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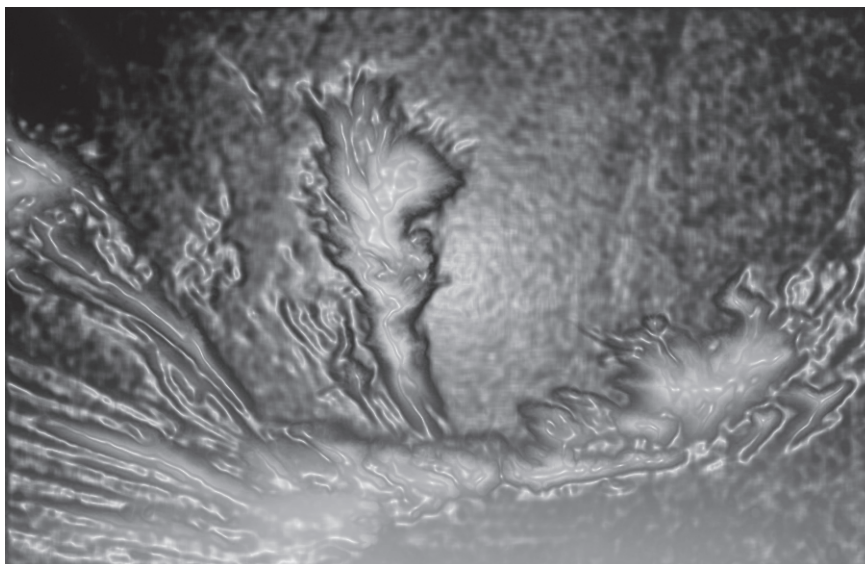


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## Contents

Editorial .....	4
THEORETICAL REPORTS.....	6
A New Approach to Leadership: WICS <i>Robert J. Sternberg</i> .....	6
Underreporting in Sexual Assault: A Review of Explanatory Factors <i>Theresa C. Kelly and Lana Stermac</i> .....	30
REPORTS OF EMPIRICAL STUDIES.....	46
The Effects of Material Reward on Artistic Creativity, Inkblot Perception, and Emotional Functioning in Art Major University Students <i>Maria E. Aguilar-Vafaie, Mark A. Runco</i> .....	46
Humorous Personality: Relationship to Stress and Well-being <i>Ieva Stokenberga</i> .....	70
Job Applicants' Attraction to Declared Family-Friendly Employment Policy: An Intergroup Approach <i>Sanita Šaitere</i> .....	85
Mourning Experiences, Risks and Possibilities in Representations of Bereaved Women in Latvia: A Qualitative Study <i>Kristīne Maslovska, Solveiga Miežītis</i> .....	96
Children's Narrative Attachment Representations in Relation to Experience of Abuse <i>Laura Pirsko</i> .....	112
Psychometric Properties of Classmates' Friendship Relationships Questionnaire <i>Tatjana Turilova-Miščenko, Malgožata Raščevska</i> .....	129
REPORTS WITH IMPLICATIONS FOR PRACTICE .....	141
Counselling Migrants: An "Internal" Approach <i>Arthur Cropley</i> .....	141
Challenges and Advances in the Treatment and Prevention of Eating Disorders in Adolescence <i>Niva Piran</i> .....	149
Notes on Authors.....	159
Notes for authors .....	162

## Editorial

This issue presents theoretical, practice related and research based reports on a wide variety of topics. The theoretical and practice related reports address topics that are currently of social concern and will serve to inform practitioners and stimulate research in the Baltic countries.

Sternberg introduces a new perspective on effective leadership as a synthesis wisdom, creativity, and intelligence focussing on how these personal characteristics impact on stories of leadership.

Kelly and Stermac review the factors found to be related to underreporting of sexual assault focussing on the literature on rape myth acceptance, as well as the response of the criminal justice system and the availability of community resources to the victims.

Piran presents an overview of the challenges and advances in the treatment and prevention of eating disorders in adolescence. This report focusses on problematic issues associated with the diagnosis, treatment, and prevention of this increasingly prevalent problem in Western countries. Cropley addresses a very timely issue, that of the psychological adjustment of migrants into and out of the Baltic countries, both in terms of preparing people for the decision to emigrate and coping upon return to the home country.

The research studies reported in this issue involve a practical contribution by adapting or creating new assessment instruments for research and clinical use.

In a qualitative study of women's representations of mourning experiences Maslovska and Miežītis derive thematic categories of grieving dynamics from bereaved participants' narratives for use in therapeutic interviews. Pirska in her study of children's attachment related narrative themes associated with emotional and or physical abuse in the family introduces a new coding schema for the evaluation of the Rochester Parenting Stories narratives.

Miščenko-Turilova and Raščevska establish the validity of the Classmates' Friendship Relationships Questionnaire for Latvian school children. Stokenberga in her study of the relationship of humour to stress and well-being in undergraduates provides cross-cultural validation for the Humour Style Questionnaire in Latvia.

Finally, two studies involving expectations about the effect of rewards yielded unexpected results. The study by Aguilar-Vafae and Runco on the effects of material reward on artistic creativity yielded complex results and suggested a heightened affective sensitivity to rewards. Šaitere's study of declared family-friendly employment policy on the perceived organizational attraction to applicants yielded negative findings thus emphasizing the importance of considering the cultural context in relation to assumptions about social expectations.

We wish to thank the Editorial Board members who over the years have given so generously of their time and have supported the journal by refereeing the manuscript submissions and helping with language corrections. We would also like to thank Pauls Legzdiņš for his contribution.

Once more, we wish to thank you, our readers for your interest and urge you to contribute papers for future issues of our journal.

Solveiga Miežītis  
Maļgožata Raščevska  
Editors

## THEORETICAL REPORTS

### A New Approach to Leadership: WICS

Robert J. Sternberg

Tufts University

This article presents a new approach to leadership, WICS, and relates it to other approaches. Effective leadership is viewed as a synthesis of wisdom, creativity, and intelligence (WICS). It is in large part a decision about how to marshal, deploy, and monitor these resources. One needs creativity to generate ideas, academic intelligence to evaluate whether the ideas are good, practical intelligence to implement the ideas and persuade others of their worth, and wisdom to balance the interests of all stakeholders and to ensure that the actions of the leader seek a common good. The structures and processes underlying WICS work in concert to produce and maintain stories of leadership. These stories in turn enable leaders to fulfill their mission in leading followers. Good and effective leaders generate stories that fit the needs of their followers but also help to achieve a common good.

**Key words:** leadership, wisdom, creativity, intelligence.

#### The WICS Approach to Leadership

Leadership is a major basis for success in virtually any organization (Mumford, Zaccaro, Hardeing, Jacobs, & Fleishman, 2000). Research on leadership seeks to uncover what the bases of successful leadership are (Bennis, 2007; Hackman & Wageman, 2007). I have proposed an approach called WICS (Sternberg, 2005, 2007, 2008a, 2008b). The WICS approach proposed here draws on what I believe is the best of existing approaches, including trait, situational, behavioral, contingency, and transformational approaches. In this article, I first present WICS then relate it to past approaches. Finally, I draw conclusions.

#### The Nature of WICS

WICS is an acronym that stands for wisdom, intelligence, and creativity, synthesized (Sternberg, 2003b). The approach attempts to show how good and successful leadership involves the synthesis of the three qualities. As a matter of definition, I define “leadership” as making a positive and meaningful difference to the world, at whatever level. I define “good leadership” as leadership that is positive and also is perceived as positive by stakeholders. And I define “successful leadership” as leadership that effects the changes a group or organization needs in order to better itself.

In leadership, creativity is used to generate stories that serve as a focal point for followers who are trying to understand leaders’ goals. When followers do not under-

stand the story underlying the work of the leader they often become confused and feel that the leader is aimless or confused; when they do not like the story they are likely to feel that the leader is off course. At the center of the WICS approach is intelligence, traditionally defined as the ability to adapt to the environment (Cianciolo & Sternberg, 2004; Wechsler, 1939). According to the approach used here, successful intelligence is the ability to attain goals in life, given one's sociocultural context, by adapting to, shaping, and selecting environments, through a balance of analytical, creative, and practical skills (Sternberg, 1997). Underlying this ability are fundamental executive processes, or "metacomponents" (Sternberg, 1985): recognizing the existence of a problem, defining and redefining the problem, allocating resources to the solution of the problem, representing the problem mentally, formulating a strategy for solving the problem, monitoring the solution of the problem while problem solving is occurring, and evaluating the solution to the problem after it has been solved. Analytical intelligence is involved when these processes are applied to fairly abstract problems that nevertheless take a relatively familiar form (e.g., intelligence-test items). Creative intelligence is involved when the processes are applied to relatively novel tasks and situations. Practical intelligence is involved when one applies the processes to everyday problems for purposes of adaptation to, shaping, and selection of environments.

Creativity is the ability to formulate and solve problems so as to produce solutions that are relatively novel and high in quality (Amabile, 1996; Sternberg & Lubart, 1995). Creativity involves creative intelligence in the generation of ideas, but it also involves more, in particular, knowledge; a desire to think in novel ways; personality attributes such as tolerance of ambiguity, propensity to sensible risk taking, and willingness to surmount obstacles; intrinsic, task-focused motivation; and an environment that supports creativity (Amabile, 1996; Sternberg & Lubart, 1995). At the base of creativity, again, are the metacomponents. Crucial to creativity are creative-intellectual skills in recognizing and finding good problems to solve, and then defining and redefining the problems until they are understood in a way that allows a novel solution. Creative individuals are good problem finders who devote their resources to solving problems that are worth solving in the first place. Intelligent individuals are good problem solvers, but they do not necessarily devote their resources to solving problems that are important to solve. Analytical and practical intelligence, and not just creative intelligence, are important to creativity. Analytical intelligence is used to determine whether one's creative solutions to a problem are good solutions, and practical intelligence is used to implement the solutions and to convince others that one's solutions are, indeed, good ones that they should heed.

Wisdom is the ability to use successful intelligence, creativity, and knowledge toward a common good by balancing one's own (intrapersonal) interests, other people's (interpersonal) interests, and larger (extrapersonal) interests, over the short and long terms, through the infusion of values, in order to adapt to, shape, and select environments (Sternberg, 1998b). Thus, wisdom involves both intelligence and creativity, but they are applied not just to serve one's own ends, but also, the ends of other people and of larger interests as well. At the base of wisdom, as of intelligence and creativity, are the metacomponents. One needs to recognize when problems, such as injustice exist, and to define them in a way that is respectful of multiple points of view (dialogical thinking).

One then needs to solve them in ways that take into account the needs of all stakeholders as well as the resources at hand.

Intelligence, wisdom, and creativity build on each other. One can be intelligent without being creative or wise. To be creative, one must be intelligent at some level, using one's creative intelligence to formulate good problems, one's analytical intelligence to ensure that the solutions to the problems are good, and one's practical intelligence to persuade other people of the value of one's creative ideas; but one need not be wise. To be wise, one must be both intelligent and creative, because wisdom draws upon intelligence and creativity in the formulation of solutions to problems that take into account all stakeholder interests over the short and long terms.

WICS holds that the best leaders exhibit all three of intelligence, creativity, and wisdom (Sternberg, 2005, 2007). It also holds that these skills can be developed. Now consider each of creativity, successful intelligence, and wisdom in more detail. They are presented in this order because usually, generation of ideas comes first, then analysis of whether they are good ideas, and then, ideally, application of the ideas in a way to achieve a common good.

### **WICS: Wisdom, Intelligence, and Creativity, Synthesized**

The approach proposed here views leadership as in large part a matter of how one formulates, makes, and acts upon decisions (Sternberg, 2003b, 2004b, 2007; Sternberg & Vroom 2002). According to this approach, the three key components of leadership are *wisdom*, *intelligence*, and *creativity*, *synthesized* (WICS). The basic idea is that one needs these three components working together (synthesized) in order to be a highly effective leader.

One is not “born” a leader. In the framework of WICS, one can speak of “traits” of leadership (Zaccaro, 2007; Zaccaro, Kemp & Bader, 2004), but properly, they should be viewed as flexible and dynamic rather than as rigid and static. Wisdom, intelligence, and creativity are, to some extent, modifiable forms of developing expertise (Sternberg, 1998a, 1999b) that one can decide to utilize or not in leadership decisions. Leadership involves both skills (i.e., facility in thought, action, and the translation of thought into action) and dispositions (i.e., attitudes toward oneself, others, and tasks). The dispositions are at least as important as the skills.

### **Creativity**

Creativity refers to the skills and dispositions needed for generating ideas and products that are (a) relatively novel, (b) high in quality, and (c) appropriate to the task at hand (see Sternberg, 1999a). Creativity is important for leadership because it is the component whereby one generates the ideas that others will follow. A leader who lacks creativity may get along and get others to go along—but he or she may get others to go along with inferior or stale ideas. Creativity involves both processes and contents. The processes operate on the contents, which in the case of leadership, are stories. Both processes and contents are considered below.



## Processes of Creativity

### Leadership as a Confluence of Skills and Dispositions

A confluence model of creativity (Sternberg & Lubart, 1995, 1996) suggests that creative people show a variety of characteristics. These characteristics represent not innate abilities but, rather, largely decisions and ways of making these decisions (Sternberg, 2000a). In other words, to a large extent people decide to be creative. They exhibit a creative attitude toward leadership. The elements of a creative attitude are characterized in Table 1. These characteristics are common to many views of creativity (see essays in Sternberg, 1999a).

*Table 1. Creative Skills and Attitudes Underlying Successful Leadership*

- *Problem redefinition* Creative leaders do not define a problem the way everyone else does, simply because everyone else defines the problem that way. They decide on the exact nature of the problem using their own judgment. Most importantly, they are willing to defy the crowd in defining a problem differently from the way others do (Sternberg, 2002a; Sternberg & Lubart, 1995).
- *Problem analysis* They are willing to analyze whether their solution to the problem is the best one possible.
- *Selling solutions.* They realize that creative ideas do not sell themselves; rather, creators have to decide to sell their ideas, and then decide to put in the effort to do so.
- *Recognizing how knowledge can both help and hinder creative thinking* They realize that knowledge can hinder as well as facilitate creative thinking (see also Frensch & Sternberg, 1989; Sternberg, 1985). Sometimes leaders become entrenched and susceptible to tunnel vision, letting their expertise hinder rather than facilitate their exercise of leadership.
- *Willingness to take sensible risks* They recognize that they must decide to take sensible risks, which can lead them to success but also can lead them, from time to time, to fail (Lubart & Sternberg, 1995).
- *Willingness to surmount obstacles* They are willing to surmount the obstacles that confront anyone who decides to defy the crowd. Such obstacles result when those who accept paradigms confront those who do not (Kuhn, 1970; Sternberg & Lubart, 1995).
- *Belief in one's ability to accomplish the task at hand* This belief is sometimes referred to as self-efficacy (Bandura, 1996). The leader believes that he or she is able to do the job at hand.
- *Willingness to tolerate ambiguity* The leaders recognize that there may be long periods of uncertainty during which they cannot be certain they are doing the right thing or that what they are doing will have the outcome they hope for.
- *Willingness to find extrinsic rewards for the things one is intrinsically motivated to do* Creative leaders almost always are intrinsically motivated for the work they do (Amabile, 1983, 1996). Creative leaders find environments in which they receive extrinsic rewards for the things they like to do anyway.

