studies. Furthermore, it is necessary to analyse why poor people who have higher identification with the poor have more negative attitudes towards other poor people.

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## Effectiveness of the BEA Parent Training Program in Latvia

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This study assessed the effectiveness of the BEA Parent Training Program in Latvia designed to enhance mothers' parenting sense of competence and decrease preschool age children's behavior problems. In total 106 mothers of preschool-age children participated: 60 mothers who participated in a 10-week parent training program and 46 mothers who were included in the control group. Mothers completed the Parenting Sense of Competence Scale (PSOC; Johnston & Mash, 1989) and the Child Behavior Checklist (CBCL/1,5-5; Achenbach & Rescorla, 2000) pre- and post-training, and at 6 month follow-up. The results show that mothers' participation in the parent training program led to an increase in their parenting sense of competence and a decrease in the mother-reported child behavior problems. These changes remained consistent at the 6 month follow-up.

**Keywords:** parent training, program effectiveness, parenting sense of competence, child behavior.

### Introduction

The importance of targeting and addressing behavioral difficulties early on in the developmental process has been widely discussed and it has been shown that preschool-age children's behavior problems may negatively affect later development. Studies have shown that preschool-age children's behavior problems are a major risk factor that may contribute to later social and behavioral problems, including increasing difficulties in the parent-child relationship (Campbell, Spieker, Burchinal, & Poe, 2006).

Studies from the ecological developmental perspective have shown that parents and family environment significantly affect preschool children's development, and that this parent-child interaction is bidirectional, whereby the child's behavior in turn affects the parental response (Davenport & Bourgeois, 2008). Both the parent-child interactions and parent's perceptions of themselves and the child are related to the child's behavior.

It has been shown that the probability of developing behavior problems in the preschool years is increased by parental use of corporal punishment (Lau, Litrownik, Newton, Black, & Everson, 2006; Mulvaney & Mebert, 2007), maternal negative emotional attitudes and less warmth toward the child (Caspi et al., 2004), as well as insecure or disorganized child attachment (Green, Stanley, & Peters, 2007; Moss, Bureau, Cyr, Mongeau, & St-Laurent, 2004; Pauli-Pott, Haverkock, Pott, & Beckmann, 2007). Protective factors which may prevent or lessen the development of behavioral problems include aspects of positive parenting such as warmth, responsiveness, consistency, and appropriate control (Koblinsky, Kuvalanka, & Randolph, 2006).

Children's behavioral development has also been shown to be associated with the parents' parenting sense of competence, which includes two interrelated components: the emotional component or satisfaction with parenting, and the cognitive component or the perception of one's self-efficacy in the parental role (Johnston & Mash, 1989), derived from the more general theoretical conceptualization of self-efficacy developed by Bandura (Bandura, 1982). In Bandura's conceptualization, self-efficacy is defined as an individual's belief about his or her capabilities to control aspects of his or her life as well as his or her ability to engage in proactive behavior which will allow him or her to attain certain set goals. Bandura points out that "to realize their aims, people try to exercise control over the events that affect their lives. They have a stronger incentive to act if they believe that control is possible – that their actions will be effective" (Bandura, 1997, pg. 3). Consistent with Bandura's conceptualization of self-efficacy, parenting self-efficacy has been conceptualized as beliefs or judgements a parent holds about their capabilities to organizing and executing a set of tasks related to parenting a child.

Studies have shown that parenting sense of competence is a protective factor that is negatively associated with child behavior problems (Johnston & Mash, 1989; Ohan, Leung, & Johnston, 2000), child development disorders (Herrick, Nussbaum, Holtzman, & Wissow, 2004; Wanamaker, Graydon, Leesburg, & Glenwick, 1998), parental stress, anxiety, and depression (Garstein & Sheeber, 2004; Hassall, Rose, & McDonald, 2005; Krishnakumar & Black, 2003; Rogers & Matthews, 2004; Willinger, Diendorfer-Radner, Willnauer, Jorgl, & Hager, 2005). Parenting sense of competence is positively associated with the degree of social support the parent receives (Dorsey, Klein, & Forehand, 1999), positive relationships among both parents and mutual agreement in regard to principles of parenting (Krishnakumar & Black, 2003; Ohan et al., 2000). Also important is the ability to accept the difficulties of parenting and to flexibly adjust behavior to the needs of the child (Herrick et al., 2004). The positive parent's experience in his or her parental role increases their parenting sense of competence (Coleman & Karraker, 2000; Hudson, Elek, & Fleck, 2001).

The results of research studies have led to the general assumption that parent training programs that provide parents with information about child development and positive parenting principles, along with support and assistance in dealing with difficult aspects of parenting, may increase the parent's sense of parenting competence and to encourage more positive parent-child interactions which in turn would facilitate positive development of the child. Thus during the past several decades parent training programs have been developed in different parts of the world.

The first structured and disseminated parent training program in Latvia is "Bērna emocionālā audzināšana" (English translation "Encouraging Children's Healthy Emotional Development"), referred to in Latvia as the BEA program (Lendija & Ozola, 2004). Initiated in Latvia in 2004 by Canadian-Latvian psychologist Edite Ozola, it is adapted from a program developed in Canada by psychologist Sarah Landy and colleagues (Landy, 1995; Landy & Thompson, 2006). The first version (Landy, 1995) of the parent training program was called "HEAR – Helping Encouraging Affect Regulation – Parenting Program" and the newest version (Landy & Thompson, 2006) is called "Pathways to Competence for Young Children. A Parenting Program".

The program integrates psychodynamic, behavioral, and developmental approaches and emphasizes the importance of positive parent-child interactions. The authors of the program have focused upon five elements: 1) the children's developmental capacities, 2) parents' experience of being parented in their family of origin, 3) parent-child interaction, 4) the children's view of oneself and others, and 5) parent's view of one's self and others. Each of these five aspects contributes meaningfully to the parent-child interactional system.

Various capacities of the child's development during the first 7 years of life that are important the foundation for later development are addressed in the course of the 10-step training program. Within each step the parent is provided with information about one of these developing capacities (e.g., body control, secure attachment, self-esteem, playing, language and communication, emotional regulation, problem solving, empathy). The parent is also provided with opportunities to discuss and understand the importance of each capacity what can be done to promote the burgeoning of this capacity.

Based upon the empirically validated principle that the parent's childhood experience affects how he or she will parent (Bugental & Johnston, 2000) the training program includes opportunities for parents to discuss how their current parenting behavior and beliefs have been influenced by their own developmental history in their family of origin. The aim is to help parents recognize the behavioral patterns which they are repeating from their childhood, and to change to more effective ones if necessary. Throughout the training parents receive support from group leaders and other members of the group.

In Canada evaluation of the HEAR and "Pathways to Competence" parent training programs has shown encouraging results. In a pilot study of the HEAR program (Landy et al, 1997) mothers and preschool teachers reported decrease in child behavior problems, and there were observed improvements in mother-child interactions. However, no control group was included. In a following study (Landy & Thompson, 2006) with parents of preschool children with aggressive behavior, mothers who had participated in the "Pathways to Competence" program reported a decrease in child behavior problems, greater satisfaction and sense of effectiveness in their parenting role, more social support, increased involvement with their child, and more effectiveness in setting limits than the control group mothers.

Until now there has been no effectiveness study of any parent training program in Latvia. In addition, the effectiveness of the "Pathways to Competence" program in Canada has only been studied with parents of children with aggressive behavior, and there has not been an evaluation of long-term treatment effects. The aim of this study was to assess the effectiveness of the Latvian BEA program and to examine the stability of the program outcome, with mothers parenting sense of competence and mother-reported child behavior as outcome criteria. Upon the basis of previous studies it was predicted that mothers who have completed participation in the BEA program will report an increase in parenting sense of competence, a decrease in level of child behavioral difficulties, and that these improvements will differentiate the training group from the control group. It was also predicted that these effects would be maintained at six months follow up. This aim is important in its own right but also broadens the potential applicability of the parent training program.

## Method

### *Participants*

Mothers in the parent training program were recruited through parenting-oriented websites and at preschools. Originally 125 mothers who were participating in the BEA training program agreed to participate in the study and completed the first set of questionnaires in the pre-training period. Of this original sample, 60 mothers completed the questionnaires also at post training. Therefore, only the data from these 60 mothers who completed pre and post-training questionnaires was included in the further analysis of the study. All these mothers attended more than 70% of parent training sessions.

The control group was composed of mothers who were contacted at several regular preschools in Riga. Eighty mothers were contacted and 46 completed the questionnaires at both time periods, comparable to the pre and post-training period. The mothers were initially contacted at the preschool and given the first set of questionnaires in person. The second set of questionnaires was mailed to them together with a stamped and addressed envelope to return to the researcher.

In total 106 mothers of preschool-age children participated in the study: 60 mothers (age:  $M = 31.61$ ,  $SD = 5.25$ ) who participated in the 10-week BEA program and 46 mothers (age:  $M = 31.44$ ,  $SD = 4.88$ ) who were included in the control group. To participate in the study the mother had to have at least one preschool child between 1½ and 5 years of age. By gender the two groups of children were approximately equal with 60% girls and 40% boys (age:  $M = 2.82$ ,  $SD = 1.43$ ) versus 54% girls and 46% boys (age:  $M = 3.46$ ,  $SD = 1.09$ ) in the training and control groups respectively.

Of the 106 mothers who participated at the pre-training and post-training measurement times, only 71 mothers participated at the 6 month follow-up (41 mothers from the parent training group and 30 mothers from the control group). There were no significant differences (in the initial sample as well as the sample of 71 families who participated at the 6 month follow-up) between the mothers who participated in the parent training group and those who did not participate, regarding initial level of mother's parenting sense of competence and mother-reported child behavior ratings, maternal age, child gender, and presence of siblings. Statistically significant differences were found for educational level of mother and the child's age. Parent training group mothers were better educated (all of the mothers had completed high school and 85% had completed university education) than control group mothers (4,3% had completed elementary school, 32,6% had completed high school, and 63% had completed university education). As indicated, control group children were older than training group children. These differences were statistically controlled for in the analyses

### *Measures*

Mothers were asked to complete two measures pre- and post-training, and at 6 month follow-up.