- *Continuing to grow intellectually rather than to stagnate* Effective leaders do not get stuck in their patterns of leadership. Their leadership evolves as they accumulate experience and expertise. They learn from experience rather than simply letting its lessons pass them by.

## Types of Creative Leadership

Creative leadership can be of different types (Sternberg, 1999c; Sternberg, Kaufman, & Pretz, 2003). Some of these types accept current ways of doing things, others do not; and still another attempts to integrate different current practices. Which types are more acceptable depends upon the interaction of the leader with the situation. The types of creative leadership are characterized in Table 2.

Table 2. **Types of Creative Leadership**

- *Replication.* This type of leadership is an attempt to show that a field or organization is in the right place at the right time. The leader therefore attempts to maintain it in that place. The leader keeps the organization where it is rather than moving it. The view of the leader is that the organization is where it needs to be. The leader's role is to keep it there.
- *Redefinition.* This type of leadership is an attempt to show that a field or organization is in the right place, but not for the reason(s) that others, including previous leaders, think it is. The current status of the organization thus is seen from a different point of view. Redefiners often end up taking credit for ideas of others because they find a better reason to implement the others' ideas, or say they do.
- *Forward incrementation.* This type of leadership is an attempt to lead a field or an organization forward in the direction it is already going in. The leader specializes in forward motion. Most leadership is probably forward incrementation. In such leadership, one takes on the helm with the idea of advancing the leadership program of whomever one has succeeded. The promise is of progress through continuity. Creativity through forward incrementation is probably the kind that is most easily recognized and appreciated as creativity. Because it extends existing notions, it is seen as creative. Because it does not threaten the assumptions of such notions, it is not rejected as useless or even harmful.
- *Advance forward incrementation.* This type of leadership is an attempt to move an organization forward in the direction it is already going, but by moving beyond where others are ready for it to go. The leader moves followers in an accelerated way beyond the expected rate of forward progression. Advance forward incrementations usually are not successful at the time they are attempted, because followers in fields and organizations are not ready to go where the leader wants to lead. Or significant portions of them may not wish to go to that point, in which case they form an organized and sometimes successful source of resistance.
- *Redirection.* This type of leadership is an attempt to redirect an organization, field, or product line a different direction from where it is headed. Redirective leaders need to match to environmental circumstances to succeed (Sternberg

- & Vroom, 2002). If they do not have the luck to have matching environmental circumstances, their best intentions may go awry.
- *Reconstruction/redirection*. This type of creative leadership is an attempt to move a field or an organization or a product line back to where it once was (a reconstruction of the past) so that it may move onward from that point, but in a direction different from the one it took from that point onward.
  - *Reinitiation*. This type of leadership is an attempt to move a field, organization, or product line to a different as yet unreached starting point and then to move from that point. The leaders takes followers from a new starting point in a direction that is different from the one the field, organization, or product line had previously pursued.
  - *Synthesis*. In this type of creative leadership, the creator integrates two ideas that were previously seen as unrelated or even as opposed. What formerly were viewed as distinct ideas now are viewed as related and capable of being unified. Integration is a key means by which progress is attained in the sciences. It represents neither an acceptance nor a rejection of existing paradigms, but rather, a merger of them.

### **Contents of Creativity: Stories**

Leaders generate stories that appeal in various degrees to their followers. These stories, like stories of love (Sternberg, 1998c), attract followers in various degrees. In unsuccessful leaders they leave followers indifferent, or even repulsed, as in stories of hate (see Sternberg, 2003a). Whether a story works or not, therefore, is a contingency dependent upon the leader, the followers, and the situation (Ayman, 2004). Stories provide much of the *content* of creativity in leadership. They are the way in which a leader distinguishes him or herself and the contribution he or she plans to make. The story a leader tells is not necessarily constructive, as leaders such as Hitler and Stalin have shown. Hitler's story as a savior of the Aryan race resulted in millions of deaths and much suffering. People must understand their leaders' stories if they are to understand whether the leader will do good or ill.

### **Characteristics of Stories**

Gardner (1995, 2004) has suggested that successful leaders have a story to tell and a message to convey. The leader must have a story to tell or some kind of message to convey. The story tends to be more effective to the extent that it appeals to what Gardner (1991) refers to as the "unschooled mind," that is, a mind that, in terms of modern cognitive theory, is more experiential than rational in its thinking (Sloman, 1996).

Stories have certain stable elements (Sternberg, 1995, 1998c; Sternberg, Hojjat, & Barnes, 2001). First, they have beginnings, middles, and ends. In this way, they are like scripts (Schank & Abelson, 1977). Sometimes, leaders start with a story that works well in the beginning and discover that the end does not work. They either change stories, or they lose the support of their followers. Indeed, stories are constantly being rewritten in order to suit the needs of the leader-follower unit. For example, the story of the war in Iraq changed multiple times in the USA in 2004 in order to accommodate emerging facts

and the perceived needs of followers. Some individuals found it distressing that many people cared little about the changes in the stories. They cared more about having a story with resonance than one that was necessarily “true” in any meaningful sense.

Stories also have plots, themes, and characters. For example, a common story now for political leaders in a number of countries is the warrior chieftain who will fight terrorists. The plot is the battle against terrorists. Themes give stories meaning. They help people understand why the story is important and what script it will follow. One theme is that the leader must constantly prepare his or her followers to combat the terrorists; another is that followers must give up some of their liberty to enable the leader to fight the terrorists in an effective way. Vladimir Putin, for example, announced in September, 2004 a major reorganization of the Russian government to enable effective mobilization against terrorists. The reorganization concentrated more power in his hands. Despite there being a new president of Russia, most of the power still seems to be in Putin’s hands. The characters in the battle are the terrorists, the victims, the warriors who oppose the terrorists, and the audience that watches what is happening,

Perceptions of leaders are filtered through stories. The reality may be quite different from the stories. For example, Stalin was responsible for the deaths of many millions of Soviet and other citizens. Yet when he died, there was a great deal of sadness among many citizens of the USSR. For many years, Stalin was idolized, despite his responsibility for so many deaths. Even today, many people still idolize Hitler. People see the leaders only through their stories, not through any objective reality. The stories may be based in part on objective reality, but the part may be fairly small.

Stories are hierarchically arranged so that people have multiple stories they can accept at a given time. The challenge of the leader is to create a story that is higher in people’s hierarchies rather than lower. Moreover, the leader in a competition may try to undermine the story or stories of his or her competitors, trying to show that the story he or she proposes is the one that followers should accept. Again, truth may play a relatively small role in what stories people accept. Rather, their emotional needs are likely to be key. Effective leaders know this, and pitch their stories to resonate with people’s emotions.

Stories can become self-fulfilling prophecies. For example, the governments of both the United States and Russia have a history of acting aggressively toward nations or interest groups that displease them. The United States invaded Iraq and remains there. In Chechnya, the Russian government acted in very harsh ways to suppress rebellions. More recently, Russia invaded Georgia. The harshness of the actions creates resistance, which in turn creates more harshness, and so forth. The same dynamic has played out in the Israeli-Palestinian conflict. When people have stories they act in ways to make them come true, and often they do.

Stories always have two principal roles. One is for the leader, the other for followers. Some of the stories are more symmetrical, others less so. For example, a democratic leader expects a great deal of participation from followers in setting and determining policies. An autocratic leader expects little or no participation. Leaders and followers clearly differ in the level of symmetry with which they are comfortable.

## Classification of Stories

Christopher Rate, a graduate student at Yale, and I are working to create and test a taxonomy of stories. Our main hypothesis is that leaders will succeed to different degrees, depending in large part on the extent of match between the stories of the leaders and the followers. Some tentative examples of stories we are exploring are characterized in Table 3.

*Table 3. Stories of Leadership*

- The carpenter—The leader who can build a new organization or society
- The CEO—The leader who can “get things done”
- The communicator—The leader who can communicate with diverse followers
- The conqueror—The leader who is going to conquer all enemies
- The conserver—The leader who will make sure things stay the wonderful way they are
- The cook—The leader who has the recipe to improve the life of his or her followers
- The deep thinker—The leader who will make sense out of what is going on
- The defender—The leader who will save all followers from harm
- The deity—The leader who presents him or herself as savior
- The diplomat—The leader who can get everyone to work together
- The doctor—The leader who can cure what is wrong with the organization
- The ethicist—The leader who pledges to clean up the place
- The lifesaver—The leader who will rescue followers from otherwise certain death
- The organizer—The leaders who can create order out of chaos
- The plumber—The leader who can fix all the leaks
- The politician—The leader who understands how “the system” works
- The replicator—The leader who is going to be like some past individual
- The scout—The leader who can lead followers to new and uncharted territory
- The ship captain—The captain of a ship navigating through turbulent times
- The turn-around specialist—The leader who can turn around a failing organization
- The warrior chieftain –The leader who will lead followers to fight, defensively or offensively, enemies, seen or unseen.

In terms of the model of types of creativity described above, the kinds of leaders vary widely. Replicators and conservers pretty much leave existing paradigms as they are. Doctors change things that are wrong. Turn-around specialists make major changes in the organization they lead. They are redirectors or reinitiators.

## Success or Failure of Stories

Leaders succeed to the extent that they (a) have a story that fits their followers’ needs, (b) communicate that story in a compelling way, (c) implement the story in a way that suggests it is succeeding (given that there may be a difference between the perception

and the reality), and (d) persuade followers, in the end, that the story accomplished what it was supposed to have accomplished. Leaders fail to the extent that they (a) have a story that fails to fit their followers' needs, (b) fail in communicating their story, (c) fail in implementing the story, (d) fail in persuading followers that they have accomplished what they promised, (e) fail to have any coherent story at all, (f) seem to move from story to story without convincing followers that there is a need to change stories, or (g) allow a story of successful leadership to be replaced with a story of personal failings. For example, the leader may come to be viewed as in power not to lead, but to maintain power at all costs, to enrich him or herself personally, to increase his or her power to the maximum extent possible, or to harm groups not obeying him or her. In these cases, stories of leadership come to be replaced with stories of personal failings. Joseph Stalin, Adolph Hitler, and many other leaders eventually lost the mantle of leadership as a result of such personal failings.

It is interesting to see how the story of the administration of President George W. Bush has changed in the USA. The War in Iraq story originally represented a Defender story. This story was quite successful. Then it turned out that it was extremely unclear what the Defender was defending the country against. The main rationale for the war—defense against weapons of mass destruction alleged to be possessed by Iraq—proved to be false. So the story changed to one more resembling that of a strong Warrior Chieftain who had won an important war. But the victory proved to be somewhat Pyrrhic. By June, 2005, U.S. soldiers were dying daily. So it was no longer clear what victory means. The Warrior Chieftain story wore thin for some parts of the population because it became increasingly unclear what the goal of the war was, or who was really winning it.

Leaders need to be creative in inventing their stories, analytically intelligent in addressing the strengths and weaknesses of their stories, practically intelligent in implementing the stories and persuading followers to listen to them, and wise in generating and instantiating stories that are for the common good. They may fail if they lack creativity, intelligence, or wisdom, and especially if they foolishly succumb to the fallacies described earlier (such as egocentrism), which can divert them from a successful leadership story to a story of failed leadership.

Stories fit into a contingency-based notion of leadership. There is no one story that works for all organizations in all times or all places. Rather, success of a story fits into the situation at a given time and place. When Tolstoy speculated, in *Anna Karenina*, that if it had not been Napoleon, it would have been someone else fitting that particular situation, he was partially right. The situation demanded a certain kind of story. But it was not certain that anyone would come along who could tell that story in a compelling way and convince people to listen to him or her.

Creativity is in itself insufficient for successful leadership. In addition to being able to come up with good ideas, a good leader needs to know how to analyze and evaluate his or her ideas. Successful intelligence is instrumental in this evaluation process.

## (Successful) Intelligence

Intelligence would seem to be important to leadership, but how important? Indeed, if the conventional intelligence of a leader is too much higher than that of the people he or she leads, the leader may not connect with those people and become ineffective (Williams & Sternberg, 1988). Intelligence, as conceived here, is not just intelligence in its conventional narrow sense—some kind of general factor (*g*) (Demetriou, 2002; Jensen, 1998, 2002; Spearman, 1927; see essays in Sternberg, 2000b; Sternberg & Grigorenko, 2002) or as IQ (Binet & Simon, 1905; Kaufman, 2000; Wechsler, 1939), but rather, in terms of the theory of successful intelligence (Sternberg, 1997, 1999d, 2002b). Successful intelligence is defined in part as the skills and dispositions needed to succeed in life, given one's own conception of success, within one's sociocultural environment (Sternberg, 1997). The successfully intelligent person capitalizes on strengths and compensates for or remediates weaknesses. Leaders can be effective in a variety of ways, if they are able to develop a pattern of capitalization, compensation, and remediation that works for them and their followers. Two particular aspects of the theory are especially relevant: academic and practical intelligence (see also Neisser, 1979).

It is clear how intelligence would have aspects of skill. But how would it have aspects of a disposition? The main way is through the decision to apply it. Many leaders know better, but do anyway. Their minds tell them what they should be doing, but their motives—for power, for fame, for money, for sex, or whatever—lead them in different directions. Leaders often fail not because they are not smart enough, but because they choose not to use the intelligence they have.

### Academic Intelligence

Academic intelligence refers to the memory and analytical skills and dispositions that in combination largely constitute the conventional notion of intelligence—the skills and dispositions needed to recall and recognize but also to analyze, evaluate, and judge information. These skills and dispositions matter for leadership, because leaders need to be able to retrieve information that is relevant to leadership decisions (memory) and to analyze and evaluate different courses of action, whether proposed by themselves or by others (analysis). But a good analyst is not necessarily a good leader.

The long-time primary emphasis on *academic* intelligence (IQ) in the literature relating intelligence to leadership has, perhaps, been unfortunate. Indeed, as mentioned above, recent theorists have been emphasizing other aspects of intelligence, such as emotional intelligence (e.g., Caruso, Mayer, & Salovey, 2002; Goleman, 1998a, 1998b) or multiple intelligences (Gardner, 1995, 1999), in their theories. Here the emphasis is on practical intelligence (Hedlund et al., 2003; Hedlund et al., 2006; Sternberg et al., 2000; Sternberg & Hedlund, 2002), which has a somewhat different focus from emotional intelligence. Practical intelligence is a part of successful intelligence. Practical intelligence is a core component of leadership, and thus will receive special attention here.

### Practical Intelligence

Practical intelligence is the set of skills and dispositions to solve everyday problems by utilizing knowledge gained from experience in order purposefully to adapt to, shape,

and select environments. It thus involves changing oneself to suit the environment (adaptation), changing the environment to suit oneself (shaping), or finding a new environment within which to work (selection). One uses these skills to (a) manage oneself, (b) manage others, and (c) manage tasks.

Different combinations of intellectual skills engender different types of leadership. Leaders vary in their memory skills, analytical skills, and practical skills. A leader who is particularly strong in memory skills but not in the other kinds of skills may have vast amounts of knowledge at his or her disposal, but be unable to use it effectively. A leader who is particularly strong in analytical skills as well as memory skills may be able to retrieve information and analyze it effectively, but be unable to convince others that his or her analysis is correct. A leader who is strong in memory, analytical, and practical skills is most likely to be effective in influencing others. But, of course, leaders exist who are strong in practical skills but not in memory and analytical skills (Sternberg, 1997; Sternberg et al., 2000). In conventional terms, they are “shrewd” but not “smart.” They may be effective in getting others to go along with them, but they may end up leading these others down garden paths. An important part of practical intelligence is *tacit knowledge*, or having the procedural knowledge to handle everyday life situations that typically is not formally taught in schools or other institutions.

For three levels of military leadership, tacit knowledge scores were not found to correlate with the number of months leaders had served in their current positions (Hedlund et al., 2003), presumably because successful leaders spent less time in a job before being promoted than did less successful leaders. Subsequent research, however, found that tacit knowledge scores did correlate with leadership rank such that leaders at higher levels of command exhibited greater tacit knowledge than did those at lower ranks (Hedlund et al., 2003).

## Wisdom

A leader can have all of the above skills and dispositions and still lack an additional quality that, arguably, is the most important quality a leader can have, but perhaps, also the rarest. This additional quality is wisdom.

The most extensive program of relevant research was that conducted by Baltes and his colleagues. For example, Baltes and Smith (1987, 1990) gave adult participants life-management problems, such as “A fourteen-year-old girl is pregnant. What should she, what should one, consider and do?” and “A fifteen-year-old girl wants to marry soon. What should she, what should one, consider and do?” Baltes and Smith tested a five-component model on participants’ protocols in answering these and other questions, based on a notion of wisdom as expert knowledge about fundamental life matters (Smith & Baltes, 1990) or of wisdom as good judgment and advice in important but uncertain matters of life (Baltes & Staudinger, 1993). Wisdom is reflected in these five components: (a) rich factual knowledge (general and specific knowledge about the conditions of life and its variations), (b) rich procedural knowledge (general and specific knowledge about strategies of judgment and advice concerning matters of life), (c) life span contextualism (knowledge about the contexts of life and their temporal [developmental] relationships),



(d) relativism (knowledge about differences in values, goals, and priorities), and (e) uncertainty (knowledge about the relative indeterminacy and unpredictability of life and ways to manage).

Three kinds of factors—general person factors, expertise-specific factors, and facilitative experiential contexts—are proposed to facilitate wise judgments. These factors are used in life planning, life management, and life review. An expert answer should reflect more of these components, whereas a novice answer should reflect fewer of them. The data collected to date generally have been supportive of the model.

Over time, Baltes and his colleagues (e.g., Baltes, Smith, & Staudinger, 1992; Baltes & Staudinger, 1993) have collected a wide range of data showing the empirical utility of the proposed theoretical and measurement approaches to wisdom. For example, Staudinger, Lopez and Baltes (1997) found that measures of intelligence and personality as well as their interface overlap with but are not identical with measures of wisdom in terms of constructs measured. Staudinger, Smith, and Baltes (1992) showed that human-services professionals outperformed a control group on wisdom-related tasks. In a further set of studies, Staudinger and Baltes (1996) found that performance settings that were ecologically relevant to the lives of their participants and that provided for actual or “virtual” interaction of minds increased wisdom-related performance substantially.

Wisdom is viewed here according to a proposed balance theory of wisdom (Sternberg, 1998b, 2003b), according to which an individual is wise to the extent he or she uses successful intelligence, creativity, and knowledge as moderated by values (a) to seek to reach the common good, (b) by balancing intrapersonal (one’s own), interpersonal (others’), and extrapersonal (organizational/institutional/spiritual) interests, (c) over the short and long term, (d) to adapt to, shape, and select environments. Wisdom is in large part a decision to use one’s intelligence, creativity, and experience for a common good. Although definitions of wisdom differ, this definition is similar to others in the literature (see essays in Sternberg & Jordan, 2005).

Wise leaders do not look out just for their own interests, nor do they ignore these interests. Rather, they skillfully balance interests of varying kinds, including their own, those of their followers, and those of the organization for which they are responsible. They also recognize that they need to align the interests of their group or organization with those of others groups or organizations because no group operates within a vacuum. Wise leaders realize that what may appear to be a prudent course of action over the short term does not necessarily appear so over the long term.

Leaders can be intelligent in various ways and creative in various ways, but this does not guarantee they are wise. Indeed, probably relatively few leaders at any level are particularly wise. Yet the few leaders who are notably so—perhaps Nelson Mandela, Martin Luther King, Mahatma Gandhi, Winston Churchill, Mother Teresa—leave an indelible mark on the people they lead and, potentially, on history. It is important to note that wise leaders are probably usually charismatic, but charismatic leaders are not necessarily wise, as Hitler, Stalin, and many other charismatic leaders have demonstrated over the course of time. Both leaders just mentioned were charismatic, but were responsible individually and with their associates for many millions of deaths of innocent citizens,

not only of other countries, but of their own. They tried, unsuccessfully, to make hate a virtue (Sternberg, 2003a).

Unsuccessful leaders often show certain stereotyped fallacies in their thinking. These fallacies typify thinking that is unwise, that is, foolish. These fallacies can bring down leaders who are quite creative and intelligent, but at the same time, unwise. Consider five such flaws (Sternberg, 2002a, 2002b). The first, the *unrealistic-optimism fallacy* occurs when they think they are so smart and effective that they can do whatever they want. The second, *egocentrism fallacy*, occurs when successful leaders start to think that they are the only ones that matter, not the people who rely on them for leadership. The third, *omniscience fallacy*, occurs when leaders think that they know everything, and lose sight of the limitations of their own knowledge. The fourth, *omnipotence fallacy*, occurs when leaders think they are all-powerful and can do whatever they want. And the fifth, *invulnerability fallacy*, occurs when leaders think they can get away with anything, because they are too clever to be caught; and they figure that even if they are caught they can get away with what they have done because of who they imagine themselves to be.

### **Ethics in Leadership**

Wisdom entails positive ethical values. But carrying out ethical behavior is much harder than it would appear to be, in part because it involves multiple, largely sequential, steps, similar to those in bystander intervention (Latané & Darley, 1970). To behave ethically, the individual has to:

1. recognize that there is an event to which to react;
2. define the event as having an ethical dimension;
3. decide that the ethical dimension is significant;
4. take responsibility for generating an ethical solution to the problem;
5. figure out what abstract ethical rule(s) might apply to the problem;
6. decide how these abstract ethical rules actually apply to the problem so as to suggest a concrete solution;
7. enact the ethical solution, meanwhile possibly counteracting contextual forces that might lead one not to act in an ethical manner;
8. deal with possible repercussions of having acted in what one considers an ethical manner.

For example, why is there such a weak reaction to the genocide in Darfur? Some people are unaware that the genocide exists, or if they are aware of it, may not see it as any of their concern. If they know about it, they may see it as a war between competing tribes rather than as a genocide. Even if they see an ethical dimension, they may decide it is only in the context of a tribal war, where there is always an ethical dimension. They may see it as someone else's responsibility to deal with the problem. Or they may see it as their problem, but be unsure what exactly they are supposed to do about it. Or even if they know what to do, they may be unsure whether it is pragmatic to act. Perhaps acting will make the situation worse, as some people feel about the Bashir indictment by the International Criminal Court at The Hague. And even if they act, their acting may actually result in more, not fewer, killings. So it is a long way from a situation that has an ethical

component to a response. Unless people go through the entire set of steps, they may fail to behave in an ethical manner, despite the best intentions.

In sum, WICS provides a way of understanding leadership as a set of cognitive-decision processes embodying wisdom, intelligence, and creativity. One uses creativity to generate ideas, intelligence to analyze and implement the ideas, and wisdom to ensure that they represent a good common good.

Relation of WICS to Past Approaches to Leadership and to Data Testing Antecedents of Leadership

The WICS approach is, of course, related to many other approaches. It incorporates elements of transformational as well as transactional leadership (Avolio, 2007; Bass, 1998; Bass & Avolio, 1994; Bass, Avolio, & Atwater, 1996), emotionally intelligent leadership (Goleman, 1998a, 1998b), visionary leadership (Sashkin, 1988, 2004), and charismatic leadership (Conger & Kanungo, 1998; Weber, 1968). Eventually an approach to leadership will appear that integrates all the strengths of these various approaches. In the meantime, the WICS approach seems like a start.

Antonakis, Cianciolo, and Sternberg (2004a) have identified several different schools of leadership, providing a taxonomy similar to taxonomies provided by others (see Antonakis, Cicanciolo, & Sternberg, 2004b; Goethals, Sorenson, & Burns, 2004). Here, I discuss different approaches and how they are related to WICS. Leadership is a complex interlocking of many antecedent skills, attitudes, and situational variables (Hunt, 2004). What WICS provides is a framework that relates to and in some respects may integrate many of the approaches that have come earlier, but that individually have included only some of these interlocking skills, attitudes, and situational variables.

### **The Trait-based Approach**

A traditional approach is the trait-based approach (Bird, 1940; Mann, 1959; Stogdill, 1948; Zaccaro, Kemp, & Bader, 2004). This approach seeks to find those attributes of persons that are associated with leadership success. WICS also seeks to find such attributes, although in WICS, attributes are viewed as more highly modifiable than they are in traditional trait theories.

WICS argues that there is a relation between intelligence and leadership effectiveness. There does indeed seem to be a moderate correlation between intelligence and leadership effectiveness (Stogdill, 1948; see also Morrow & Stern, 1990; Spreitzer, McCall, & Mahony, 1997; essays in Riggio, Murphy, & Pirozzolo, 2002). This positive correlation appears both in laboratory and field studies, and appears to be robust (Zaccaro, Kemp, & Bader, 2004). WICS also claims that creative intelligence and creativity are related to intelligence. Research shows that an aspect of creative intelligence and of creativity, divergent thinking, is indeed positively correlated with leadership success (Baehr, 1992; Mumford & Connelly, 1991; Mumford, Scott, Gaddis, & Strange, 2002).

Research also suggests a relationship between practical intelligence and leadership (Hedlund et al., 2003). One aspect of practical intelligence is emotional intelligence. This aspect deals in particular with that aspect of practical interactions that are emotionally laden. Research suggests that emotional intelligence also appears to be a positive

predictor of leadership (Caruso, Mayer, & Salovey, 2002; Goleman, Boyatzis, & McKee, 2002; Sosik & Megerian, 1999; see also Zaccaro et al., 2004).

Other theories of leadership overlap with the trait-based aspects of WICS. For example, Zaccaro et al. (2004) have proposed a model of attributes of leaders. The model encompasses three distal attributes: personality, cognitive abilities, and motives and values, all three of which are viewed as overlapping with each other. The model also involves three proximal attributes: social-appraisal skills, problem-solving skills, and expertise/tacit knowledge. Cognitive abilities overlap highly with what I have referred to as successful intelligence. Personality and motivation, as noted above, are part of creativity. And values are essential to wisdom. Social-appraisal skills and tacit knowledge are integral parts of practical intelligence in WICS. Problem-solving skills are part of intelligence. So WICS includes all of the elements of the Zaccaro et al. (2004) model, and also has some other elements. It parses the elements in a somewhat different way from that of Zaccaro and his colleagues, however.

### **The Behavioral Approach**

The behavioral approach fits into the tradition of B. F. Skinner and his behaviorist progenitors (Bales, 1954; Goethals, Sorenson, & Burns, 2004). Behavioral theories are associated with mid-twentieth-century approaches at the University of Michigan and Ohio State University (e.g., Lewin, Lippitt, & White, 1939; Lewin & Lippitt, 1938). A typical view was that leadership involved two kinds of behaviors, those that were mission oriented and that led to productivity; and those that were person oriented and that were sensitive to people's feelings. Leaders could be either high or low in initiating structure and in showing consideration (see, e.g., Blake & Mouton, 1964; Hersey & Blanchard, 1969; Stogdill & Coons, 1957). In WICS, both of these kinds of behaviors are aspects of practical intelligence—in particular, managing tasks and managing others. WICS also adds a third kind of behavior, namely, managing oneself. WICS also emphasizes not just the behaviors, but also the cognitions underlying and producing the behaviors.

A related view has been proposed by McGregor (1957). He suggested two “theories” of leadership, which he referred to as X (leaders must emphasize production) and Y (leaders must emphasize interpersonal relations). WICS takes a somewhat different view, namely, that there are individual differences whereby for some workers, Theory X is true, and for others, Theory Y is true. A practically intelligent leader adjusts his or her behavior to take into account different needs of individual employees. The wise leader ensures that, in doing so, the interests of all stakeholders are respected.

### **Situational Approaches to Leadership**

Social psychology tends to emphasize the importance of situational variables in behavior. For example, two of the most famous studies of all time, the studies of Milgram (1974) and of Zimbardo (1972), are famous precisely because they show the power of situations, in the case of Milgram, in eliciting obedience, and in the case of Zimbardo, in inciting guard-like or prisoner-like behavior in a prison simulation. Situational approaches to leadership similarly emphasize the importance of situations in leadership (Ayman, 2004).

Research has given some support to the situational view (Howells & Becker, 1962; Leavitt, 1951; Shartle, 1951). Situations clearly matter for leaders. Situational variables are incorporated into WICS in three different ways. First, recall that the contextual sub-theory is wholly situationally determined. What is considered to be intelligent in one culture may or may not be considered to be intelligent in another (Sternberg, 2004a). Second, one of the six facets of our investment model of creativity (Sternberg & Lubart, 1995) is the situation: People can be creative only to the extent the situation allows them to be. A person might have all the internal attributes for creativity, but in the absence of a supportive environment, these attributes might never manifest themselves. Or they might manifest themselves, resulting in the person's imprisonment or worse. Third, wisdom is always implemented in context, because the course of action that balances intrapersonal, interpersonal, and extrapersonal interests so as to achieve a common good can only be understood in the context in which the action takes place. But note that situations matter only in interaction with the person, as proposed by contingency theories.