*Parenting Sense of Competence.* The Parenting Sense of Competence Scale (PSOC; Johnston & Mash, 1989) is a 16-item questionnaire designed to measure parents' satisfaction with parenting and their perceived efficacy in the parenting role. There are two

subscales: Efficacy subscale (e.g. “Being a parent is manageable, and any problems are easily solved”) and Satisfaction subscale (e.g. reverse-scored item “I go to bed the same way I wake up in the morning, feeling I have not accomplished a whole lot”). Items are rated on a 6-point Likert-scale ranging from “strongly disagree” to “strongly agree”. Scoring for some items is reversed so that as a result higher scores indicate greater parenting sense of competence.

The questionnaire has been translated to Latvian with forward-translation and back-translation. Initial psychometric analysis showed that the Latvian version of the PSOC produced a similar two-factor structure as the original scale, but that four items were with insufficient factor loadings and were therefore omitted from further use in the Latvian version. The Latvian version of the PSOC now consists of 12 items with internal consistencies (Cronbach’s  $\alpha$ ) of .75 and .77 for the Satisfaction and Efficacy subscales, respectively, in this sample (Skreitule-Pikse & Sebre, 2008).

*Child Behavior.* The Child Behavior Checklist for 1,5 to 5-year-old children (CBCL/1,5-5; Achenbach & Rescorla, 2000) is a 99-item questionnaire with two general scales which were used for this study: Internalizing Problem Scale (including Emotionally Reactive, Anxious / Depressed, Somatic Complaints, Withdrawn subscales); and Externalizing Problem Scale (including Attention Problems and Aggressive Behavior subscales). Respondents rate each item on a 3-point scale (0 = not true, 1 = somewhat or sometimes true, and 2 = often true). The checklist was translated to Latvian with forward-translation and back-translation. Internal consistencies (Cronbach’s  $\alpha$ ) of the Internalizing and Externalizing Problem Scales were .87 and .88, respectively, in this sample.

### *Procedure*

The training program consisted of participation in ten group sessions (2 hours each), as well as the completion of weekly homework assignments. Training was conducted for groups of 7–10 mothers, led by trained group leaders, the majority of whom were professional psychologists with master’s or doctoral degrees. Session took place at psychological services centers or private group practice rooms. All participants were informed about the study and assured that participation in the study was voluntary and confidential.

## **Results**

Parent training group effects for mother’s sense of competence and mother-reported child’s behavior were analyzed by  $2 \times 2$  (Group  $\times$  Time) repeated-measures analysis of variance (ANCOVA) (see Table 1).

Results show significant Group  $\times$  Time interaction effects for satisfaction with parenting, sense of parental efficacy in the mother role, and mother’s reported child internalizing and externalizing behavior. Mothers who participated in the parent training program at the post-training assessment reported higher satisfaction with parenting,  $t(60) = -4.88$ ,  $p < .001$ , and higher efficacy in their role as a parent,  $t(60) = -6.22$ ,  $p < .001$ , as well as lower ratings of children’s internalizing behavior problems,  $t(60) = 3.99$ ,  $p < .001$ , and lower ratings of children’s externalizing behavior problems,  $t(60) = 4.81$ ,  $p < .001$ , than during pre-training assessment.

**Table 1. Short-term parent training group effects for mother's sense of competence and mother's reported child behaviour**

Measure	Parent training group (n = 60)		Control group (n = 46)		Group (A) <sup>a</sup>	Time (B) <sup>a</sup>	A × B <sup>a</sup>
	pre M (SD)	post M (SD)	pre M (SD)	post M (SD)			
<i>Mother's Sense of Competence</i>							
Satisfaction	24.55 (4.65)	27.32 (4.24)	26.07 (5.15)	23.78 (5.70)	0.62	1.28	33.52***
Efficacy	25.67 (4.21)	28.35 (3.28)	26.37 (5.03)	25.93 (4.59)	0.74	0.04	20.93***
<i>Mother's reported Child Behavior</i>							
Internalizing Behavior	12.38 (6.64)	9.48 (6.11)	12.07 (6.63)	11.35 (6.88)	0.02	2.65	5.26*
Externalizing Behavior	16.38 (7.21)	13.37 (6.79)	14.46 (4.86)	13.61 (6.36)	1.20	0.13	4.99*

Note. <sup>a</sup>df = 1. Covariates: child's age; educational level of mother. \*  $p < .05$ . \*\*\*  $p < .001$

Mothers in the control group at the post-training assessment reported lower satisfaction with parenting,  $t(46) = 3.76$ ,  $p < .001$ , than during pre-training assessment. There were no statistically significant differences in the control group between pre- and post-training ratings of sense of efficacy in their role as a parent,  $t(46) = 0.91$ , *ns*, child internalizing behaviors,  $t(46) = 1.07$ , *ns*, and child externalizing behaviors,  $t(46) = 1.44$ , *ns*.

The stability of the parent training program outcome was analyzed by 2 × 2 (Group × Time) repeated-measures analysis of variance (ANCOVA) (see Table 2).

**Table 2. Stability of the parent training group effects for mother's sense of competence and mother's reported child behaviour**

Measure	Parent training group (n = 41)		Control group (n = 30)		Group (A) <sup>a</sup>	Time (B) <sup>a</sup>	A × B <sup>a</sup>
	post M (SD)	follow-up M (SD)	post M (SD)	follow-up M (SD)			
<i>Mother's Sense of Competence</i>							
Satisfaction	27.73 (4.14)	27.66 (4.53)	24.17 (5.23)	24.67 (5.03)	11.93***	10.13**	0.23
Efficacy	28.39 (3.10)	28.24 (3.49)	25.50 (4.49)	26.23 (4.18)	6.63*	0	2.04
<i>Mother's reported Child Behavior</i>							
Internalizing Behavior	9.00 (5.18)	8.12 (6.36)	12.00 (7.50)	10.67 (9.06)	1.85	1.17	0.02
Externalizing Behavior	13.27 (6.83)	12.20 (7.79)	13.73 (6.63)	13.10 (7.62)	0.09	0.05	0.05

Note. <sup>a</sup>df = 1. Covariates: child's age, educational level of mother. \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p = .001$



Results show no significant Group  $\times$  Time interaction effect for mother's satisfaction with parenting, efficacy in the mother role and mother-reported child's internalizing and externalizing behavior problems.

Post-training and follow-up scores were compared using paired  $t$  – tests, and results show no significant differences in the parent training group between post-training and follow-up ratings of mother's satisfaction with parenting,  $t(41) = 0.12, ns$ , efficacy in the mother role,  $t(41) = 0.43, ns$ , mother-reported child's internalizing behavior problems,  $t(41) = 0.97, ns$ , and child's externalizing behavior problems,  $t(41) = 1.08, ns$ . Also, there were no significant differences in the control group between post - training and follow-up ratings of mother's satisfaction with parenting,  $t(30) = - 0.12, ns$ , efficacy in the mother role,  $t(30) = - 1.20, ns$ , mother-reported child internalizing behaviors,  $t(30) = 1.11, ns$ , and child externalizings,  $t(30) = 0.58, ns$ .

During the follow-up evaluation mothers who participated in the parent training program reported higher satisfaction with parenting,  $t(41) = - 4.59, p < .001$ , higher efficacy in the mother role,  $t(41) = - 4.27, p < .001$ , lower ratings of children's internalizing behavior,  $t(41) = 4.22, p < .001$ , and lower ratings of children's externalizing behavior,  $t(41) = 4.33, p < .001$ , than during pre-training. There were no statistically significant differences in the control group between pre-training and follow-up ratings of mother's satisfaction with parenting,  $t(30) = 2.04, ns$ , efficacy in the mother role,  $t(30) = -1.00, ns$ , mother-reported child internalizing behaviors,  $t(30) = 1.44, ns$ , and child externalizing behaviors,  $t(30) = 1.12, ns$ . Figure 1 and Figure 2 show these changes over time in mother's sense of competence and mother-reported child behavior.