### **Contingency Approaches to Leadership**

Contingency models of leadership assume that there is an interaction between a leader's traits and the situation in which he or she finds him or herself (e.g., Fiedler, 1978, 2002; Fiedler & Link, 1994; House, 1971, 1996; Vroom & Jago, 1998, 2007; Vroom & Yetton, 1973; Yukl, 1998). There is some evidence that when a leader's cognitive skills are substantially higher than those of his or her followers, higher levels of cognitive skills may actually work against the leader's effectiveness (Simonton, 1994; Williams & Sternberg, 1988).

WICS is contingency-based in the sense that the optimality of actions depends on the situation in which the leader finds him or herself. What is intelligent in one situation is not necessarily intelligent in another. Moreover, creativity is largely situationally determined. A course of action that was creative some years ago (e.g., an advance forward incrementation) might at a later time be only mildly creative (e.g., a small forward incrementation). Similarly, a wise course of action depends on who the stakeholders are, what their needs are, the environmental press under which they are operating, the state of the organization at the time, and so on.

### **Transformational Leadership Approaches**

Transformational approaches to leadership can be seen as originating in the work of Burns (1978), although it has been greatly developed since then (Bass, 1985, 1998, 2002; Bass & Avolio, 1994, 1995; Bass, Avolio, & Atwater, 1996; Sashkin, 2004). Burns suggested that there are essentially two ways of performing leadership functions, transactional and transformational. In WICS, transactional leaders basically emphasize the adaptive function of practical intelligence. They modify their behavior to adapt to the environment. Transformational leaders emphasize the shaping function of practical intelligence. They modify the environment to suit their image of what it should be.

## Conclusion

There is probably no approach to leadership that will totally capture all of the many facets—both internal and external to the individual—that make for a successful leader. The WICS approach may come closer than some other approaches, however, in capturing dimensions that are important. It is based upon the notion that a successful leader decides to synthesize wisdom, intelligence, and creativity through compelling stories.

An effective leader needs creative skills and dispositions to come up with ideas, academic skills and dispositions to decide whether they are good ideas, practical skills and dispositions to make the ideas work and convince others of their value, and wisdom-based skills and dispositions to ensure that the ideas are in the service of the common good rather than just the good of the leader or perhaps some clique of family members or followers. A leader lacking in creativity will be unable to deal with novel and difficult situations, such as a new and unexpected source of hostility. A leader lacking in academic intelligence will not be able to decide whether his or her ideas are viable, and a leader lacking in practical intelligence will be unable to implement his or her ideas effectively. An unwise leader may succeed in implementing ideas, but may end up implementing ideas that are contrary to the best interests of the people he or she leads.

The WICS approach provides several implications for the study of leadership.

First, it implies that previous work relating intelligence to leadership might have yielded a stronger relationship had a broader model of intelligence, such as the model of successful intelligence, been used. This argument has been shown empirically to apply in other domains as well. For example, tests of successful intelligence substantially improved prediction of success in two educational settings—a wide variety of colleges and a business school (Hedlund et al., 2006; Sternberg et al., 2004; Sternberg et al., 2006).

Second, the WICS approach implies that effective leadership is not entirely trait based, not entirely situational, not entirely behavioral, and not entirely contingency-based either. Rather, good leaders capitalize on strengths and compensate for and remediate weaknesses. The prediction of this approach is that when leaders are unsuccessful they have been unable to find strengths upon which effectively to capitalize, or they have been unable to compensate for or correct their weaknesses. Leaders who exhibit the fallacies of thinking described in the article, for example, fail to compensate for weaknesses in their inflated views of themselves.

Third, the approach points out the critical role of wisdom to the leadership process. This attribute of wise leaders has not figured prominently in many theories, but figures prominently in the present one. No matter how smart or creative a leader is, the leader is unlikely to be effective unless he or she is wise as well.

Fourth, the approach suggests that effective leaders are *always* creative. The type of creativity may vary, depending on the leader and the situation he or she confronts. But creativity of some kind is essential to effective leadership in order to meet the demands of changing tasks and situations.

Fifth, the approach claims that intelligence, creativity, and wisdom are not traits, per se, but rather modifiable forms of developing expertise. When one assesses these

attributes, one assesses an individual at a certain point in time and in a certain place, rather than assessing an attribute that is stable over time and place.

Sixth, the approach implies that stories are essential to leadership. The extent to which the leadership succeeds will depend in large part upon how effective the story underlying it is.

Seventh, the approach argues that effective leadership is, at least in large part, a decision. Effective leaders decide for creativity and for wisdom, and for effective use of their intelligence to adapt to, shape, and select environments. Much of the time, the actions of leaders may matter little to their organizations. Indeed, subordinates' decisions may be more influential. But at crucial times, poor decisions at the top, such as to behave unethically, to make an unwise acquisition, or to maintain a failing product line, may do in an otherwise successful business.

Finally, the approach is empirically testable. The way we are testing it is through situational-judgment tests of leadership. Participants, who are either (a) expert leaders or (b) laypeople without substantial leadership experience, are presented with scenarios that are coded for either showing (a) positive examples, (b) no examples, or (c) negative examples of each of the elements of WICS: (a) wisdom, (b) analytical intelligence, (c) practical intelligence, and (d) creativity. For example, in a scenario, a leader might be creative (he has a new and exciting plan for raising the public profile of the organization) but unwise (the plan denigrates an already oppressed minority group within the society); or the leader might be academically intelligent but not creative (the leader saves the organization a great deal of money by pointing out flaws in the accounting procedures of the organization, but has no better idea to put into its place); or the leader might be practically intelligent but not wise (the leader is marketing a drug that is a sales blockbuster but has dangerous side effects). The goal of the study is to determine whether participants rate leaders as better leaders to the extent they show the elements of WICS, and as worse leaders to the extent they show a lack of these elements.

WICS is certainly not entirely new. As stated earlier, it draws upon many past theories. But it may provide a synthesis that suggests at least some new directions for theory and research on leadership.

## References

- Amabile, T. M. (1983). *The social psychology of creativity*. New York: Springer.
- Amabile, T. M. (1996). *Creativity in context*. Boulder, CO: Westview.
- Antonakis, J., Cianciolo, A. T., & Sternberg, R. J. (2004a). Leadership: Past, present, and future. In J. Antonakis, A. T. Cianciolo, & R. J. Sternberg (Eds.), *The nature of leadership* (pp. 3–15). Thousand Oaks, CA: Sage.
- Antonakis, J., Cianciolo, A. T., & Sternberg, R. J. (Eds.). (2004b). *The nature of leadership*. Thousand Oaks, CA: Sage Publications.
- Avolio, B. J. (2007). Promoting more integrative strategies for leadership theory-building. *American Psychologist*, *62*, 25–33.
- Ayman, R. (2004). Situational and contingency approaches to leadership. In J. Antonakis, A. Cianciolo, & R. J. Sternberg (Eds.), *The nature of leadership* (pp. 148–170). Thousand Oaks, CA: Sage.
- Baehr, M. E. (1992). *Predicting success in higher level positions: A guide to the system for testing and evaluation of potential*. New York: Quorum.
- Bales, R. F. (1954). *Interaction process analysis: A method for the study of small groups*. Cambridge, MA: Addison-Wesley.
- Baltes, P. B., & Smith, J. (1987, August). *Toward a psychology of wisdom and its ontogenesis*. Paper presented at the Ninety-Fifth Annual Convention of the American Psychological Association, New York.
- Baltes, P. B., & Smith, J. (1990). Toward a psychology of wisdom and its ontogenesis. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 87–120). New York: Cambridge University Press.
- Baltes, P. B., Smith, J., & Staudinger, U. (1992). Wisdom and successful aging. In T. B. Sonderegger (Ed.), *Psychology and aging* (pp. 123–167). Lincoln, Nebraska: University of Nebraska Press.
- Baltes, P. B., & Staudinger, U. M. (1993). The search for a psychology of wisdom. *Current Directions in Psychological Science*, *2*, 75–80.
- Bandura, A. (1996). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B. M. (1998). *Transformational leadership: Industrial, military, and educational impact*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bass, B. M. (2002). Cognitive, social, and emotional intelligence of transformational leaders. In R. E. Riggio, S. E. Murphy, F. J. Pirozzolo, *Multiple intelligences and leadership* (pp. 105–118). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bass, B. M., & Avolio, B. J. (Eds.) (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage.
- Bass, B. M., & Avolio, B. J. (1995). *MLQ Multifactor Leadership Questionnaire for Research: Permission set*. Redwood City, CA: Mindgarden.
- Bass, B. M., Avolio, B. J., & Atwater, L. (1996). The transformational and transactional leadership of men and women. *International Review of Applied Psychology*, *45*, 5–34.
- Bennis, W. (2007). The challenges of leadership in the modern world : Introduction to the special issue. *American Psychologist*, *62*, 2–5.



- Binet, A., & Simon, T. (1905). Méthodes nouvelles pour le diagnostic du niveau intellectuel des anormaux. *L'Année psychologique*, 11, 191–336.
- Bird, C. (1940). *Social psychology*. New York: Appleton-Century.
- Blake, R. R., & Mouton, J. S. (1964). *The managerial grid*. Houston: Gulf Publishing Company.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Caruso, D. R., Mayer, J. D., & Salovey, P. (2002). Emotional intelligence and emotional leadership. In R. Riggio (Ed.), *Multiple Intelligences and Leadership*. Lawrence Erlbaum.
- Cianciolo, A. T., & Sternberg, R. J. (2004). *A brief history of intelligence*. Malden, MA: Blackwell.
- Conger, J. A., & Kanungo, R. N. (1998). *Charismatic leadership in organizations*. Thousand Oaks, CA: Sage Publications.
- Demetriou, A. (2002). Tracing psychology's invisible giant and its visible guards. In R. J. Sternberg & E. L. Grigorenko (Eds.) *The general factor of intelligence: How general is it?* (pp. 3–18). Mahwah, NJ: Lawrence Erlbaum Associates.
- Fiedler, F. E. (1978). The contingency model and the dynamics of the leadership process. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 11, pp. 59–112). New York: Academic Press.
- Fiedler, F. E. (2002). The curious role of cognitive resources in leadership. In R. E. Riggio, S. E. Murphy, F. J. Pirozzolo, *Multiple intelligences and leadership* (pp. 91–104). Mahwah, NJ: Lawrence Erlbaum Associates.
- Fiedler, F. E., & Link, T.G. (1994). Leader intelligence, interpersonal stress, and task performance. In R. J. Sternberg & R. K. Wagner (Eds.). *Mind in context: Interactionist perspectives on human intelligence* (pp. 152–167). New York: Cambridge University Press.
- Frensch, P. A., & Sternberg, R. J. (1989). Expertise and intelligent thinking: When is it worse to know better? In R. J. Sternberg (Ed.), *Advances in the psychology of human intelligence* (Vol. 5, pp. 157–188). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gardner, H. (1991). *The unschooled mind*. New York: Basic Books.
- Gardner, H. (1995). *Leading minds*. New York: Basic Books.
- Gardner, H. (1999). *Intelligence reframed: Multiple intelligences for the 21st century*. New York: Basicbooks.
- Gardner, H. (2004). *Changing minds: The art and science of changing our own and other people's minds*. Boston, MA: Harvard Business School Press.
- Goethals, G. R., Sorenson, G. J., & Burns, J. M. (Eds.) (2004). *Encyclopedia of leadership* (4 vols.). Thousand Oaks, CA: Sage.
- Goleman, D. (1998a). *Working with emotional intelligence*. New York: Bantam.
- Goleman, D. (1998b). What makes a good leader? *Harvard Business Review*, November-December, 93–102.
- Goleman, D., Boyatzis, R., & McKee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence*. Boston, MA: Harvard Business School Press.
- Hackman, J. R., & Wageman, R. (2007). Asking the right questions about leadership: Discussion and conclusions. *American Psychologist*, 62, 43–47.
- Hedlund, J., Forsythe, G. B., Horvath, J. A., Williams, W. M., Snook, S., & Sternberg, R. J. (2003). Identifying and assessing tacit knowledge: Understanding the practical intelligence of military leaders. *Leadership Quarterly*, 14, 117–140.

- Hedlund, J., Wilt, J. M., Nebel, K. R., Ashford, S. J., & Sternberg, R. J. (2006). Assessing practical intelligence in business school admissions: A supplement to the graduate management admissions test. *Learning and Individual Differences, 16*, 101–127.
- Hersey, P., & Blanchard, K. H. (1969). *Management of organizational behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- House, R. J. (1971). A path-goal theory of leader effectiveness. *Administrative Science Quarterly, 16*, 321–338.
- House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *Leadership Quarterly, 7*, 323–352.
- Howells, L. T., & Becker, S. W. (1962). Seating arrangement and leadership emergence. *Journal of Abnormal and Social Psychology, 64*, 148–150.
- Hunt, J. G. (2004). What is leadership? In J. Antonakis, A. T. Cianciolo, & R. J. Sternberg (Eds.), *The nature of leadership* (pp. 19–47). Thousand Oaks, CA: Sage.
- Jensen, A. R. (1998). *The g factor: The science of mental ability*. Westport, CT: Praeger/Greenwood.
- Jensen, A. R. (2002). Psychometric g: Definition and substantiation. In R. J. Sternberg & E. L. Grigorenko (Eds.), *General factor of intelligence: How general is it?* (pp. 39–54). Mahwah, NJ: Lawrence Erlbaum.
- Kaufman, A. S. (2000). Tests of intelligence. In R. J. Sternberg (Ed.), *Handbook of intelligence* (pp. 445–476). New York: Cambridge University Press.
- Kuhn, T. S. (1970). *The structure of scientific revolutions* (2nd ed.). Chicago: University of Chicago Press.
- Latané, B., & Darley, J. M. (1970). *Unresponsive bystander: Why doesn't he help?* Englewood Cliffs, NJ: Prentice-Hall.
- Leavitt, H. J. (1951). Some effects of certain communication patterns on group performance. *Journal of Abnormal and Social Psychology, 46*, 38–50.
- Lewin, K., & Lippitt, R. (1938). An experimental approach to the study of autocracy and democracy: A preliminary note. *Sociometry, 1*, 292–300.
- Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology, 10*, 271–299.
- Mann, R. D. (1959). A review of the relationship between personality and performance in small groups. *Psychological Bulletin, 56*, 241–270.
- McGregor, D. (1957). The human side of enterprise. *Management Review, 46*(11), 22–28, 88–92.
- Milgram, S. (1974). *Obedience to authority: An experimental view*. New York: Harper & Row.
- Morrow, I. J., & Stern, M. (1990). Stars, adversaries, producers, and phantoms at work: A new leadership typology. In K. E. Clark & M. B. Clark (Eds.), *Measures of leadership* (pp. 419–440). Greensboro, NC: Center for Creative Leadership.
- Mumford, M. D., & Connelly, M. S. (1991). Leaders as creators: leader performance and problem solving in ill-defined domains. *Leadership Quarterly, 2*, 289–316.
- Mumford, M. D., Scott, G. M., Gaddis, B., & Strange, J. M. (2002). Leading creative people: Orchestrating expertise and relationships. *Leadership Quarterly, 13*, 705–750
- Mumford, M. D., Zaccaro, S. J., Harding, F. D., Jacobs, T. O., & Fleishman, E. A. (2000). Leadership skills for a changing world: Solving complex social problems. *Leadership Quarterly, 11*, 11–35.