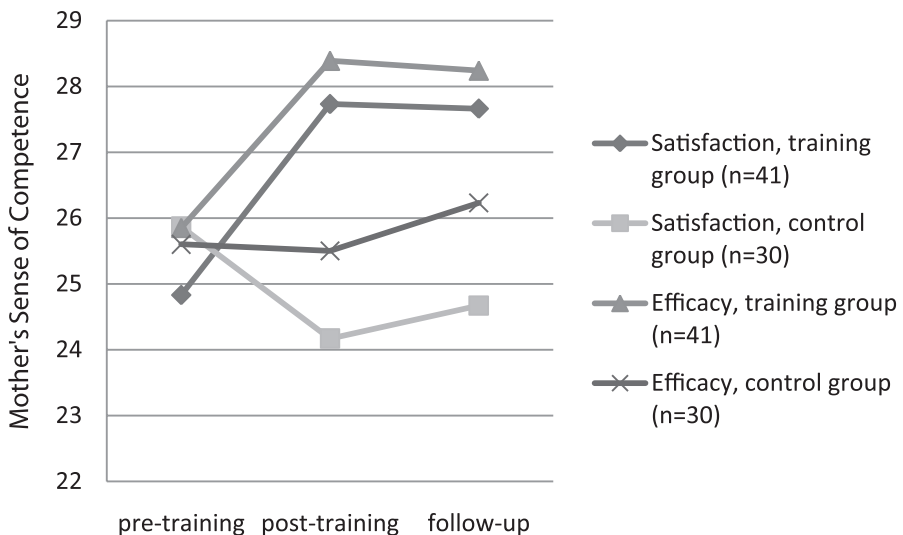


Figure 1. Changes over time in mother's sense of competence

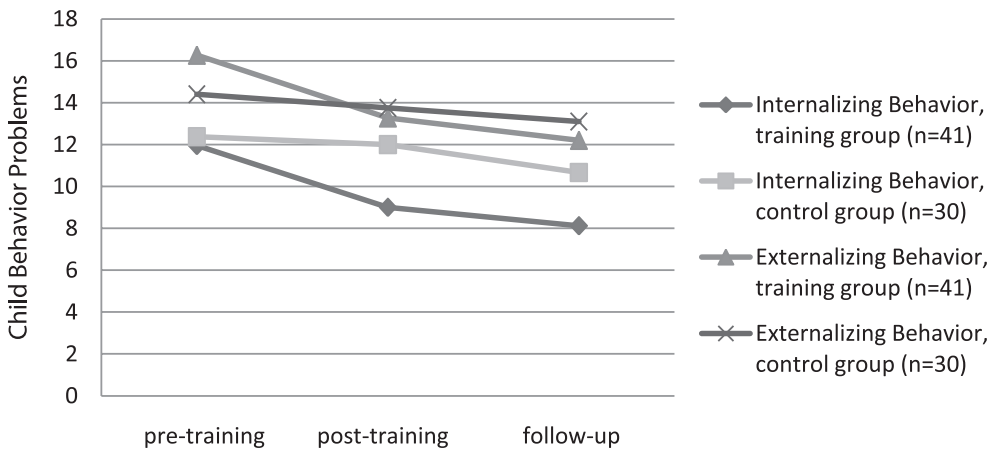


Figure 2. Changes over time in mother-reported child internalizing and externalizing behaviour

During the follow-up evaluation mothers who participated in the parent training program reported higher satisfaction with parenting,  $t(41) = -4.59, p < .001$ , higher efficacy in the mother role,  $t(41) = -4.27, p < .001$ , lower ratings of children's internalizing behavior,  $t(41) = 4.22, p < .001$ , and lower ratings of children's externalizing behavior,  $t(41) = 4.33, p < .001$ , than during pre-training. There were no statistically significant differences in the control group between pre-training and follow-up ratings of mother's satisfaction with parenting,  $t(30) = 2.04, ns$ , efficacy in the mother role,  $t(30) = -1.00, ns$ , mother-reported child internalizing behaviors,  $t(30) = 1.44, ns$ , and child externalizing behaviors,  $t(30) = 1.12, ns$ . Figure 1 and Figure 2 show these changes over time in mother's sense of competence and mother-reported child behavior.

## Discussion

The results indicate that preschool children's mothers' participation in the Latvian version of the parent training program "Encouraging Child's Emotional Development" leads to an increase in the mother's parenting sense of competence, a decrease in the mother-reported child behavior problems, and that these are improvements differentiate the training group from the control group. These results are similar to those of Landy and Thompson (Landy & Thompson, 2006) who found that after participation in the Canadian version of the training program, mothers of aggressive children reported greater satisfaction with parenting, greater parenting sense of efficacy, and less child aggressive behavior.

In light of Bandura's conceptualization of self-efficacy (Bandura, 1997), a person's beliefs about their efficacy are influenced by their actual life experience within a specific domain, the positive behavioral models which are available, and one's received support and encouragement. Mothers who participated in the parent training program were able to increase their knowledge of child development and parenting, to master more

effective ways of interaction with the child, and to receive encouragement and support. These training program elements allowed mothers to better cope with their child-rearing responsibilities, as a result of which they felt more comfortable in their role as mother and, thereby, reported greater sense of parenting efficacy.

It is interesting that mothers in the control group during the second measurement indicated lower satisfaction with parenting than during the first measurement time. This could be explained by the fact that initially mothers felt pleased that they had been asked to participate in the study, and that this phenomena of inclusion enhanced their sense of self-efficacy. However, this effect did not persist over time. After completing the initial questionnaire about parenting sense of competence, mothers began to pay more attention to how they think about themselves as a mother, and without the information, support and encouragement of the training group, their satisfaction with their role as a mother declined.

The current study has demonstrated that mothers' participation in the Latvia parent training program leads not only to an decrease in the child's externalizing behavior problems, but also leads to a decrease in the child's internalizing behaviors. Initially this program was developed in Canada for parents of young children with symptoms of excessive aggression and noncompliance (Landy et al., 1997), but the current study shows that it is effective also for parents whose children have internalizing problems.

Until now there had been no assessment of the long-term effectiveness of the parent training program "Encouraging Child's Emotional Development". Results of the current study indicate that changes after mother's participation in the parent training program remained consistent at the 6 month follow-up.

There are a number of limitations of this study that need to be considered in interpreting the findings. First, the effects of using only mothers' reports of child behavior problems should be considered. Including reports from fathers or preschool-teachers and observations of mother-child interactions would be useful in future studies to make stronger conclusions about program effectiveness. Second, among the limitations of the study needs to be mentioned the relatively small number of research participants, especially within the follow-up measurement. Third, the specificity of the program effectiveness measurement would be made more precise by including other possibly influential variables (e.g., child temperament, parental relationships), which were not included in this study.

Further research should focus upon examining how fathers' or both parents' participation in the training program influences child development, parents' interactions with their child, and the mutual relationships between parents. Future research should also explore other possible variables influencing training program effectiveness (for example, child temperament).

Finally, it can be concluded that preschool children's mothers' participation in the parent training program "Encouraging Child's Emotional Development" increased the mothers' parenting sense of competence and decreased mother-reported child behavior problems, and that these improvements differentiated the training group from the control group. These changes in mother-reported parenting sense of competence and child behavior problems ratings remained consistent at the 6 months follow-up.

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# The Role of Emotional Expression and Ambivalence Over Expression In Romantic Relationships

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The study examined the role of emotional expression and ambivalence over emotional expression in romantic relationships. Self-report data from 156 participants in romantic relationships were used to predict participants' levels of relationship satisfaction from their self-reported levels and type (i.e. positive vs. negative) of emotional expression and ambivalence over emotional expression. There was a significant positive relationship between self-reported levels of emotional expression and relationship satisfaction, and a significant negative relationship between ambivalence over expression and relationship satisfaction. Emotional expression and ambivalence were inversely related. Multiple regression analysis indicated that higher levels of negative emotional expression, lower ambivalence over emotional expression, and gender were the best predictors of increased relationship satisfaction. The limitations of the findings are discussed.

**Keywords:** emotional expression, romantic relationship, ambivalence.

## Introduction

The role of emotional expression in human functioning has received increased attention in the literature and has raised a number of interesting questions over the past several decades (Kennedy-Moore & Watson, 1999; Greenberg and Johnson, 1986; Gottman & Levenson, 1986; 1992; King, 1993). Although the importance of emotional expression has been empirically supported, the debate over its benefits is ongoing. Some research indicates the adverse consequences of 'bottled up' emotions on psychological and physical well-being, while other studies suggest that 'letting it all out' may have a negative impact on interpersonal relationships (Kennedy-Moore & Watson, 1999; King & Emmons, 1991).

The expression of emotion affects the quality of a relationship. Some evidence suggests that lower levels of emotional expression are related to difficulties in deriving satisfaction from the relationship (Feldman & Aschenbrenner, 1983). Individuals who express their feelings less were found to have a harder time responding to the needs of their partner. They also had difficulty developing effective communication and problem solving skills. Lavee and Ben-Ari's (2004) data from 197 Israeli couples suggests that the more emotionally expressive both partners are, the higher the wives' reported levels of marital satisfaction. Moreover evidence suggests that the communication of emotion enhances one's own awareness of emotional states; in addition to that of one's partner

(Gottman, Katz, & Hooven, 1997). However, the evidence is inconsistent with respect to the role of emotional expression and its relationship with marital satisfaction.

Studies show that high levels of positive emotional expression are associated with higher levels of marital adjustment (Carstensen et al., 1995; Feeney et al., 1998; Gill et al., 1999; Halberstadt et al., 1995). Gill, Christensen, Fincham (1999) found that positive behaviour by both spouses predicted an increase in wife's satisfaction, and negative behaviour by both spouses predicted a decrease in wife's satisfaction. Similarly, Halberstadt and colleagues (1995) found that women's expression of positive emotions was positively correlated with marital satisfaction, while for men the expression of negative emotion was inversely related to marital satisfaction.

The expression of negative emotion has been consistently found among dissatisfied couples. Gottman and Levenson (1986) noted that marital dissatisfaction was associated with greater levels of negative affect and negative affect reciprocity. Similarly, Carstensen and colleagues (1995) using an observational coding system demonstrated that even in long-term marriages within middle-aged and older couples, unhappy couples exchanged more negative affect than happy couples.

### **Ambivalence over Emotional Expression**

Another factor that can seriously impact an individual's overall well-being is ambivalence over emotional expression. Some researchers suggest that the inhibition of emotion plays a more important role in psychological, physical and interpersonal adjustment than expression of emotion per se. (Pennebaker, 1989, King & Emmons, 1990; King, 1993; Emmons & Colby, 1995; Mongrain and Vatesse, 2003). Laura King and Robert Emmons (1990) refer to the term "ambivalence over emotional expression", explaining that it is not expression of emotion that leads to favourable or adverse consequences, but rather the internal conflict that an individual experiences over expressing emotion that affects their psychological, physical and interpersonal well-being (King & Emmons, 1990; King, 1993). According to this view, individuals can either be expressive or inexpressive but still feel conflicted about their expressive style. Ambivalence may be experienced with regard to positive or negative emotion (King & Emmons, 1990). For example, individuals can have a desire to express an emotion (e.g. affection toward someone), but inhibit that desire. Conversely, they can express an emotion (e.g. lash out in anger) and later regret it.

In their study, King and Emmons (1990) found that ambivalent individuals were overall less expressive; although these individuals wished to express an emotion, they inhibited their expression. Some studies suggest that individuals who are ambivalent about expressing emotions report higher scores on depression, daily negative affect, obsessive/compulsive tendencies, paranoid ideations and phobic anxiety. They also reported lower levels of self-esteem and overall life satisfaction (Katz & Campbell, 1994; King & Emmons, 1990). Mongrain and Zuroff (1994) similarly found that ambivalence over emotional expression was a mediating variable in predicting depression. Katz and Campbell (1994) believe that ambivalence over expression may make an individual more emotionally vulnerable, in so far as they tend to respond more intensely and take longer to recover from emotional events. These results highlight the importance of ambivalence over emotional expression in personal well-being.

Given the well-supported inverse relationship between ambivalence and psychological well-being, it is likely that ambivalence over emotional expression would be associated with interpersonal adjustment. However, there is limited research in this area. Emmons and Colby (1995) investigated the way in which emotionally conflicted individuals utilize social support to deal with daily stressors and found that ambivalence over emotional expression and fear of intimacy were negatively related to measures of social support and psychological well-being. They also found that social support mediated the relationship between ambivalence and well-being. The authors concluded that conflicted individuals may be less likely to benefit from social support, as they are less likely to seek and accept sympathy and social support from others.

Few studies to date have focused on the role of ambivalence in romantic relationships (Mongrain & Vattese, 2003; King & Emmons, 1991; King, 1993). Mongrain and Vattese (2003) found that when mood and other personality constructs were controlled for, ambivalence played a role in several intrapsychic and interpersonal domains. For example, highly ambivalent females reported suppressing their negative feelings toward their boyfriend during a conflict resolution task, while observers noted that such females were constricted in their nonverbal communication. As a result, highly ambivalent females were less congruent in their communication and displayed more submissive behaviour toward their boyfriends. King (1993) investigated the role of emotional expression, ambivalence over emotional expression and marital satisfaction via self-report questionnaires. The data from fifty married couples revealed that spouses' rating of each other's expressiveness correlated with marital satisfaction, independent of the self-reported levels of emotional expression. And only husbands' ambivalence over the expression of emotion negatively impacted wives' satisfaction.

To date the available research on emotional expression and marital quality is equivocal. Studies generally demonstrate that overall levels of expression are beneficial for marital adjustment. More importantly, the role of negative expression has consistently been associated with poor quality of relationship. Ambivalence over emotional expression appears to be an important factor in psychological adjustment; however, little research has investigated its role in marital satisfaction. The objective in this study was to further investigate the relationship between the amount and type of emotional expression and ambivalence over expression and relationship satisfaction.

### *Hypotheses*

It was hypothesized that self-reported levels of positive emotional expression would be positively correlated with relationship satisfaction, and self-reported levels of negative emotional expression and ambivalence over expression would be negatively correlated with marital satisfaction. Furthermore, an inverse relationship between emotional expression and ambivalence over emotional expression was predicted; with negative emotional expression and ambivalence over emotional expression hypothesized to be the best predictors of relationship satisfaction.



## Method

### *Participants*

Two hundred and six participants were recruited through university listserv and word of mouth. Of the total sample, 156 participants (107 women and 49 men) completed the survey. The online survey included a requirement to read and consent to participate in the study. In order to be eligible for the study participants had to be over the age of 18 and to be currently involved in an intimate/romantic relationship.

The participants ranged in age from 18 to 60 ( $M = 30.35$ ,  $SD = 7.54$ ). Women's ages ranged from 19 to 57 ( $M = 29.52$ ,  $SD = 7.16$ ), while men's ages ranged from 18 to 60 ( $M = 32.12$ ,  $SD = 8.09$ ). A majority of participants indicated they were in a *committed relationship* (45.2%), (i.e. a relationship in which both partners are exclusive, are planning to continue the relationship with or without the goal of living together/becoming common law partners/getting married), followed by *marriage* (36.1%), and *common law* (17.4%). An average length of a relationship was 5.54 years with standard deviation of 5.48 years and ranged from 6 months to 39 years.

The majority of participants had a Bachelor Degree (45.8%), 32.7% had a Master's Degree, 9.8% a College Diploma, 7.8% had completed grade 12 or 13, and 3.9% had attained a Ph.D.. The majority of the participants earned between \$20,000- \$39,000 (30.3%), 27.6% earned less than \$20,000; 17.1% earned \$40,000 – \$59,000; 13.2% earned \$60,000 – \$79,000; and 11.8% earned more than \$80,000. The majority of the participants (84%,  $n = 126$ ) described themselves as "White" (Eastern European, Northern European, etc.), 4.7% ( $n = 7$ ) as "Asian" (Chinese, Japanese, etc.), 2.7% ( $n = 4$ ) as "South Asian" (Pakistani, East Indian, etc.), 1.3% ( $n = 2$ ) as "Black" (African, Caribbean, etc.), and 6.7% ( $n = 10$ ) as "Other", which included mixed ancestry and 3.8% ( $n = 6$ ) did not specify their race. In terms of ethnicity, 64.2% ( $n = 97$ ) did not identify themselves as part of an ethnic group, while the other 35.8% ( $n = 54$ ), reported a total of 25 different ethnic groups. All but one of the participants resided in Canada

### *Measures*

*Ambivalence over Emotional Expression Questionnaire* (AEQ - King & Emmons, 1990) is a 28 item scale to measure ambivalence over the expression of emotion. It assesses different styles of ambivalence from wanting to express but not being able to, to expressing but not necessarily wanting to express, e.g. "I often can not bring myself to express what I am really feeling" on a 5 point scale. The measure has good psychometric properties. The alpha reliability (internal consistency) coefficient of the AEQ was .89. A test-retest correlation with a 6-week interval was computed on 50 participants and the authors report a coefficient of .78. Following confirmatory factor analyses, a single general factor emerged with an eigenvalue of 1.39 – on which the two emerged clusters loaded highly. These results suggest that the AEQ is unidimensional, thus the subscales were disregarded.

*Emotional Expression Questionnaire* (EEQ - King & Emmons, 1990) is 16-item self-report measure of general expression that rates a person's tendency to express positive and negative emotion, as well as the expression of intimacy on a 7-point scale. The authors report alpha reliability coefficient = .78 (e.g. "When I really like someone they

know it"). A confirmatory factor analysis was conducted and 3 clusters emerged in the exploratory analysis. Each cluster had substantial reliability coefficients considering the small number of items. Reliability coefficients for the three subscales were  $\alpha = .74$  for the 7-item positive emotional expression cluster;  $\alpha = .63$  for the 5-item intimacy cluster; and  $\alpha = .67$  for the 4-item negative expression cluster. All of the clusters demonstrated significant positive correlations. Although the expression of negative emotion was not as strongly correlated with the expression of intimacy ( $r = .37$ ), or the expression of positive emotion ( $r = .29$ ), intimacy and positive expression were significantly correlated with each other ( $r = .58$ ).

*Dyadic Adjustment Scale, Short Form* (DAS - Spanier, 1976) is a widely used self-report measure of relationship satisfaction and is originally a 32-item scale designed to use with married or unmarried couples. A seven item, Short Form of the Spanier 32-item scale was used to assess the quality of relationships (Sharpley & Cross, 1982). Analysis of the discriminant function coefficients revealed that 6 out of 32 items contributed most to the discriminant function. Selected item loadings on discriminant function on scores from high to low relationship satisfaction groups ranged from .404 to .819. The overall reliability was .96, which replicates Spanier's (1976) results. Higher scores on DAS reflect greater satisfaction with the relationship.

### Procedure

Respondents were recruited through University of Toronto listserv and by word of mouth. The participants received an email briefly stating the objectives of the study, eligibility criteria, time commitment, and an internet link to the survey. The survey included the Ambivalence over Emotional Expression Questionnaire, an Emotional Expression Questionnaire, and a Dyadic Adjustment Scale (Short Form). Participants were asked to evaluate their style of emotional expression and levels of relationship satisfaction.

## Results

### Descriptive statistics

In terms of relationship satisfaction, assessed using the Dyadic Adjustment Scale, Short Form (DAS -SF), total scores for the participants ranged from 12 to 38 ( $M = 27.83$ ,  $SD = 5.02$ ). Men's relationship satisfaction scores ranged from 15 to 38 ( $M = 29.45$ ,  $SD = 4.60$ ), while women's ranged from 12 to 37 ( $M = 27.27$ ,  $SD = 5.02$ ). The men in this sample were significantly more satisfied in their relationships compared to women,  $t(149) = (-2.56)$ ,  $p < 0.05$ . Means and standard deviations for all the measures are presented in Table 1. No gender differences were found for the EEQ or the AEQ.

**Table 1. Means and Standard Deviations for ambivalence over emotional expression (AEQ) and emotional expression (EEQ), and Dyadic Adjustment Scale-SF (N=153)**

Measure	M	SD
EEQ	4.88	0.46
AEQ	2.29	0.61
DAS	27.83	5.02

*Emotional Expression and Relationship Satisfaction*

A significant positive relationship was revealed between emotional expression and relationship satisfaction ( $r = 0.24, p < 0.01$ ), indicating that the higher the levels of emotional expression the higher the levels of relationship satisfaction. Men's self-reported levels of emotional expression were significantly related to their self-reported levels of relationship satisfaction ( $r = 0.35, p < 0.05$ ). In contrast women's scores on emotional expression were not significantly correlated with their ratings of relationship satisfaction ( $r = 0.18, p = 0.06$ ). The correlations are presented in Table 2.

**Table 2. Correlations between emotional expression (EEQ), ambivalence over emotional expression (AEQ), and relationship satisfaction (DAS)**

<i>Measure</i>	<i>EEQ</i>	<i>AEQ</i>
Emotional expression (EEQ)	–	–
Ambivalence over Expression (AEQ)		
Male (n = 48)	.19	–
Female (n = 103)	.49**	
Total (n = 154)	.42**	
Relationship Satisfaction (DAS)		
Male (n = 48)	.35*	-.27
Female (n = 103)	.18	-.38**
Total (n = 154)	.24**	-.37**

Notes: \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; two-tailed

*Positive and Negative Emotional Expression and Relationship Satisfaction*

There was a significant positive correlation between self-reported *negative emotional expression* and relationship satisfaction ( $r = 0.34, p < 0.01$ ), but there was no significant relationship between *positive emotional expression* ( $r = 0.15, p = 0.07$ ) and relationship satisfaction.