- Neisser, U. (1979). The concept of intelligence. *Intelligence*, 3, 217–227.
- Riggio, R. E., Murphy, S. E., & Pirozzolo, F. J. (2002). *Multiple intelligences and leadership*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Sashkin, M. (1988). The visionary leader. In J. A. Conger & R. N. Kanugo (Eds.), *Charismatic leadership: The elusive factor in organizational effectiveness* (pp. 122–160). San Francisco: Jossey-Bass.
- Sashkin, M. (2004). Transformational leadership approaches: A review and synthesis. In J. Antonakis, A. Cianciolo, & R. J. Sternberg (Eds.), *The nature of leadership* (pp. 171–196). Thousand Oaks, CA: Sage.
- Schank, R. C., & Abelson, R. P. (1977). *Scripts, plans, goals, and understanding*. Hillsdale, NJ: Erlbaum.
- Shartle, C. L. (1951). Studies of naval leadership, Part I. In H. Guetzkow (Ed.), *Group, leadership and men* (pp. 119–133). Pittsburgh, PA: Carnegie Press.
- Simonton, D.K. (1994). *Greatness: Who makes history and why?* New York: Guilford.
- Slooman, S. A. (1996). The empirical case for two systems of reasoning. *Psychological Bulletin*, 119, 3–22.
- Smith, J., & Baltes, P. B. (1990). Wisdom-related knowledge: Age/cohort differences in response to life-planning problems. *Developmental Psychology*, 26, 494–505.
- Sosik, J. J., & Megerian, L. E. (1999). Understanding leader emotional intelligence and performance: The role of self-other agreement on transformational leadership perceptions. *Group & Organization Management*, 24, 367–390.
- Spearman, C. (1927). *The abilities of man*. London: Macmillan.
- Spreitzer, G. M., McCall, M. W., Jr., & Mahoney, J. D. (1997). Early identification of international executive potential. *Journal of Applied Psychology*, 82, 6–29.
- Staudinger, U. M., & Baltes, P. M. (1996). Interactive minds: A facilitative setting for wisdom-related performance? *Journal of Personality and Social Psychology*, 71, 746–762.
- Staudinger, U. M., Lopez, D. F., & Baltes, P. B. (1997). The psychometric location of wisdom-related performance: Intelligence, personality, and more? *Personality and Social Psychology Bulletin*, 23, 1200–1214.
- Staudinger, U. M., Smith, J., & Baltes, P. B. (1992). Wisdom-related knowledge in life review task: Age differences and the role of professional specialization. *Psychology and Aging*, 7, 271–281.
- Sternberg, R. J. (1985). *Beyond IQ: A triarchic theory of human intelligence*. New York: Cambridge University Press.
- Sternberg, R. J. (1995). Love as a story. *Journal of Social and Personal Relationships*, 12 (4), 541–546.
- Sternberg, R. J. (1997). *Successful intelligence*. New York: Plume.
- Sternberg, R. J. (1998a). Abilities are forms of developing expertise. *Educational Researcher*, 27, 11–20.
- Sternberg, R. J. (1998b). A balance theory of wisdom. *Review of General Psychology*, 2, 347–365.
- Sternberg, R. J. (1998). *Love is a story*. New York: Oxford University Press.
- Sternberg, R. J. (Ed.) (1999a). *Handbook of creativity*. New York: Cambridge University Press.
- Sternberg, R. J. (1999b). Intelligence as developing expertise. *Contemporary Educational Psychology*, 24, 359–375.

- Sternberg, R. J. (1999c). A propulsion model of types of creative contributions. *Review of General Psychology*, 3, 83–100.
- Sternberg, R. J. (1999d). The theory of successful intelligence. *Review of General Psychology*, 3, 292–316.
- Sternberg, R. J. (2000a). Creativity is a decision. In A. L. Costa (Ed.), *Teaching for intelligence II* (pp. 85–106). Arlington Heights, IL: Skylight Training and Publishing Inc.
- Sternberg, R. J. (Ed.). (2000b). *Handbook of intelligence*. New York: Cambridge University Press.
- Sternberg, R. J. (2002a). Creativity as a decision. *American Psychologist*, 57(5), 376.
- Sternberg, R. J. (2002b). Smart people are not stupid, but they sure can be foolish: The imbalance theory of foolishness. In R. J. Sternberg (Ed.), *Why smart people can be so stupid* (pp. 232–242). New Haven: Yale University Press.
- Sternberg, R. J. (2003a). A duplex theory of hate: Development and application to terrorism, massacres, and genocide. *Review of General Psychology*, 7(3), 299–328.
- Sternberg, R. J. (2003b). WICS: A model for leadership in organizations. *Academy of Management Learning & Education*, 2, 386–401.
- Sternberg, R. J. (2004a). Culture and intelligence. *American Psychologist*, 59(5), 325–338.
- Sternberg, R. J. (2004b). WICS: A model of educational leadership. *The Educational Forum*, 68(2), 108–114.
- Sternberg, R. J. (2005). WICS: A model of leadership. *The Psychologist-Manager Journal*, 8(1), 29–43.
- Sternberg, R. J. (2007). A systems model of leadership: WICS. *American Psychologist*, 62 (1), 34–42.
- Sternberg, R. J. (2008a). Leadership as a basis for the education of our children. In A. Craft, H. Gardner, & G. Claxton (Eds.), *Creativity, wisdom, and trusteeship: Exploring the role of education* (pp. 143–157). Thousand Oaks, CA: Corwin.
- Sternberg, R. J. (2008b). The WICS approach to leadership: Stories of leadership and the structures and processes that support them. *The Leadership Quarterly*, 19 (3), 360–371.
- Sternberg, R. J., The Rainbow Project Collaborators, & University of Michigan Business School Project Collaborators (2004). Theory based university admissions testing for a new millennium. *Educational Psychologist*, 39(3), 185–198.
- Sternberg, R. J., & The Rainbow Project Collaborators (2006). The Rainbow Project: Enhancing the SAT through assessments of analytical, practical and creative skills. *Intelligence*, 34 (4), 321–350.
- Sternberg, R. J., Forsythe, G. B., Hedlund, J., Horvath, J., Snook, S., Williams, W. M., Wagner, R. K., & Grigorenko, E. L. (2000). *Practical intelligence in everyday life*. New York: Cambridge University Press.
- Sternberg, R. J., & Grigorenko E. L. (Eds.). (2002). *The general factor of intelligence: How general is it?* Mahwah, NJ: Lawrence Erlbaum Associates.
- Sternberg, R. J., Hedlund, J. (2002). Practical intelligence, g, and work psychology. *Human Performance* 15(1/2), 143–160.
- Sternberg, R. J., Hojjat, M., & Barnes, M. L. (2001). Empirical aspects of a theory of love as a story. *European Journal of Personality*, 15, 1–20.
- Sternberg, R. J., & Jordan, J. (Eds.) (2005). *Wisdom: A handbook*. New York: Cambridge University Press.

- Sternberg, R. J., Kaufman, J. C., & Pretz, J. E. (2003). A propulsion model of creative leadership. *Leadership Quarterly*, 14, 455–473.
- Sternberg, R. J., & Lubart, T. I. (1995). *Defying the crowd: Cultivating creativity in a culture of conformity*. New York: Free Press.
- Sternberg, R. J., & Lubart, T. I. (1996). Investing in creativity. *American Psychologist*, 51(7), 677–688.
- Sternberg, R. J., & Vroom, V. H. (2002). The person versus the situation in leadership. *Leadership Quarterly*, 13, 301–323.
- Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. *Journal of Psychology*, 25, 35–71.
- Stogdill, R. M., & Coons, A. E. (Eds.) (1957). *Leader behavior: Its description and measurement* (Research Monograph Number 88). Columbus, Ohio: Bureau of Business Research, Ohio State University.
- Vroom, V. H., & Jago, A. G. (2007). The role of the situation in leadership. *American Psychologist*, 62, 17–24.
- Vroom, V. H., & Jago, A. G. (1998). Situation effects and levels of analysis in the study of leaders participation. In F. Yammarino & F. Dansereau (Eds.), *Leadership: The multi-level approaches* (pp. 145–159). New York: JAI.
- Vroom, V. H., & Yetton, P. W. (1973). *Leadership and decision making*. Pittsburgh, PA: University of Pittsburgh Press.
- Weber, M. (1968). *Max Weber on charisma and institutional building* (S. N. Eisenstadt, Ed.). Chicago: University of Chicago Press.
- Wechsler, D. (1939). *The measurement of adult intelligence*. Baltimore: Williams & Wilkins.
- Williams, W. M., & Sternberg, R. J. (1988). Group intelligence: Why some groups are better than others. *Intelligence*, 12, 351–377.
- Yukl, G. (1998). *Leadership in organizations* (4<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice-Hall.
- Zaccaro, S. J. (2007). Trait-based perspectives of leadership. *American Psychologist*, 62, 6–16.
- Zaccaro, S. J., Kemp, C., and Bader, P. (2004). Leader traits and attributes. In J. Antonakis, A. T. Cianciolo, & R. J. Sternberg (Eds.), *The nature of leadership*, (pp. 101–124). Thousand Oaks, CA: Sage Publications, Inc.
- Zimbardo, P. G. (1972, April). Psychology of imprisonment. *Transition/Society*, pp. 4–8.

## **Underreporting in Sexual Assault: A Review of Explanatory Factors**

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Despite the pervasive problem of sexual assault in our society, experts believe that available statistics on rape are an underestimate of the actual number of assaults committed. Researchers and clinicians have long been interested in understanding better the reasons victims are hesitant to report sexual assault and what factors may contribute to these low rates of disclosure. The following paper provides a discussion of the factors found to be related to underreporting of sexual assault. Specifically, the paper examines the literature pertaining to rape myth acceptance, the response of the criminal justice system and availability of community resources as well as situational and victim-related variables as possible contributors to the phenomena of underreporting. Although the research reviewed is specific to the North American context, the findings can also be applied internationally.

**Key Words:** Sexual Assault Reporting

### **Introduction**

It is estimated that millions of women globally have experienced or will experience some form of sexual assault. Statistics around the world provide many examples of the prevalence as well as the seriousness of sexual violence and sexual assault. It is estimated that one-third of adolescent girls experiences a forced sexual encounter or sexual assault (World Bank, 2007; World Health Organization, 2008). In some countries, approximately one in four women may experience sexual violence by an intimate partner and one study based in eight countries found a 25% rate of sexual violence in dating relationships (World Health Organization, 2008).

European statistics reveal similar rates of sexual violence. A 2001 survey in the United Kingdom found that 19.4% of women had been victims of sexual violence (United Nations Development Fund for Women, 2001). A number of studies have reported on the atrocities in the former Yugoslavia and one reported that over 20,000 Muslim women had been raped during the Balkan War (World Health Organization, 2002). Among the studies conducted in Europe, Norwegian researchers found that approximately 25% of women had experienced sexual and/or physical abuse from an intimate partner.

In North America, it has also been estimated that one in three US women will be sexually assaulted in her lifetime. In Canada, 51% percent of all women have experienced at least one incident of sexual or physical violence (Statistics Canada, 1993). Almost 40% of Canadian women had experienced a sexual assault since age 16 and 23% admitted to having been victims of rape or attempted rape.

## Reporting of Sexual Assault

Attempts to address the pandemic of sexual violence and design prevention programs globally remain hindered by the very low official reporting of sexual assault. The number of sexual assaults reported annually to authorities is a vast underestimate of the actual number of assaults committed each year due to the fact that most victims do not come forward (Allgeier & Allgeier, 1995). One Canadian study found that only 6% of sexual assaults are reported to the police. Furthermore, the same study found that only 1% of “date” rapes are reported to the authorities (Ontario Women’s Directive, 1995). Data from 2004 General Social Survey appeared to echo these findings where only 8% of sexual assault cases in all of Canada were brought to the attention of the authorities (Statistics Canada, 2003; 2006). Statistics Canada (2006) conducted a review of studies utilizing data from victimization surveys and found that over 90% of sexual assault victims did not seek assistance from the criminal justice system through reporting the crime. Instead, they were more likely to disclose to friends and family than to the police. Although disclosure numbers were higher for those seeking services such as counselling and medical treatment in the aftermath of an assault (27%), these numbers were still believed to be an underestimate of those actually seeking help. While the availability of these specialized options presents greater choice to women, the disclosure of sexual assault remains low in Canada and effects the efforts made by Canadians in designing intervention and prevention strategies and understanding the continuing risk factors associated with sexual violence. As a result, much of our current knowledge about sexual assault is a limited generalization to non-reporting victims and unidentified assailants (Allgeier & Allgeier, 1995; Koss, Gidycz, & Wisniewski, 1987).

Given the gravity of sexual assault and the negative sequelae resulting from it, researchers and clinicians alike have been keen to explore the reasons survivors of sexual assault do not or only rarely report. It is widely believed and supported by participants in the 2004 General Social Survey that there are many reasons for not reporting a sexual assault. Some of these include a desire for privacy, lack of faith in the criminal justice system, shame or embarrassment, little or no evidence of what happened, uncertainty as to whether a crime occurred, and fear or sympathy for the perpetrator (Statistics Canada, 2003; 2006). Many victims of sexual assault state that seeking assistance from a variety of authorities is as traumatic as the assault itself. These negative encounters have been identified as a form of secondary victimization or a second rape (Bergen, 1995; Clark & Hepworth, 1994; Gager & Schurr, 1976; New York Radical Feminists, 1974; Roberts & Grossman, 1994; Rozee & Koss, 2001; Winkel & Koppelaar, 1991) in which there is a lack or absence of positive social support (Ullman, 1999).

The low disclosure rates and underreporting of sexual assault continues to present serious limitations to research and clinical work in this area. Understanding some of the factors contributing to this may present pathways to changing these patterns. The following paper provides a review and discussion of the literature pertaining to this issue in North America. Studies included examine the factors that have found to be responsible for victims’ hesitancy to report their experiences. The first section will provide a discussion on rape myth acceptance. The second section will address the issue of secondary victimization through response bias within the criminal justice system, followed by a

review of studies that focus on community response bias. The next section will delve into the aspects of the assault that have been found to influence the timeliness of reporting. Finally, the paper will discuss studies which have focused on victim-related variables that might impact upon reporting such as feelings of guilt, embarrassment, shame, and self-blame.