*Ambivalence over Emotional Expression and Relationship Satisfaction*

The participants' levels of ambivalence over emotional expression and relationship satisfaction were negatively correlated ( $r = -0.37, p < 0.01$ ). However this relationship was significant for women ( $r = -0.38, p < 0.01$ ), but not for men ( $r = -0.27, p = 0.06$ ). The correlations are presented in Table 2.

*Ambivalence over Emotional Expression and Emotional Expression*

There was a significant negative relationship between ambivalence over emotional expression and level of emotional expression ( $r = -0.42, p < 0.01$ ). However, this relationship was significant for women ( $r = -0.49, p < 0.01$ ), but not men ( $r = -0.19, p = 0.19$ ). See Table 2 for summary of correlations.

*Predicting Relationship Satisfaction from Negative Emotional Expression and Ambivalence over Emotional Expression*

To determine whether participants who scored higher on negative emotional expression (EEQ-negative expression) and ambivalence over emotional expression (AEQ) would

report lower levels of relationship satisfaction, a hierarchical regression was performed. The final regression model consisted of the EEQ (negative expression), the AEQ, and gender as predictors, and the DAS -SF as the criterion variable. The three predictors significantly predicted relationship satisfaction,  $F(3, 147) = 12.69$ ,  $p < 0.01$ , accounting for 21 % of the variance in relationship satisfaction ( $R^2 = 0.45$ ). The results are presented in Table 3.

**Table 3. Summary of Regression predicting Relationship Satisfaction (N = 150)**

<i>Measure</i>	<i>B</i>	<i>SE B</i>	<i>Beta</i>
Ambivalence over emotional expression	-1.97	.71	-.23**
Negative Expression	1.46	.50	.24**
Gender	2.20	.79	.21**

Notes:  $R^2 = .21$  (Adjusted  $R^2 = .19$ ). \*  $p < .05$ ; \*\*  $p < 0.01$ .

## Discussion

The current study examined the relationships between self-reported levels and type of emotional expression, ambivalence over expression and relationship satisfaction. The results demonstrated that negative emotional expression, ambivalence over expression, and gender are the best predictors of relationship satisfaction, rather than any one variable alone.

### *Emotion Expression and Relationship satisfaction*

The findings support those from previous studies and indicate that individuals who are more satisfied with their relationships tend to be more emotionally expressive (Brody, 1999; King, 1993). Communication has often been identified as a key variable in marital adjustment (Gottman & Porterfield, 1981; Gaelick et al., 1985). These authors contend that marital adjustment requires one to be able to express feelings freely and openly.

There was no significant relationship between emotional expression and relationship satisfaction for the women in this sample. Similar to King's (1993) study, the men who tended to be more emotionally expressive were more satisfied with their relationships. This finding contradicts the accumulated literature on gender differences in emotional expression given that generally, women have been found to be more expressive and more confident about expressing positive and negative emotions (Blier & Blier-Wilson, 1989; Rauer & Volling, 2005). Gottman and Porterfield's (1981) study helps account for this somewhat unexpected gender difference by demonstrating that husbands' competence in sending and receiving nonverbal emotional cues to their wives was related to the overall satisfaction within the marriage more so than wives' competence. It is also possible that the men who responded to the survey were generally more expressive than men who chose not to participate in the current study.

The literature generally indicates that higher levels of positive emotional expression are correlated with increased marital satisfaction (Carstensen et al., 1995; Feeney, 2002; Gill et al., 1999). The results of this study did not replicate this finding. Rather, the current study demonstrated that the expression of negative emotion was important to relationship satisfaction. Contrary to prediction, the more participants expressed negative

emotions the more satisfied they were with their relationship. According to the negative confrontation model, some negative expression and confrontation can serve a positive function in marriage (Gill et al., 1999; Karney & Bradbury, 1997). If problems are not confronted head-on, they are likely to persist and escalate over time, thereby reducing the quality of the relationship. Thus, avoiding issues and not confronting one's partner about a problem can impede a couple's movement toward resolution. In other words, the easier it is for an individual to express negative emotions the more likely the individual is able to communicate and resolve problems. Gottman and Krokoff (1989) have similarly found a positive relationship between expression of anger and relationship satisfaction among married couples.

Previous studies on emotional expression investigated 'stronger' expression of negative behaviours such as blame, negative judgments, and demands (Gill et al., 1999; Gottman, 1986) and found that expressions of negative behaviours were inversely related to relationship satisfaction. The measure used in this study did not assess how emotion was expressed. Thus, while we found a positive relationship between negative expression and relationship satisfaction, it is important to know what and how negative emotion is expressed. Very intense expressions of negative affect may be detrimental for the relationship, whereas moderate levels of expression of negative affect may be productive for maintaining communication and result in a better quality of relationship (Gottman, 1986).

### *Ambivalence over emotional expression and relationship satisfaction*

The data on ambivalence over emotional expression and relationship satisfaction indicated an inverse correlation: the more ambivalent an individual was the less satisfaction they reported within the relationship. This suggests that individuals who are dispositionally ambivalent over expressing their emotions are less likely to experience satisfying relationships. They may be more likely to inhibit their emotions, and not communicate their needs. Conversely, they may express emotions and then regret it later. (Carstensen et al., 1995; Gill et al., 1999). However, it is not possible to infer a causal relationship as individuals, who have lower levels of relationship satisfaction, may be more ambivalent about expressing their emotions due to the nature of their relationship (King, 1993). In this study, unlike King's (1993), men's levels of ambivalence over emotional expression were not related to relationship satisfaction. This was in contrast with women for whom ambivalence played an important role. However, it is important to note that the sample of women in the current study was twice as large as the sample for men; thus, there may have been limited variance within the male sample to detect a significant relationship between the two factors.

There were several other limitations with this study. First, the findings are based on a small sample. Further, given that the data were collected through the university list-serv and the participants mainly resided in Canada, the results may not be generalizable across cultures. However, about one third of the participants identified themselves as being from a particular ethnic background, resulting in 25 different ethnic groups. In future studies, it would be worthwhile to examine cultural differences in the expression of emotion and ambivalence about expression and how these may be related to relationship satisfaction. Second, emotional expression was assessed via self-report measures, thus,

there may be a discrepancy between what people think they are expressing and what they are actually expressing. Countering this however, Rosenberg and Ekman (1994) found a high degree of consistency between participants' self-reported emotional experiences and observers' ratings of the quality of their emotions. The findings from their study support the view that there is substantial consistency between what the participants felt and what they actually expressed. Third, the measures of emotional expression and ambivalence are dispositional, and ignore the social context of expression, although there is some evidence that emotional expression is fairly consistent and remains relatively stable over time (Schuerger, Zarella, Hotz; 1989). In future studies it would be important to explore this question further to determine whether dispositional tendencies to express emotion influence the expression of emotion across different social contexts.

In future research it will be important to take account of the fact that measures of emotional expression and ambivalence do not account for the intensity of emotional expression or the style in which emotions are expressed. Given that moderate expressions of anger and disappointment were positively related to relationship satisfaction, it would be worthwhile to explore the relationship between intensity of expressed negative affect and the style of expression, for example the use of "I" statements reflecting feeling states versus statements of blame and complaint, and the quality of romantic relationships. Another important question to explore in future research is the relationship between people's attitudes and beliefs about expressing emotions and their style of expression. Furthermore, a wider range of instruments measuring intensity and types of emotions, people's attitudes toward expression of emotions, as well as using observational methods of assessing emotional expression would yield greater understanding of the role of emotional expression and ambivalence over expression in romantic relationships.

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## THEORETICAL REPORTS

### Understanding the Innovation-Friendly Institutional Environment: A Psychological Framework

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Innovation involves generation and implementation of novel and effective products such as devices and machines, processes, systems and the like. There is widespread acceptance that business and industry must innovate in order to prosper. However, managers lack a clear concept of how to foster innovation. Psychological theory offers helpful insights, but research has shown that the processes, personal properties and management behaviours that facilitate generation and implementation of novel products are often contradictory or paradoxical. This means that there are no simple universal principles of innovation-friendliness. A phase model of the generation and implementation of effective novelty solves the contradictions, but yields a confusing picture of how innovation can be fostered. Mapping psychological factors such as cognitive processes, personal properties, or motivation onto the phases yields a systematic and manageable overview of the situation, makes it possible to diagnose the strengths and weaknesses of a particular organization, and suggests remedial measures, thus offering a framework for both practice and research.

**Keywords:** creativity, creativity paradoxes, creativity phases, innovation, organizational environment, organizational ambidexterity, promoting innovation.

#### The Innovative Institutional Environment: Theoretical Insights from Psychology

Bledow et al (2009, p. 305) define innovation as the development and intentional introduction of new and useful ideas by individuals, teams, and organizations. The crucial idea is that innovation goes beyond mere generation of novelty to encompass putting the novelty into successful practice. The purpose of this article is to make a contribution to the development of a novel theoretical framework for research and practice on innovation in the sense just outlined: we will do this by proposing a theoretical model derived from psychological research on creativity, especially (a) the *Ps* approach (see for example Kaufman and Sternberg, 2010), (b) the paradoxes of creativity (e.g., Sawyer, 2006) and (c) the phase model of creativity (Cropley & Cropley, 2009).

In business, manufacturing, marketing and the like it has become almost axiomatic that innovation is the key to meeting the challenges of the early 21<sup>st</sup> century arising from technological advances, social change, globalization, and now the global financial crisis.

For instance, economic theory suggests that returns on investments in rich countries should have been lower during the second half of the twentieth century than during the first half, because the stock of capital was rising faster than the workforce. However, the fact is that they were considerably higher. The decisive factor that defeated the law of diminishing returns and added greatly to an explosion of human material welfare was the *addition to the system of new knowledge and technology*, i.e., innovation. In fact, at the turn of the present century innovation was accounting for more than half of economic growth (*Economist Technology Quarterly*, 2002, p. 13). Thus, the crucial question that must be answered is how to shape production, business, marketing or finance environments in ways that promote innovation.

### Models of innovation

Of course, organizational researchers have not been idle. Herzog (2008), for instance, has reviewed recent models of innovation in business and organizations, and Bledow et al (2009) have proposed a “dialectic” perspective. More traditional *business* models were largely based on Schumpeter’s (1942) Theory of Economic Development. These are characterised by their primary focus on innovation’s commercial and organizational aspects. Leifer et al (2000), for example, described it in terms of timelines: the ‘trajectory’ it follows, where in the process the idea generation and opportunity recognition occur, the degree of formality and linearity of the process, the nature of the players in the process, the organisational structures that support the process, and the resources and competencies required. Afuah (1998) linked new technological knowledge and new market knowledge leading to innovation to processes and people. Christensen, Anthony, & Roth (2004) reiterated the importance of resources (what a firm has), processes (how a firm does its work), and values (what a firm wants to do) in their RPV theory, and stressed that these define an organisation’s strengths and weaknesses in relation to the innovation process.

It may be said that these models view innovation through the lens of the business functions and processes needed to turn an idea into a commercial product. Business models of innovation give significant attention to the management of the innovation process within the business organisation, including such factors as the physical environment in which innovation takes place, the structure of the organisation engaging in innovation, and the traditions of the organisation. Such models frequently offer not only a descriptive model of the business of innovation, but also a diagnostic and prescriptive approach to the application of the model. Luecke and Katz (2003) offered, for example, a “Workplace Assessment Checklist” that allows managers to examine, inter alia, their leadership style; the diversity of thinking and learning styles among their staff; characteristics of their work groups; the psychological environment; and the nature of the physical workspace, to see if these are fostering the organisation’s ability to innovate, or hindering it. Higgins (1995) adopted a more extensive approach to organisational diagnosis examining characteristics across seven dimensions: Skills; Strategy; Structure; Systems; Style; Staff; Shared Values.

Such models of the innovation process often focus on organisational and environmental phenomena. However, writing from a business standpoint, Buzan (2007, p. vii)

made the link between innovation and human actors explicit when he stated that "... right now any individual, company or country wishing to survive in the twenty-first century must develop the brain's seemingly infinite capacity to create and to innovate." He also drew attention to initiatives in various countries to "raise the level of national creativity" as a means for ensuring growth in "today's increasingly competitive global marketplace." Florida (2004) tied the strength of the world's largest economy, the United States, directly to psychological aspects of the human actors by attributing its success to, among other things, its ability to attract creative people to work within its environment.

In recent years, as interest in a more psychological approach to innovation focused on the creativity of the human actors has increased, discussions in the mainstream creativity literature have become more practical, and have paid greater attention to the concrete results of creative processes. For instance, Horenstein (2002, p. 2) emphasized *useful* creativity involving "devices or systems that *perform tasks or solve problems* [emphasis added]." Burghardt (1995, p. 4) made the distinction even more explicit: He saw engineering and technological creativity as "creativity *with a purpose* [emphasis added]," whereas creativity in fine art and the like is "creativity *with no functional purpose* [emphasis added]." Creativity with a purpose is vital in the emergence of new products, machines, structures, methods and processes in areas such as engineering, production, marketing, finance, health care, agriculture, and even law enforcement, i.e., it is vital for innovation, for it is useful practical products – especially ones that can successfully be produced and/or marketed – that business and industry are interested in. We turn now to key ideas in creativity theory which offer prospects for working out a theoretical approach to the issue of how to foster innovation in organizations.

### Key ideas in creativity theory

The theoretical model of organizational innovation which will be presented below is based on three central ideas in creativity theory: (a) the Ps of creativity, (b) the paradoxes of creativity, and (c) the phases of creativity. These three ideas are presented in this section.

#### *The Ps of Creativity*

The traditional framework for looking at creativity in psychology is the 4 Ps approach, which focuses on the Person, the Process, the Product, and the influence of the surrounding environment (Press), as originally proposed by Barron (1955) and Rhodes (1961). However, Cropley and Cropley (2009) argued that the idea of Person is too general to serve as the basis for a differentiated discussion of non-cognitive factors in creativity, since it confounds personality characteristics (such as self-confidence, openness to novelty, or unorthodoxy), motivational states (such as willingness to take risks, drive for closure, or tolerance for ambiguity), and feelings (such as pleasurable anticipation versus anxiety in the face of incongruity, optimism versus pessimism, or the thrill of the chase versus trepidation). Other authors have argued for a componential model, Amabile (1996) for example separating skills, personal factors and motivation.

Research supports treating these factors separately, thus implying that they should not be lumped together. For instance, in a 30-year longitudinal study, Helson (1999)

showed that personal properties such as openness and flexibility are only favourable to creativity when they are accompanied by motivational states such as tolerance for ambiguity and optimism. In fact there are substantial empirical literatures supporting the view that creativity is related to personality traits (for a fairly recent overview see Batey and Furnham, 2006), motivation (see Kasof, Chen, Himsel and Greenberger, 2007) and mood/feelings (e.g., Baas, De Dreu, & Nijstad, 2008).

Accordingly, Cropley and Cropley sub-divided Person into *personal properties*, *personal motivation*, and *personal feelings*, thus looking at creativity from the point of view of a *six Ps* framework involving “Process,” “Personal properties,” “Personal Motivation,” “Personal Feelings,” “Product,” and “Press.” The manager’s task then seems disarmingly straightforward: Help people acquire mastery of the processes that lead to generation of effectively novel products and the insertion of such products into the organization’s activities, motivate people to carry out such processes, support personality traits that help them do this, make sure they feel good about developing effective novelty, recognize and acclaim “good” products, and provide appropriate rewards for such products.

### *The Paradoxes of Creativity*

However, as Anderson (1992, p. 40) pointed out, creativity “is still the most elusive weapon in an executive’s arsenal.” Identifying facilitatory or inhibitory processes, personal characteristics, motives, and feelings, and environmental conditions that promote creativity and its practical utilization to yield innovation turns out to be less straightforward than might have been hoped. Psychological research (e.g., Csikszentmihalyi, 2006) has shown that the human properties and environmental conditions involved are not necessarily universally favourable or unfavourable – something that is facilitatory under some circumstances may be inhibitory under others. Around 40 years ago Storr (1971) referred to this phenomenon as the “paradox” of creativity, and Cropley (1997) described creativity as a “bundle of paradoxes (p. 8).” Some of these paradoxes are presented in the balance of this section.

***Divergent vs. convergent thinking:*** For instance, it is almost universally accepted in the western world that creativity involves production of novelty. Indeed, some writers (e.g., Hausman, 1984) have argued that creativity is so novel that it is unprecedented and has no connection with anything that went before. Whereas, intuitively, production of such unprecedented novelty would be expected to require divergent thinking (e.g., seeing previously unnoticed problems, combining previously unlinked ideas, drawing apparently irrational conclusions), numerous modern writers (for a summary, see Cropley, 2006) have emphasized the importance of convergent thinking (e.g., learning and remembering what is already known, seeing compelling and logical connections, drawing strictly rational conclusions). This dichotomy can be thought of as involving on the one hand recognizing incongruity, or in its more general sense seeing problems, and on the other different strategies for reducing it.

Furthermore, new knowledge seems to be intimately connected with old knowledge: the Canadian Intellectual Property Office reported (2007) that 90% of new patents in that country were improvements of existing knowledge. In fact, Scott (1999) listed a substantial number of creativity researchers who give a prominent place to existing knowledge in creativity. Several writers (e.g., Savransky, 2000; Sternberg, Kaufman &

Pretz, 2002) have suggested processes through which existing knowledge can be converted into effective novelty. On the other hand, Gardner (1993) reported that the relationship between creativity and existing knowledge is an uneasy one, with knowledge necessary for creativity, to be sure, but also inhibiting it, for instance by pre-disposing people to work along an existing pathway, while Goncalo, Vincent and Audia (2010) pointed out that present creativity can block future creativity, for instance by pre-empting the need for it.

For the sake of brevity and simplicity, this paradoxical relationship between existing knowledge and creativity will be presented here in the form of a bipolar contrast between a family of cognitive processes that can be subsumed under the heading “divergent” (e.g., making broad associations, recognizing surprising links, making unusual suggestions) and another family of essentially “convergent” processes (e.g., homing in on the best answer, testing the practical effectiveness of a trial solution, getting things just right). Both these are involved in creativity, even though they appear to be diametric opposites. This paradox of the cognitive processes involved in creativity will be presented here via the shorthand of “divergent vs. convergent thinking.”

**Personal properties:** A similar paradox is seen in the case of personal properties. Csikszentmihalyi (1996) referred to the role in creativity of a “complex” personality that combines contradictions such as sensitivity occurring together with toughness, or high intelligence with naiveté. Helson (1983) pointed out that the creative personality seems to be simultaneously stereotypically “masculine” (autonomous, self-confident, tough) and also stereotypically “feminine” (sensitive, intuitive, responsible). According to McMullan (1978) there are, in fact, seven broad polarities in the personal properties that facilitate creativity: These include openness vs. drive for closure, acceptance of fantasy combined with maintenance of a strong sense of reality, a critical and even destructive attitude vs. constructive problem-solving, cool neutrality combined with passionate engagement, self-centeredness coexisting with altruism, self-criticism and self-doubt together with self-confidence, tension and concentration side by side with relaxedness. These two poles are summarized here as involving the bipolar dimension of “innovative” vs. “adaptive” personal properties, both of which are involved in creativity.