### **Rape Myth Acceptance and Other Theories of Attribution**

To understand what underlies victims' reticence to come forward and report their experiences, it is necessary to examine general social and cultural views of sexual assault. The acceptance of certain false beliefs about rape and rape victims, often termed rape myths, is widely recognized and used to justify the treatment of both the victims and perpetrators of sexual assault. Examples of some of these common rape myths include beliefs that only certain types of women are raped, that rapists tend to be strangers, that men cannot control their sexual urges and that women must not be in certain dangerous situations. The following studies present some of the evidence for the existence of rape myths and their potential role in perpetuating the silence surrounding sexual assault.

In one of the earliest study in this area, Burt (1980) created an instrument to assess levels of endorsement of these myths entitled the Rape Myth Acceptance Scale (RMAS). This is the most well known measure in the field. Research on this measure found that attitudinal variables were closely correlated with the RMAS. Such variables include traditional sex role stereotypes, endorsement of interpersonal violence, and adversarial sexual beliefs (Payne et al., 1999; Pinzone-Glover et al., 1998). Studies conducted using these instruments have yielded results noting that men were more accepting of these attitudes than women were (Fonow et al., 1992; Jimenez & Abreu, 2003; Kassing & Prieto, 2003; Kopper, 1996; Lonsway & Fitzgerald, 1994, 1995).

In an early review of the literature on rape myths, Lonsway and Fitzgerald (1994) found two trends. First, they noted that participants from a community sample who were more inclined to possess such beliefs were less likely to convict a person accused of rape. In addition, higher rape myth acceptance has been associated with shorter sentence length for men convicted of sexual assault in studies that utilized both student and community samples.

Research has also found that men in comparison to women were more likely to agree with certain myths, such as that a woman secretly desires to be raped and that rape is the same as sex (Fonow et al., 1992). Moreover, men more often blamed the victim than women did. The researchers characterized the attitudes of the men in the sample as being more controlling. Subsequent studies using the RMAS have led other researchers to conclude that rape myth acceptance operates as a means for men to justify some forms of sexual violence; while for women it acts as a way to disavow personal vulnerability (Lonsway & Fitzgerald, 1995).

In a study that examined the influence of cultural affiliation on rape myth acceptance, findings demonstrated that Caucasian females were more sympathetic and blamed the victim of sexual assault less than Hispanic women. Latina women tended to possess more negative attitudes toward rape victims and espouse to higher tolerance of rape myths. The researchers surmised the reason for this result stemmed from the fact that



Hispanic women might have more traditional sex roles favouring men over women (Jimenez & Abreu, 2003).

Using a sample of undergraduate females which included some survivors of sexual assault, Mason, Riger, and Foley (2004) examined rape myth acceptance among this group. Consistent with previous research, they found that participants who had high scores on this measure often blamed the victim more and were less likely to report that they believed a rape transpired. This was particularly true of those who identified themselves as victims of date rape. Victims of stranger rape assigned the least amount of blame to victims.

A concept related to and viewed as an extension of rape myth acceptance, benevolent sexism, has also been identified in attributions of blame in sexual assault. Benevolent sexism is seen as a collection of attitudes that view women in stereotypical roles but is subjectively more positive and meant to elicit behaviours that are more prosocial (Glick & Fiske, 1996; 2001). Because of this, benevolent sexism is seen as a rather dangerous form of prejudice because it does not meet the overt characteristics of prejudice and women might be hard pressed to find fault with it (Glick & Fiske, 1996, 2001; Sibley & Wilson, 2006). The available research has consistently found that people who scored high on benevolent sexism placed less blame on perpetrators of sexual assault who were known to the victims, i.e., acquaintances as compared to stranger rape assailants.

Several studies have now examined how the concept of benevolent sexism may be related to bias in attributions and perceptions of sexual assault that may influence reporting. Abrams et al. (2003) found that higher benevolent sexism was related to higher blame for known assailant rape victims and to viewing the victim's behaviour as more inappropriate. Individuals who scored high on benevolent sexism were more likely to see a woman inviting a relationship with a man as a violation of traditional sex role norms. As such, they were perceived as being more responsible for the consequences. True rape was not seen to occur when women failed to follow traditional gender roles by participants who scored high in benevolent sexism. Women who ignored such roles might be seen as actively inviting aggressive behaviours. Viki et al. (2004) similarly found that people who scored high on benevolent sexism placed less blame on perpetrators of acquaintance rape and recommended shorter sentences for assailants in acquaintance rapes.

In summary, the research reviewed on the enduring pervasiveness of rape myths supports the acceptance of such views among diverse populations. Endorsement of these beliefs is related to stereotyped and often false views of both victims and perpetrators and has wide-ranging implications for the treatment and disposition of sexual assault cases and hence the low levels of willingness to disclose. In our clinical work, rape myths and related concerns about social views and beliefs about responsibility of victims and perpetrators are a significant factor in the reluctance of survivors to come forward and report a sexual assault.

### **Criminal Justice System Response to Sexual Assault**

As noted earlier, sexual assault victims are often wary of reporting what happened to them because of the additional trauma stemming from interacting with the authorities and/or support agencies (Bergen, 1995; Clark & Hepworth, 1994; Gager & Schurr, 1976;

New York Radical Feminists, 1974; Roberts & Grossman, 1994; Rozee & Koss, 2001; Ullman, 1999; Winkel & Koppelaar, 1991). Researchers have found that upon initial contact with a sexual assault victim, law enforcement officials may utilize screening techniques to determine whether certain cases should not be pursued. Some reasons for not pursuing a case may include discrepancies in the victim's story or findings that nothing happened at all. In addition to these reasons, there may be pervasive discrimination against a specific type of victim or against a social class to which she or he belongs. For example, authorities have been less likely to pursue an investigation if the victim is poor, a member of any minority groups, a prostitute, or a substance abuser (Clark & Lewis, 1977; Gager & Schurr, 1976). Moreover, if a victim's behavior could have been construed to provoke the assault, the case might be declared unfounded (Gunn & Linden, 1997). Finally, if there is a possibility that the defendant will not be convicted, the police may also conclude the case is unfounded (Allgeier & Allgeier, 1995; Brown, Hamilton, & O'Neill, 2007; Clark & Lewis, 1977; Estrich, 1995; Gager & Schurr, 1976; Hall, 1995; New York Radical Feminists, 1974).

An early study by Clark and Lewis (1977) noted that out of the 74 "unfounded" cases of sexual assault, most reports provided no explanation as to why they were not pursued. For the remaining cases, the officers involved appeared to believe that the cases would not be strong enough to prosecute or that the victim had not been assaulted at all. In 12 cases with explanations, all appeared to demonstrate some bias. The reports seemed to share the prejudices the officers had about how women should behave. Some reasons involved alcohol use, any mental illness, and the promptness of reporting the incident. The researchers concluded that these attitudes might have influenced how these cases were handled. More recently, a report from Statistics Canada (2003) found that once a sexual assault case was reported to the police, it was less likely than other violent offences to be considered as "founded" by the authorities. These cases were also less likely to result in charges laid against the suspect.

To obtain the perspective of sexual assault victims, researchers conducted telephone interviews with a sample of 102 women from Canada (Hattem, 2000). 38% of those interviewed indicated that their reticence to report sexual assault stemmed from negative perceptions of the criminal justice process. Much of this was based on fears of not being taken seriously by the police or the courts. Some respondents reported anxiety about being blamed for the assault taking place. Respondents often cited other women's experiences or their own experiences with the criminal justice system as support for their positions. It was only when the probability of conviction was high that victims were willing to document the assault.

The bias against victims of sexual assault is not limited to the police and extends to other criminal justice officials. While it is often easier to make arrests in certain sexual assault cases such as those where the victim knows the assailant, obtaining convictions for these cases is often more difficult. Among the cases brought forth in the U.S., about half or more are rejected (Allgeier & Allgeier, 1995; Brown et al., 2007; Clark & Lewis, 1977; Frohman, 1995; Hall, 1995; Rozee & Koss, 2001). Compared to violent offences in Canada, sexual assault cases often result in lower conviction rates (Statistics Canada, 2003). Using a sexual assault care clinic database and legal files, DuMont and Myhr

(2000) found that the overall conviction rate for sexual assault cases was 17%. Statistics Canada (2006) found that less than four in ten cases of sexual assault cases that were brought before the courts resulted in a conviction.

In an examination of several district attorneys' offices across the United States, Frohman (1995) discovered that prosecutors use a similar set of criteria to the police when it comes to pursuing cases. Topping the list of reasons to reject cases was a previous relationship between the victim and the perpetrator, followed by the lack of force involved, and the absence of corroborating evidence. This study also found that some district attorneys distinguished different types of sexual assaults based on the acts that occurred, the situation in which the assault transpired, and the relationship between the parties. Other attorneys had issues as to the timeliness of the crime being reported, stating that the victim's motives and credibility could be questioned in the course of a trial. With respect to corroborating evidence, sexual assault is viewed as less likely to be supported by evidence than other crimes such as a theft. In sexual assault cases, evidence for trial is quite difficult to procure as there is little probability of witnesses, no contraband, and no way to re-enact the event for recording. Some researchers have found that having evidence was often dependent on the victim not immediately engaging in behaviours that most do following an assault such as bathing, douching, and brushing their teeth (Brekke & Borgida, 1988; Brown et al., 2007; Estrich, 1995; Frohman, 1995; Gager & Schurr, 1976).

Another study investigating sexual assault prosecutions found that from 102 reports only a handful of cases were prosecuted (Campbell et al., 1999). Only four of these cases convicted the assailant at trial while five cases accepted a guilty plea. The remaining cases received little attention from the legal system and were dropped early in the prosecution process. Some of the prosecutors surveyed cited the unconvincing presentation of the survivor as a witness among the reasons for dropping cases. This often becomes an issue when there is a discrepancy between the victim's behaviour and what the prosecutor knows or believes about rape. Other prosecutors have used the survivor's living circumstances, relationship with the assailant and behaviour as reasons to drop cases. Should the victim live in a racially mixed, working class neighbourhood, prosecutors may conclude that a predominantly White and middle-class jury will render a not guilty verdict (Brown et al., 2007; Campbell et al., 1999; Rozee & Koss, 2001; Temekin, 2000).

In one of the few studies of presiding judges' perceptions of sexual assault victims researchers obtained findings similar to studies of prosecutors. Survey data results indicated that judges tended to divide victims into two categories: true victims and those implicated in the assault. Their assessments were based on the factors related to the attack and the nature of the victims' character. They also tended to hold on to more traditional views of sexual assault including that sexual assaults involving stranger assailants were more believable (Gager & Schurr, 1976).

Feldman-Summers and Palmer (1980) surveyed 17 superior court judges from the U.S. The questionnaire they completed examined beliefs regarding the causes of sexual assault, ways to prevent sexual assault, judgments of the number of complaints brought to the attention of the criminal justice system, and judgments about the circumstances associated with different sexual assault complaints. Compared to social services

personnel (counsellors, social workers), judges were more likely to perceive sexual assault as a result of characterological issues of men, i.e., sexual frustration and mental illness and women's behaviour, e.g., going out alone at night. Furthermore, they believed that sexual assault could be prevented by changing the behaviours of potential victims.

There is also evidence that juries tend to render verdicts according to their own sexual beliefs as well applying their own standards of behaviour to the victim (Brekke & Borgida, 1988; Clark & Lewis, 1977; Gager & Schurr, 1976; Kalven & Zeisel, 1971; Wiener & Hurt, 2000). In a study that examined jury decisions in rape trials, researchers compared the outcomes of cases decided by a jury and cases where only a judge presided. They found that juries rarely rendered a conviction when the case was an acquaintance rape (three out of forty-two cases). According to the researchers, the juries used a doctrine of 'contributory' behaviour on the part of the victim such as accompanying the perpetrator back to his residence or hitchhiking to guide their decisions (Kalven & Zeisel, 1971). In another study, Clark and Lewis (1977) noted that juries were less likely to believe that a rape occurred if the victim went back to the assailant's residence. There is an implicit belief that she did so voluntarily and probably provoked or enticed the assailant. Coincidentally, these cases were also deemed to be unfounded by the police.

Brekke and Borgida (1988) used a sample of 208 undergraduate students to examine mock jurors' decision-making processes in a case of sexual assault. The researchers audiotaped participants as they deliberated over testimony presented at a mock rape trial. The participants were divided into two groups: one where an expert witness was used and the other group without such testimony. Discussions were analyzed according to whether participants felt it was beneficial for the prosecution to have the testimony of an expert witness or not. Results indicated that in cases where there is great ambiguity, mock juror participants resort to using themselves as reference points. Under these conditions, these individuals were more likely to be influenced by variables that concerned task, situation, context, and individual differences. When participants did not have feedback from an expert witness, they tended to spend a great deal of time deliberating over the victim's behaviour. Furthermore, the tones of their discussions were more oriented towards the defense attorneys' position.

In summary, the studies reviewed on criminal justice responses to sexual assault victims support the view that forms of bias operate within various levels of the criminal justice system that may have negative psycholegal implications for sexual assault victims. The treatment of rape victims within the criminal justice system has been referred to as re-victimization or a secondary trauma. The implicit or explicit views of criminal justice officials and the resulting treatment of rape victims are known to be factors in reluctance to come forward following a sexual assault.

### **Community Resources and Responses to Victims**

Another factor identified as contributing to rape victims' hesitation to disclose is related to the lack and differential availability of community resources and supports for survivors. A U.S. study found that many victims coming forward received only minimal community services and few filed a police report (Campbell, Sefl, Barnes, Ahrens, Wasco, & Zaragoza-Diesfeld, 1999). Those who received medical treatment were not fully advised

about potential consequences of the assault such as pregnancy and sexually transmitted disease precautions. Not surprisingly, the rates of secondary victimization were higher among individuals who sought medical and legal services. Further, the researchers identified survivors of non-stranger rape as an at-risk group for post-traumatic stress. These individuals received fewer services from the legal system and experienced higher rates of secondary victimization than victims of stranger assault.

Clinical service providers for sexual assault victims are also vulnerable to rape myth acceptance and may demonstrate bias in their treatment of survivors. In a survey of 183 counsellor trainees in the U.S., it was found that males in the sample were more accepting of rape myths than their female counterparts. Experience in providing therapy to rape clients played a role in whether one endorsed rape myths. Individuals who possessed less experience in this area were more likely to endorse rape myths than those who engaged in prior work with such clients. The researchers were concerned that some participants did not outright reject certain rape myths and thought that this could present an obstacle in providing treatment to victims of sexual assault (Kassing & Prieto, 2003).

A qualitative study using interview data from U.S. rape victim advocates found that many of their clients experienced secondary victimization at the hands of medical professionals as well as the police. This was particularly true when the victims were subjected to questions that forced them to recount the rape multiple times, accused them of lying or blamed them for what transpired. While the majority of advocates felt their clients' interactions with the police were primarily responsible for re-victimization and medical professionals were viewed less negatively, the participants still believed much could be done to improve the manner in which clinical services could be provided. One advocate told the researcher she often heard doctors telling victims no rape kit would be performed if they did not remember being assaulted (Maier, 2008).

In summary, a number of studies have identified the lack of community resources and the selective availability of support services as related to the willingness of victims to come forward. In particular, victims of acquaintance rape or victims with few outer signs of trauma may experience difficulty in obtaining services and may be particularly hesitant to report their assaults. This review also documents that some service providers working specifically with sexual assault victims may still endorse stereotypes and biased views of victim behaviour.

### **Assault-related Variables**

Researchers have found that situational variables associated with a sexual assault may also impact the likelihood of rape disclosures being treated seriously and the resulting reluctance of victims reporting this crime. One factor that has been identified as important in this is the relationship between the victim and the perpetrator. Researchers have consistently found that attributions of victim responsibility were highest in situations involving known assailants rather than in situations with strangers (Allgeier & Allgeier, 1995; Bridges & McGrail, 1989; Littleton, 2001; Mynatt & Allgeier, 1990; Tetreault & Barnett, 1987). In a study of victims' perception of credibility upon reporting, Canadian researchers found that women who were raped by someone who was known to them were less likely to report the incident. Chart information from 958 cases seen at a sexual

assault clinic in Vancouver was used to examine the relationship between police contact and circumstances of the assault. The presence of physical injury and the fact that the assailant was a stranger were variables significantly associated with police involvement. This finding was interpreted as victims' misconception, albeit with some foundation, that injuries must be present in order to be seen as credible by the authorities (McGregor, Wiebe, Marion, & Livingstone, 2000).

In another study examining attributions of blame in sexual assault, researchers found that a previous relationship between the victim and perpetrator predicted less blame for the perpetrator (Marx & Gross, 1995). Schuller and Klippenstine's (2004) literature review also concluded that as the sexual intimacy of a couple increased people were more likely to concentrate on the behaviour of the woman and be more wary of her credibility in reports of sexual assault.

The level of injuries in addition to relationship to the assailant was also found to influence whether victims report a sexual assault. A study by Feldman-Summers and Norris (1984) reported that among a pool of self-identified rape victims, a large majority of women (74%) who reported to the police and/or a social agency had suffered cuts and bruises. With respect to the victim-assailant relationship, 36% of victims who reported the crime to the authorities had no prior relationship with the perpetrator compared to the 61% who did not report and had some relationships with the assailant. As noted above by McGregor et al., (2000), the presence of physical injury was also significantly associated with police involvement in their Canadian study.

Millar, Stermac, and Addison (2002) also found that the more severe the attack, the earlier victims would seek treatment. In their analyses, it was discovered that victims sustaining physical injury were more likely to obtain treatment 13-24 hours after the assault. When weapons were used during the attack, victims sought help within 12 hours. The researchers also found patterns when it came to the relationship between perpetrator and victim. In cases where the assailant was a stranger, victims were more likely to seek help within 12 hours. Meanwhile, non-stranger rape victims waited over 48 hours before obtaining treatment. In regards to the last finding, there were several possible explanations proposed by the researchers. The first is that victims of known assailant assaults would be less likely to label their experiences as rape since the prevailing view often involves an anonymous assailant. Another reason might stem from these individuals' belief that what happened to them will be taken less seriously than cases where the attacker was a stranger (Abrams, Viki, Masser, & Bohner, 2003; Allgeier & Allgeier, 1995; Bergen, 1995; Gager & Schurr, 1976; Lips, 1993; Millar et al., 2002; Winkel & Koppelaar, 1991; Ullman, 1999).

DuMont, Miller, and Myhr (2003) obtained similar results from their research. They found that the more severe the type of coercion used the more likely the victim would obtain police involvement. Using a sample of 186 cases from a sexual assault care clinic in Toronto, the researchers found that victims who experienced physical violence or were restrained in some manner were three times more likely to contact the authorities than those who did not. That is, those who believed themselves to have met criteria for assault as defined by rape myths often reported to the police and medical professionals.

The researchers concluded that these violent aspects of the assaults helped victims to define what happened to them and consequently, to report it.

The presence of alcohol and the victim's use of alcohol also influence the attributions in a rape and poses serious questions pertaining to criminal responsibility (Schuller & Wall, 1998; Wall & Schuller, 2006). Specifically, observers often view victims who consume alcohol prior to the assault as more culpable than ones who do not (Clark & Lewis, 1977). Researchers found that this was true in a study of undergraduate men and women who perceived the drinking victim as being careless and more responsible for her fate than the non-drinking woman. There was also a tendency not to label the scenario as a rape, especially when alcohol was involved (Scronce & Corcoran, 1995).

### **Victim-related Variables**

Research has demonstrated that certain behaviours of rape victims have been linked to biased views of sexual assault and consequently, the reluctance to report. Some literature indicates that if the victim of a sexual assault acts in a manner that suggests her sexual availability and interest, observers' interpretation of the situation will be such that the perpetrator's role will be downplayed, which could contribute to victims' unwillingness to report. Examples include consensual sexual activity with the perpetrator, previous intimacy with the perpetrator, or allowing the perpetrator to pay for the date (Clark & Lewis, 1977; Littleton, 2001; New York Radical Feminists, 1974).

Whether or not the victim resisted has been found to influence attributions of blame in sexual assault (Clark & Lewis, 1977). One group of researchers found that only 6% of participants in their sample of college students identified an incident as rape if the victim did not resist. Meanwhile, 25% did so when the victim made verbal resistance. The remaining 53% of the sample labeled the incident as rape if the victim resisted physically. This led researchers to conclude that the stronger and explicit the resistance, the more likely observers would identify the situation as a sexual assault (Hannon, Kuntz, Van Laar, Williams & Hall, 1996).

Kopper (1996) also found that observers' perception of victim resistance played a role in judgments regarding rape. Specifically, the time of initial resistance was significantly associated with blame attributed to the victim and the acquaintance assailant post-assault. When the time of resistance occurred early in the encounter participants held the victim less responsible. In addition, they were more likely to believe that the assault was unavoidable. The result might explain as to why acquaintance rape is not as widely reported. Given that the victim knows her assailant in these assaults she might tend to blame herself. This might be particularly true should the victim not resist right away (Mynatt & Allgeier, 1990).

Bergen (1995) found themes of guilt and self-blame during interviews with victims of marital rape and domestic violence. Many of these women saw themselves as failing in the efforts to be a good partner and partially responsible for what happened. It was not until these women sought assistance and consequently left their abusers that they were able to define what happened to them as rape (Bergen, 1995; Estrich, 1995). Mynatt and Allgeier (1990) suggested that survivor self-blame was greater in assaults where psychological force was more prominent than physical force. The self-blame on the part of the

victim may be a part of a vicious cycle where they perceive themselves as responsible and thereby reluctant to contact the authorities (Lonsway & Fitzgerald, 1994; Thornton, Ryckman, Kirchner, Jacobs, Kaczor, & Kuehnel, 1988).

The type of clothing worn by a rape victim has also been related to attributions of responsibility. Vali and Rizzo (1991) examined perceptions of rape victims among a sample of psychiatrists from the U.S. The results showed that 63% of the participants indicated that revealing clothes contributes to the sexual victimization of young females and 88% reported that the victim signaled attention from the nature of their clothing. Cassidy and Hurrell (1995) studied students and their perceptions of rape based on the victim's clothing in a series of presented stimuli. The results showed that provocative dress of a date rape victim resulted in a greater likelihood of blame towards the victim compared to when the victim was conservatively dressed or when there was no physical information presented. In addition, there was a greater tendency to justify the assailant's behaviour when the victim was dressed provocatively than when the victim was conservatively dressed. Finally, participants were less likely to render judgments that a rape occurred when the victim was dressed provocatively.

Whether or not the victim possessed a condom was also studied in order to assess how that might impact other people's judgment of the situation. The researchers found that participants viewed the female in the scenario with a condom as being more sexually available and more willing to engage in sex than the female in the scenario who did not possess a condom. Situations with females having a condom were less likely to be viewed as a sexual assault (Hynie, Schuller, & Couperthwaite, 2003).

Despite increased awareness of factors contributing to sexual assault, it appears that victim characteristics and resulting victim blame continue to influence judgments of sexual assault responsibility. Knowledge of this bias and the effects of blaming victims for their appearance, prior relationships and overall behaviour continue to be contributing factors in making women hesitant to come forward after a sexual assault.

## **Discussion**

This paper reviewed some of the prevailing factors associated with the overall under-reporting of sexual assault in North America. While this review does not include many international studies, it is widely believed that the socio-cultural attitudes and beliefs underlying victims' reluctance to come forward exist and are possibly even more pronounced in other cultures. This paper examined beliefs and attitudes about sexual assault that are implicated in the prevailing treatment of sexual assault survivors and held by victims, perpetrators, members of the criminal justice system, medical and clinical treatment personnel as well as the general public. Given the content of these attitudes and the enduring stereotypes, it is not surprising that many victims feel that they experience secondary victimization following reporting a sexual assault. As such, overall reporting rates severely underestimate the number of actual cases.

Further exacerbating this is the misguided information those in the criminal justice system use to ascertain culpability. The perceptions that are shaped from this information ultimately result in biased treatment when survivors attempt to access either



criminal justice or clinical services (Campbell et al., 1999; Feldman-Summers & Palmer, 1980; Frohman, 1995; Gunn & Linden, 1997; Hattem, 2000; Maier, 2008; Statistics Canada, 2003; 2006; Ullman, 1999). By being implicitly told that their ordeal will constantly be doubted and questioned at every turn, victims of sexual assault find themselves traumatized once again and consequently, wondering why they have sought out assistance in the first place. This tendency to find fault with the victim is pervasive and also discourages those who have been assaulted from coming forward at all, forcing them to deal with their experience in silence.

Despite this continuing negative bias some strides have been made in a number of areas in the overall handling of sexual assault cases and the treatment of survivors. In the past decade, metropolitan police departments have established specialized sex crime units, possibly in response to criticism. Individuals working for these units receive specialized training to deal with victims. Consequently, the manner in which the crime is investigated might be affected in that more resources such as dealing with crime scenes or utilizing female officers and detectives to question victims are allotted to specific aspects of the investigation (Clark & Hepworth, 1994; Gager & Schurr, 1976; Hall, 1995). In the Canadian context, the case of *Jane Doe v. Board of Commissioners of Police for the Municipality of Metropolitan Toronto* (1990) introduced changes regarding how Toronto police handle sexual assault cases. These changes included revising the definition of rape, which shifted away from the emphasis on violence as being part of the crime and including both men and women as possible perpetrators and victims (Landau, 2006).

As well, Ontario and other provinces in Canada have developed a network of specialized care centres for victims of sexual assault. These are hospital-based and designed to provide emergency medical and nursing care to victims of sexual assault who are over 18 years old. The focus is not only on specialized care, including counselling and follow-up but also on the collection of forensic evidence in order to aid in the prosecution of perpetrators. The inclusion of highly specialized and trained personnel has aided victims in coming forward and receiving appropriate assistance. While much more work needs to be done in order to increase the rates of disclosure in sexual assault, these steps as well as our broadening awareness are indications of possible change in this area.

## References

- Allgeier, A.R., & Allgeier, E.R. (1995). *Sexual Interactions*. Lexington, KY: D.C. Heath and Company.
- Abrams, D., Viki, G.T., Masser, B., & Bohner, G. (2003). Perceptions of stranger and acquaintance rape: The role of benevolent and hostile sexism in victim blame and rape proclivity. *Journal of Personality and Social Psychology*, *84*(1), 111–125.
- Bergen, R.K. (1995). Surviving wife rape. *Violence Against Women*, *1*(2), 117–138.
- Brown, J.M., Hamilton, C., & O'Neill, D. (2007). Characteristics associated with rape attrition and the role played by scepticism or legal rationality by investigators and prosecutors. *Psychology, Crime, & Law*, *13*(4), 355–370.
- Burt, M. (1980). Cultural myths and supports for rape. *Journal of Personality and Social Psychology*, *38*, 217–230.
- Campbell, R., Sefl, T., Barnes, H.E., Ahrens, C.E., Wasco, S.M., & Zaragoza-Diesfeld, Y. (1999). Community services for rape survivors: Enhancing psychological well-being or increasing trauma? *Journal of Consulting and Clinical Psychology*, *67*(6), 847–858.
- Cassidy, L., & Hurrell, R.M. (1995). The influence of victim's attire on adolescents' judgment of date rape. *Adolescence*, *30*(118), 319–323.
- Clark, S., & Hepworth, D. (1994). Effects of reform legislation on the processing of sexual assault cases. In J.V. Roberts & R.M. Mohr (Eds.), *Confronting sexual assault: A decade of legal and social change* (pp. 20–56). Toronto, ON: University of Toronto Press.
- Clark, L., & Lewis, D. (1977). *Rape: The price of coercive sexuality*. Toronto, ON: The Women's Press.
- DuMont, J., Miller, K.L., & Myhr, T.L. (2003). The role of “Real Rape” and “Real Victim” stereotypes in the police reporting practices of sexually assaulted women. *Violence Against Women*, *9*(4), 466–486.
- DuMont, J., & Myrh, T.L. (2000). So few convictions: The role of client-related characteristics in the legal processing of sexual assaults. *Violence Against Women*, *6*(10), 1109–1136.
- Estrich, S. (1995). Is it rape? In P. Searles & R.J. Berger (Eds.), *Rape & society: Readings on the problem of sexual assault* (pp. 183–193). Boulder, CO: Westview Press.
- Feldman-Summers, S., & Norris, J. (1984). Differences between rape victims who report and those who do not report to a public agency. *Journal of Applied Social Psychology*, *14*, 562–573.
- Feldman-Summers, S., & Palmer, G.C. (1980). Rape as viewed by judges, prosecutors, and police officers. *Criminal Justice and Behaviour*, *7*(1), 19–40.
- Fonow, M.M., Richardson, L., & Wemmerus, V.A. (1992). Feminist rape education: Does it work? *Gender & Society*, *6*(1), 108–121.
- Frohman, L. (1995). Discrediting victims' allegations of sexual assault: Prosecutorial accounts of case rejections. In P. Searles & R.J. Berger (Eds.), *Rape & society: Readings on the problem of sexual assault* (pp. 199–214). Boulder, CO: Westview Press.
- Gager, N., & Schurr, C. (1976). *Sexual assault: Confronting rape in America*. New York: Grosset & Dunlap.
- Glick, P., Diebold, J., Bailey-Werner, B., & Zhu, L. (1997). The two faces of Adam: Ambivalent sexism and polarized attitudes toward women. *Personality & Social Psychology Bulletin*, *23*(12), 1323–1335.