**Motivation:** Many studies have confirmed that *motivation* plays an important role in creativity. To take a single example, Park and Jang (2005) investigated motivation for scientific creativity by interviewing both theoretical and applied physicists. They concluded that, in addition to feelings such as interest or curiosity, these scientists were also affected by what they called *cognitive motives* – essentially deriving from their knowledge about phenomena in the external world. In particular, they identified (a) recognition of gaps in existing knowledge (incompleteness), (b) a drive to round out recently emerging novelty (development), and (c) identification of contradictions in accepted knowledge (conflict/discrepancy) as cognitive motives for creativity. They gave examples from statements by Einstein that indicate he experienced *all three* of these motivating forces, but at different times.

It is often assumed that only intrinsic motivation is favourable for creativity. This was the early position of Amabile (e.g. 1983). However, Kasof, Chen, Himsel and Greenberger (2007) reported that some psychological research shows that extrinsic motivation has a negative effect, some that it has a positive effect, and some that the effects

are mixed. Indeed Amabile herself (e.g., Collins & Amabile, 1999) has accepted that extrinsic motivation is not necessarily fatal to creativity. Eisenberger and Byron (2011) recently summarized research on intrinsic and extrinsic motivation and showed that both can foster creativity, depending on the kind of task (Product in our terms) and way the task is presented and the kind of performance (e.g., generation of novelty vs. generation of a large number of products) that is rewarded (analogous to Press in our terms).

Unsworth (2001) distinguished four patterns of motivation in creativity. The person can be driven by external pressure to solve problems defined by other people (she called this “responsive” creativity – the most clearly externally-motivated creativity), the person may be motivated by external pressure to solve self-discovered problems (“expected” creativity – a mixed kind of motivation), the person may be self-motivated but the problem may be defined externally (“contributory” creativity – a second pattern of mixed motivation) and finally, the person may be self-motivated to solve self-defined problems (“proactive” creativity – the most clearly internally-motivated form). The crucial point for our purposes here is that all four of these constellations can lead to creativity. Reducing this to a bipolar dimension, we distinguish between “proactive” motivation at one pole (internal motivation and self-discovered problems) and “reactive” motivation at the other (external motivation and imposed problems), with various “mixed” constellations between the poles. Both of these can lead to creativity, and thus, a further paradox arises.

**Feelings:** In an overview of research on mood and creativity, Kaufman (2003) showed that mood is a precursor to creativity, accompanies it, and results from it. Furthermore, despite the widespread belief that positive mood is necessary for creativity and negative mood is fatal to it, Baas, De Dreu, and Nijstad (2008) showed in a meta-analysis that research indicates that there are at least three facets to the mood–creativity link: hedonic tone (positive vs. negative feelings), level of activation (activating vs. deactivating effect of mood), and effect on focus (promotion vs. prevention), or some combination of these. They also divided creative performance into idea generation (multiple ideas), insight (a single idea) and creative products (literary works, other artistic products, designs, work performance, etc). They showed that some moods affect certain aspects of creativity but not other aspects, and that some moods affect creativity more than others. There was no universal tendency for positive affect to enhance creativity better than negative mood: positive moods do indeed lead to more creativity when the task is framed as enjoyable and intrinsically rewarding, but they lead to less creativity when the task is framed as serious and extrinsically rewarding, and performance standards are emphasized. Thus, a new dichotomy emerges: both “generative” feelings such as the “thrill of the chase” when facing a challenge, the feeling of excited anticipation when generating novelty, or the feeling of satisfaction after achieving an effectively novel product, but also “conserving” feelings such as anxiety in the face of uncertainty, frustration when progress is impeded, or disappointment when a product is not validated play a role in creativity.

**Product:** Turning from “mere” production of novelty to the actual application of the creativity in business, manufacturing, marketing, and the like, it is apparent that, although products must be novel, they also have to function as intended and be accepted

by potential users or customers. Christensen (1997) gave examples of highly effective (and sometimes ultimately successful) novel products that nonetheless led to disasters for otherwise successful and well-run “great firms,” because customers rejected them. As Besemer (2006, p. 171) put it in a down-to-earth way: “consumers don’t like too many surprises.” Hence, in order to go beyond mere generation of novelty to yield innovation, creative products need to be simultaneously radical (novel, original and even surprising), and yet routine (in the sense, for instance, of reliable and effective). This yields the bipolar dimension “radical” vs. “routine” products.

**Environmental Press:** In a research program stretching over more than 30 years and largely based on daily logs or diaries kept by managers, Amabile (e.g., 1996) showed that there was a complex interaction between Press (management pressure) and creativity. Where the task involved carrying out pre-defined steps, a *high* level of environmental demand facilitated performance, i.e., high Press. However, where the task involved exploring possibilities, a low level of demand was facilitatory. Thus, sometimes giving people their head may be most favourable to creativity (i.e., low Press), at other times, however, insisting that they produce something effective within time constraints may be more appropriate. Thus the final paradox involves the simultaneous importance of both high and low managerial demand.

The six paradoxes of creativity are summarized in Table 1. They are stated there in bipolar terms in order to make the paradoxical nature of each social/psychological dimension strikingly clear. The crucial point is that both poles are important for innovation, even though they may seem to be mutually incompatible, i.e. even though this is paradoxical.

**Table 1. Examples of paradoxical aspects of the six Ps of innovation**

<i>P</i>	<i>Paradox</i>	
Process	<i>Divergent Thinking</i>	vs. <i>Convergent Thinking</i>
	Involves: <ul style="list-style-type: none"> <li>- conceptualizing a situation broadly</li> <li>- asking unexpected questions</li> <li>- making remote associations</li> <li>- seeing unexpected links</li> <li>- finding problems</li> <li>- restructuring problems</li> <li>- generating solution criteria</li> <li>- communicating a situation to others in a loose and general way</li> </ul>	Involves: <ul style="list-style-type: none"> <li>- conceptualizing a situation precisely</li> <li>- accepting the way a situation is presented</li> <li>- reapplying the already known</li> <li>- recognizing familiar patterns in material</li> <li>- working on the problem as presented</li> <li>- accepting existing problem definitions</li> <li>- working according to existing criteria</li> <li>- communicating a situation to others clearly and precisely</li> </ul>
Personal properties	<i>Innovative personality</i>	vs. <i>Conforming personality</i>
	A person is: <ul style="list-style-type: none"> <li>- tolerant of ambiguity</li> <li>- flexible</li> <li>- independent</li> <li>- non-conforming</li> <li>- inner-directed</li> <li>- open-minded</li> </ul>	A person is: <ul style="list-style-type: none"> <li>- eager to eliminate ambiguity</li> <li>- inclined to do things in known ways</li> <li>- eager to win the agreement of others</li> <li>- accepting of prevailing norms</li> <li>- inclined to go along with others</li> <li>- closed-minded</li> </ul>

<i>P</i>	<i>Paradox</i>		
Motivation	<i>Proactive motivation</i>	vs.	<i>Reactive motivation</i>
	A person is driven by: <ul style="list-style-type: none"> <li>- the urge to push ahead</li> <li>- risk taking</li> <li>- low drive for closure</li> <li>- drive to seek the new/surprising</li> <li>- the urge to generate variety</li> </ul>		A person is driven by: <ul style="list-style-type: none"> <li>- the urge to cooperate with others</li> <li>- risk avoidance</li> <li>- drive for rapid closure</li> <li>- drive to avoid the new/surprising</li> <li>- the urge to get it right</li> </ul>
Feelings	<i>Generative feelings</i>	vs.	<i>Conserving feelings</i>
	A person feels: <ul style="list-style-type: none"> <li>- pleasure in finding a novel solution</li> <li>- excitement in the face of uncertainty/a delayed solution</li> <li>- optimism when problems arise</li> <li>- the desire to do more when successful</li> <li>- enjoyment of the challenge when unsuccessful</li> </ul>		A person feels: <ul style="list-style-type: none"> <li>- pleasure in already having an easy solution</li> <li>- anxiety in the face of uncertainty/a delayed solution</li> <li>- pessimism if problems arise</li> <li>- relief and feeling of closure when successful</li> <li>- disappointment and discouragement when unsuccessful</li> </ul>
Product	<i>Radical product</i>	vs	<i>Routine product</i>
	A product is: <ul style="list-style-type: none"> <li>- novel</li> <li>- elegant</li> <li>- seminal</li> <li>- germinal</li> </ul>		A product is: <ul style="list-style-type: none"> <li>- relevant (matches task specification)</li> <li>- correct</li> <li>- effective</li> </ul>
Press	<i>Low management demand</i>	vs.	<i>High management demand</i>
	A manager: <ul style="list-style-type: none"> <li>- defines tasks broadly</li> <li>- assigns responsibilities loosely</li> <li>- offers opportunities for acquiring broad knowledge and skills</li> <li>- makes time available for thinking things over</li> <li>- is open to novelty</li> <li>- rewards generation of novelty</li> <li>- delays sanctions against lack of success</li> <li>- respects and protects those who do not conform</li> <li>- stands up to external pressure</li> </ul>		A manager: <ul style="list-style-type: none"> <li>- defines tasks narrowly</li> <li>- assigns highly specific responsibility</li> <li>- insists on deep specialized knowledge</li> <li>- demands rapid solutions</li> <li>- is suspicious of novelty</li> <li>- rewards “not rocking the boat”</li> <li>- quickly sanctions lack of success</li> <li>- sidelines or ridicules those who do not conform</li> <li>- gives in to external pressure</li> </ul>

### *The Phase Approach*

The equal importance in innovation of mutually contradictory processes, motivational states, personal properties, and feelings, and the importance of products being both radical and yet also conventional (fitting in with what already exists), as well as the need for both high and low demand in the environment, raises considerable difficulties for people such as managers who wish to establish an environment that will promote production and exploitation of effective novelty (i.e. innovation). They must promote, for instance, accuracy and effectiveness, because new products must work properly or their firm will risk serious harm. Accuracy and effectiveness involve convergent thinking, adaptive



personal properties, conserving feelings, extrinsic motivation, routine products, and high environmental demand. However, innovation-facilitating managers must also foster generation of variety and perception of possible applications of such novelty, which involve divergent thinking, innovative personal properties, generative feelings, intrinsic motivation, radical products, and low environmental demand. Thus, managers face the seemingly impossible task of combining fire and ice.

The answer to how this is to be done seems to us to be provided by a phase approach: Contradictory poles of the paradoxes really are both of central importance, but *not simultaneously* – apparently contradictory processes, sub-products, human factors, or environmental presses play their key role *at different points* in the process of production and implementation of effective novelty (e.g., Csikszentmihalyi, 2006). The influence of certain environmental conditions waxes and wanes in importance depending on what phase of the process is currently active. Particular human properties may foster production of effective novelty in one phase, but inhibit it in another. For instance, the personal trait of non-conformity or the process of unfettered thinking may together foster seeing problems and getting novel ideas about what to do about them in situations where coming up with something new is required, but inhibit painstaking verification of the value of ideas or effective communication in situations where the primary task is to link novelty to the requirements of the real world in ways that are understandable and acceptable to users (such as marketing people or customers).

What is needed is an approach that sorts out the situation in a systematic way. A very early relevant study was that of Prindle (1906). He showed that successful inventions were developed in a series of steps, each step building on the one before, but with different things happening in each step. Another early study was that of Rossman (1931). He also studied inventors and identified seven steps or phases in the emergence of a workable new idea: Problem Awareness, Problem Analysis, Survey of Information, Formulation of Solutions, Analysis of Solutions, Invention of a New Solution and Testing of New Ideas. The “classical” approach is that of Wallas (1926), who originally proposed seven phases in the development of a creative product, although over the years this came to be reduced to four: Information, Incubation, Illumination, and Verification. In his Creative Problem Solving model Parnes (1957) identified five phases: Fact-Finding, Problem-Finding, Idea-Finding, Solution-Finding (Idea Evaluation) and Acceptance-Finding (Idea Implementation). More recently, Barron (1988) also argued for four phases (Conception, Gestation, Parturition, and Bringing up the Baby).

### *An integrative framework*

As Feldhusen (1995) put it, creativity always arises from a “knowledge base”, and more recent writers such as Ward and Kolomyts (2010, p. 94) differentiate what this means to some extent by referring to the importance of “various types of information, such as specific category exemplars, general knowledge, images, source analogs, and so on.” Thus, a phase in which such information is acquired logically belongs to the steps in innovation. However, it is also necessary to go beyond mere acquisition of knowledge and become aware of discrepancies, gaps and the like in the field, i.e., to recognize, find or even invent or construct problems (Kozbelt, Beghetto & Runco, 2010). This implies

that mere possession of information is not enough, and that generation of novelty needs to be “activated” by problem awareness. We thus refer to a phase of “Activation”. In the case of practical innovation, there are further elements too. The solution has to be made available to potential users, and these have to accept it. Thus, in our view Wallas’s four phases need to be supplemented by three additional ones, yielding a model with seven phases, which Cropley and Cropley (2009) labelled “Preparation” (acquiring familiarity with a field), “Activation” (becoming aware of or constructing problems), “Generation” (producing potential solutions), “Illumination” (recognizing the best idea), “Verification” (confirming that it is the best), “Communication” (passing on the solution to the relevant field such as marketers or consumers) and “Validation” (confirmation by the field that the solution works or is acceptable).

Of these phases, the first five involve acquiring information, seeing problems, generating novelty, recognizing good solutions and confirming them, while the last two involve applying or implementing the novelty in a practical setting, and thus constitute the phases where creativity fuses with the external world to become innovation. These phases do not necessarily form a lock-step progression of completely distinct stages. There may well be false starts, early break-offs and restarts, jumps over a particular phase, or various interactions such as the result of one phase forcing a return to an earlier one but with a different starting point derived from the now abandoned phase. Shaw (1989) referred to such interactions as involving “loops.”

### **Mapping psychological factors, phases and paradoxes onto each other**

The combination of seven phases and six psychological factors yields  $6 \times 7 = 42$  cells each involving a particular pairing of a phase and a psychological factor – we call these *nodes*. Twenty eight of these nodes describe interactions between phases of the innovation process (Preparation, Activation, Generation, Illumination, Verification, Communication, Validation) and particular *psychological* factors (cognitive processes, personal properties, personal motivation and personal feelings). Seven nodes refer to combinations of product (or by-product) and phase, and seven refer to environmental press (management behaviour) in the phase in question. These 42 nodes provide a highly differentiated “map” of the process of innovation in which the interaction of phases and social/psychological factors is taken into account. The 42 nodes are shown in Table 2.

In Table 2 we take the matter further by specifying the process, personal traits, motivation, feelings and environmental press we believe are most favourable to innovation in each node. Thus, for instance, in the phase of Generation, divergent thinking, proactive motivation, innovative personal traits, and generative feelings define what we believe is the *ideal* constellation of psychological properties for generative activities. In our view, these would ideally be supported by low management pressure in order to promote this aspect of innovation.

Table 2. Core elements in the phases of innovation

Phase \ Element	Process	Motivation	Personal properties	Feelings	Product	Press
Preparation	Convergent thinking	Mixed Motivation	Conforming personality	Conserving feelings	Routine product	High demand
Activation	Divergent thinking	Proactive Motivation	Innovative personality	Generative feelings	Radical product	Low demand
Generation	Divergent thinking	Proactive Motivation	Innovative personality	Generative feelings	Radical products	Low demand
Illumination	Convergent thinking	Proactive Motivation	Innovative personality	Generative feelings	Radical product	Low demand
Verification	Convergent thinking	Mixed Motivation	Conforming personality	Conserving feelings	Routine product	High demand
Communication	Mixed	Reactive Motivation	Adaptive personality	Conserving feelings	Routine product	High demand
Validation	Convergent thinking	Reactive Motivation	Adaptive personality	Conserving feelings	Routine product	High demand

In the phases of Activation and Generation thinking divergently is of primary importance, but in the phases of Validation and Verification convergent thinking may well be vital. To take another example, a highly demanding management style may facilitate innovation in the phases of Communication and Validation, but inhibit it during Preparation, Activation, and Generation. When the dichotomies presented in Table 1 are systematically mapped onto the 42 nodes the result is a differentiated model of the creativity/innovation process that specifies more precisely: (a) the sequence of steps (phases) leading to an innovation (*process*); (b) the different mental actions that are central to each step; (c) what *personal properties*, *personal motives*, and *personal feelings* are of central importance in each step (*person*); and (d) what kind of sub-*product* the actors need to generate in each step. Armed with this insight, the model then identifies (e) environmental properties – especially management behaviours (*press*) – that will either inhibit or foster innovation in each phase of the process.

It is important to note that the entries in each cell (for instance “convergent thinking” in the cell specifying the core process in the phase of Preparation) are not meant to imply that the process, personal property, motivational state, pattern of feelings, intermediate product or kind of management press mentioned in a cell is exclusively involved in the phase in question. For instance, in the phase of Preparation divergent thinking (making unexpected combinations, seeing surprising implications, etc) may also play a role, in addition to the convergent thinking (acquiring factual information, reasoning logically) mentioned in the table. However, the process of convergent thinking is of *predominant* importance in this cell: The main thing here is to acquire broad and accurate mastery of what is already known. In the same way, in the phase of Generation, a certain degree of pressure from the environment to produce a result (high environmental demand) may also be facilitatory, in addition to the low demand mentioned in Table 2, but the *core* quality of the environment in this phase is that it provides freedom from pressure to find a quick solution (low demand).

## Usefulness of this approach

We see two kinds of use for the model just presented. The first involves its application as a source of research questions. It must be admitted that the specific configurations listed in the cells of Table 2 as “ideal” are partly intuitive in origin, so that the first research task would be to provide better evidence of the accuracy of these contents. A number of further research questions arise: How does experience in one phase affect behaviour in a later one? When is the right time to switch into a new phase? How could an individual, a group or a manager recognize that it is time to switch? What kind of training would be needed to teach people how to see the need to switch and to do it? It is known, for instance (e.g., Rietzschel, Nijstad, & Stroebe, 2010) that even problem-solving groups which have successfully generated novel ideas not infrequently have difficulty picking the best ideas from among the ones they have just generated. Using the terminology presented here, we would describe the problem as involving switching from Generation to Illumination and Verification, and would “diagnose” such groups as experiencing difficulty in switching to *convergent* thinking. Special training may well be needed to learn to make this switch.

The model also offers promise of application in practice, for instance for helping organisations to become more innovative. Our approach is “diagnostic”; our purpose is not anointing the ideal organization but assessing the relative strength/weakness of the various nodes in a particular organization. For instance an organization might be good at identifying problems in existing circumstances, but poor at building up staff members’ willingness or ability to produce novel ideas for dealing with such problems. It is also possible to focus on phases: For instance an organization might be good at evaluating and communicating novel ideas to customers, but poor at promoting conditions leading to the generation of such ideas.

The model also provides a more person-centered vocabulary for discussing what is actually happening at any stage of the innovation process. The possibility of saying more precisely what is going on, what is needed, what should be changed, and so on, would be a considerable help in improving actions during the innovation process. This could involve the following:

1. Mapping of the current activities of an organization onto the sequence of phases required for innovation;
2. Identification of the social-psychological dimensions that are favourable to innovation within any given phase.
3. Diagnosis of an organization’s strengths and weaknesses in each node in the innovation process.
4. Analysis and optimization of activities to maximize the outcomes of each phase of innovation.

What is called for in this connection is an instrument for assessing organizations’ strengths and weaknesses in the various phases (such as Generation, Verification, or Communication), on the different social-psychological dimensions (e.g., Process, Motivation or Press), or in the various combinations of the two, which we refer to as “nodes” (e.g., Motivation in the phase of Intuition, or Feelings in the phase of Communication). The development of such an instrument is one of our current projects.

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