- Glick, P., & Fiske, S.T. (2001). An ambivalent alliance: Hostile and benevolent sexism as complementary justifications. *American Psychologist*, 56(2), 109–118.
- Glick, P., & Fiske, S.T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70(3), 491–512.
- Gunn, R., & Linden, R. (1997). The impact of law reform on the processing of sexual assault cases. *The Canadian Review of Sociology and Anthropology*, 34(2), 155–174.
- Hall, R. (1995). *Rape in America*. Santa Barbara, CA: Contemporary World Issues.
- Halligan, S.L., Michael, T., Clark, D.M., & Ehlers, A. (2003). Posttraumatic stress disorder following assault: The role of cognitive processing, trauma memory, and appraisals. *Journal of Consulting and Clinical Psychology*, 71(5), 419–431.
- Hampton, H.L. (1995). Care of the woman who has been raped. *New England Journal of Medicine*, 332(4), 234–237.
- Hannon, R., Kuntz, T., Van Laar, S., Williams, J., & Hall, D.S. (1996). College students' judgments regarding sexual aggression during a date. *Sex Roles*, 35, 765–780.
- Hattem, T. (2000, October). *Research report: Survey of sexual assault survivors*. Retrieved March 29, 2008, from the Department of Justice Canada website: [http://www.justice.gc.ca/eng/pi/rs/rep-rap/2000/rr00\\_4/rr00\\_4.pdf](http://www.justice.gc.ca/eng/pi/rs/rep-rap/2000/rr00_4/rr00_4.pdf)
- Hynie, M., Schuller, R.A., & Couperthwaite, L. (2003). Perceptions of sexual intent: The impact of condom possession. *Psychology of Women Quarterly*, 27, 75–79.
- Jimenez, J.A., & Abreu, J.M. (2003). Race and sex effects on attitudinal perceptions of acquaintance rape. *Journal of Counselling Psychology*, 50(2), 252–256.
- Kopper, B.A. (1996). Gender, gender identity, rape myth acceptance, and time of initial resistance on the perception of acquaintance rape blame and avoidability. *Sex Roles: A Journal of Research*, 34(1), 81–94.
- Koss, M.P., Gidycz, C.A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology*, 55(2), 162–170.
- Landau, T. C. (2007). *Challenging notions: Critical victimology in Canada*. Toronto, Canada: Canadian Scholars Press.
- Lips, H.M. (1993). *Sex & gender: An introduction (2<sup>nd</sup> ed.)*. Mountain View, California: Mayfield Publishing Company.
- Littleton, H.L. (2001). When is it rape? The role of rape and seduction scripts. *Unpublished master's thesis*. Blacksburg, VA: Virginia Polytechnical Institute and State University.
- Lonsway, K.A., & Fitzgerald, L.F. (1995). Attitudinal antecedents of rape myth acceptance: A theoretical and empirical reexamination. *Journal of Personality and Social Psychology*, 68(4), 704–711.
- Lonsway, K.A., & Fitzgerald, L.F. (1994). Rape myths: In review. *Psychology of Women Quarterly*, 18, 133–164.
- Maier, S.L. (2008). "I have heard horrible stories...": Rape victim advocates' perceptions of the revictimization of rape victims by the police and medical system. *Violence Against Women*, 14(7), 786–808.
- Marx, B.P., & Gross, A.M. (1995). Date rape: An analysis of two contextual variables. *Behavioural Modification*, 19(4), 451–463.

- Mason, G.E., Riger, S., & Foley, L.A. (2004). The impact of past sexual experiences on attributions of responsibility for rape. *Journal of Interpersonal Violence, 19*(10), 1157–1171.
- McCahill, T.W., Meyer, L.C., & Fischman, A.M. (1979). *The aftermath of rape*. Lexington, MA: D.C. Heath.
- McGregor, M.J., Wiebe, E., Marion, S.A., & Livingstone, C. (2000). Why don't more women report sexual assault to the police? *Canadian Medical Association Journal, 162*(5), 659–660.
- Millar, G., Stermac, L., & Addison, M. (2002). Immediate and delayed treatment seeking among adult sexual assault victims. *Women & Health, 35*(1), 53–64.
- Mynatt, C.R., & Allgeier, E.R. (1990). Risk factors, self-attributions, and adjustment problems among victims of sexual coercion. *Journal of Applied Social Psychology, 20*(2), 130–153.
- New York Radical Feminists. (1974). *Rape: The first sourcebook for women*. New York: Plume Books.
- Ontario Women's Directorate. (1995). *Facts to Consider About Sexual Assault*. Toronto, ON: Author.
- Ozer, E.J., Best, S.R., Lipsey, T.L., & Weiss, D.S. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: A meta-analysis. *Psychological Bulletin, 129*(1), 52–73.
- Payne, D.L., Lonsway, K.A., & Fitzgerald, L.F. (1999). Rape myth acceptance: Exploration of its structure and its measurement using the Rape Myth Acceptance Scale. *Journal of Research and Personality, 33*, 27–68.
- Pinzone-Glover, H.A., Gidiycz, C.A., & Jacobs, C.D. (1998). An acquaintance rape prevention program. *Psychology of Women Quarterly, 22*, 605–621.
- Resick, P.A. (2004). A suggested research agenda on treatment-outcome research for female victims of violence. *Journal of Interpersonal Violence, 19*(11), 1290–1295.
- Roberts, J.V., & Grossman, M.G. (1994). Changing the definitions of sexual assault: An analysis of police statistics. In J.V. Roberts & R.M. Mohr (Eds.), *Confronting sexual assault: A decade of legal and social change* (pp. 57-83). Toronto, ON: University of Toronto Press.
- Roze, P.D., & Koss, M.P. (2001). Rape: A century of resistance. *Psychology of Women Quarterly, 25*, 295–311.
- Schuller, R.A., & Klippenstine, M. (2004). The impact of complainant sexual history evidence on jurors' decisions: Considerations from a psychological perspective. *Psychology, Public Policy, and Law, 10*(3), 321–342.
- Schuller, R. A., & Wall, A. (1998). The effects of defendant and complainant intoxication on mock jurors' judgment of sexual assault. *Psychology of Women Quarterly, 22*(4), 555–573.
- Scouting, I., Fairbrother, N., & Koch, W.J. (2004). Sexual assault of women: Prevention efforts and risk factors. *Violence Against Women, 10*(1), 73–93.
- Sibley, C. G., & Wilson, M. S. (2006). Differentiating hostile and benevolent sexist attitudes toward positive and negative sexual female subtypes. *Sex Roles, 51*(11-12), 687–696.
- Statistics Canada. (1993). The Violence against Women Survey. *The Daily - November 18, 1993*, Ottawa, ON: Author.
- Statistics Canada. (2003). Sexual Offences in Canada. *Juristat (Catalogue 85-002-XIE), 23*(6). Ottawa, ON: Author.
- Statistics Canada. (2006). *Measuring violence against women: Statistical trends 2006*. Ottawa, ON: Author.

- Thornton, B., Ryckman, R.M., Kirchner, G., Jacobs, J., Kaczor, L., & Kuehnel, R.H. (1988). Reaction to self-attributed victim responsibility: A comparative analysis of rape crisis counsellors and lay observers. *Journal of Applied Psychology, 18*(5), 409–422.
- Ullman, S.E. (1999). Social support and recovery from sexual assault: A review. *Aggression and Violent Behaviour, 4*(3), 343–358.
- Vali, D., & Rizzo, N.D. (1991). Apparel as one factor in sex crimes against young females: Professional opinions of U.S. psychiatrists. *International Journal of Offender Therapy and Comparative Criminology, 35*(2), 167–181.
- Viki, G.T., Abrams, D., & Masser, B. (2004). Evaluating stranger and acquaintance rape: The role of benevolent sexism in perpetrator blame and recommended sentence length. *Law and Human Behaviour, 28*(3), 295–303.
- Wall, A., & Schuller, R. (2006). Sexual assault and defendant/victim intoxication: Jurors' perception of guilt. *Journal of Applied Social Psychology, 30*(2), 253–274.
- Winkel, F.W., & Koppelaar, L. (1991). Rape victims' style of self-presentation and secondary victimization by the environment: An experiment. *Journal of Interpersonal Violence, 6*(1), 29–40.

## REPORTS OF EMPIRICAL STUDIES

### The Effects of Material Reward on Artistic Creativity, Inkblot Perception, and Emotional Functioning in Art Major University Students

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This study examined the possibility of enhancing artistic creativity and intrinsic motivation through the offer of extrinsic rewards (e.g., pay for creative performance). Inkblot perception and organization were also examined in order to assess the influences of material reward on the cognitive, motivational, and affective personality processes that may be associated with reward. A repeated measures design was used to compare the impact of single and multiple rewards. The offer of contingent reward did increase ratings of creativity and technical goodness, but for the latter art training and background (i.e., artists in the family) mediated reward effects. Reward was also associated with several indices of intrinsic task motivation and quantitative ratings of artistic performance. With first time reward, 11 personality variables and four Holtzman Inkblot Technique composite scores were influenced by reward, although some effects depended heavily on art training and art background, as well as gender. The analysis suggested a heightened affective sensitivity to rewards.

**Key words:** creativity, perception.

Intrinsic motivation has been linked with exceptional performances for well over 100 years. Galton (1879), for example, referred to intrinsic motivation as one of the most important “qualities of intellect and disposition.” He felt that it functions as an “inherent stimulus.” Much more recently, Nicholls (1972/1983) suggested that intrinsic motivation has several roles in the creative process: “First...it maintains the activity needed to establish the necessary skills or information and to generate the necessary possible solutions....Second, it brings an attitude of mind that allows task requirements to come to the fore” (p. 270). MacKinnon (1983/1960) and Barron (1972) found intrinsic motivation to be one of the core characteristics of highly creative individuals. No wonder intrinsic motivation has received so much attention in studies of creative individuals and creative performances. Of special concern are data suggesting a detrimental effects of extrinsic rewards on various aspects of creative performance (Kruglanski, Friedman, & Zeevi, 1971) and on various everyday creative activities, such as taking photographs (Amabile, Hennessey, & Grossman, 1986).

However, in a review of the literature Eisenberger and Cameron (1996) argued for a reassessment of the widespread belief about the detrimental effects of rewards on intrinsic motivation (also see Cameron & Pierce, 1994). They pointed to the (a) highly conditional effects of reward and (b) absence of any detrimental effect of reward, verbal or tangible, in repeated measures data. Typically, only in the case of expected tangible rewards, and within this category only with performance-independent tangible reward (and not quality-dependent or completion-dependent reward) has an unambiguously consistent detrimental effect on performance been demonstrated. With the limited number of within-participants studies and the methodological limitations involved in them, the issue of durability of reward effects has remained open and in need of further research. Interestingly, Eisenberger and Cameron (1996) suggested that the detrimental effect of reward, when found, is more congruent with learned helplessness theory (Overmair, 1985; Seligman, 1975) than with cognitive evaluation theory (Deci & Ryan, 1985).

Rubenson and Runco (1992, 1995) outlined a *psychoeconomic* theory of creativity which explains how both intrinsic and extrinsic factors can contribute to creative work. A critical economic concept is that of *investment*. Runco (2005) reiterated the 10,000 hour estimate of the amount of time needed to acquire expertise, and drew attention to the danger of rigidity and inflexibility arising out of such an investment of time. Experts may thus be motivated to resist creative ideas if these ideas are contrary to the theory or line of thought in which they have a substantial investment. In fact, the relationship may well be linear, with increased investments directly related to increased motivation to resist new ideas. Extrinsic economic incentives may also contribute to creativity, but their effect depends on situational context and the individual and specific task at hand. In psychoeconomic terms, much depends on the market for creativity, as well as an individual's status and discount rates. Motivation and performance in this light are both intrinsically and extrinsically determined.

Eisenberger (1992) initially explained the possible contribution of extrinsic factors in terms of *learned industriousness* and the idea that reinforcement reduces the unpleasantness of any type of physical or cognitive effort, including effort required for divergent thought. In a series of later studies, Eisenberger, Armeli, and Pretz (1998) identified various variables which mediated the enhancing or detrimental effects of reward. For instance, the nonspecific promise of reward increased pre-adolescent school children's artistic creativity if the children had previously received divergent-thinking training. Promise of reward did not enhance artistic creativity if the children had been rewarded for giving conventional object uses; however, prior training on divergent thinking was enough for obtaining higher artistic creative performance, with and without reward (Eisenberger, Haskins, & Gambleton, 1999). Furthermore, Eisenberger and Rhoades (2001) provided evidence for the enhancing role of extrinsic motivation in the beginning phases of training on task performance and intrinsic motivation, which might later transfer to other task performance, and subsequently increase self-determination, intrinsic motivation, and artistic creativity. At a low level of task complexity, contingent extrinsic reward systems might provide the opportunity for individuals to exert personal control by giving them a chance to choose which extrinsic reward they receive for producing creative work (Eisenberger & Rhoades, 2001). It might also provide clear feedback about their effectiveness and performance (Hackman & Oldham, 1980).

McCullers, Fabes, and Moran (1979) explained the detrimental and enhancing effects of reward in terms of processes other than learning and motivation. Their argument was based on MacLean's (1970; 1973) notion of the *triune brain*. Preliminary studies (Fabes, 1982; McCullers, Fabes, & Moran, 1983; Moran, McCullers, & Fabes, 1984) found that reward appears to influence the developmental level at which a participant functions, raising the possibility that extrinsic rewards may produce some developmental regression in cognitive function, perceptual organization, and in the general level of maturity at which the participant approaches the task. This hypothesis, which became known as the *developmental regression hypothesis*, is based in part on the possible primitivization of psychological functioning (via activation of limbic structures), which adversely influences the heuristic processing required for certain tasks, namely tasks that depend on emotional state or well-established skills. Limbic affective-emotional functioning is thought to mediate the effects of reward on immediate human performance (McCullers, Fabes, & Moran, 1979).

Empirical evidence supports the association of tangible reinforcement and the activation of reward/punishment brain mechanisms. In particular, relationships have been found between opiate activation and negative emotionality, including learned helplessness (Maier, Sherman, Lewis, Terman, & Liebeskind, 1983) and feelings of self-inefficacy (Bandura, Cioffi, Taylor, & Brouillard, 1988). Relationships between opiate activation and positive emotionality have also been reported, as in pleasurable aspects of social reinforcement in animals (Panksepp, Herman, Conner, Bishop, & Scott, 1978; Panksepp, Herman, Vilberg, Bishop, & DeEsquinazi, 1980), and between dopamine (DA) activation and positive emotionality in humans (Depue, Luciana, Arbisi, Collins, & Leon, 1994).

Our approach reflects a synthesis of perception, cognition, emotions, and motivation. Syntheses of this nature are provided by neural models of temperament and personality (Cloninger, 1986; Gray, 2000; LeDoux, 1987; Zuckerman, 1984). The key point is that emotions play a significant role in organizing feeling, thought, and action (LeDoux, 1987). One implication is that the developmental regression hypothesis—and the idea that since material reward activates emotional systems, and emotions necessarily have a detrimental effect on higher order cognitive functioning, rewards should produce a primitivization of functioning—is not tenable (Damasio, 1995; LeDoux, 1987; Panksepp, 1998).

An explanation of the role of intrinsic motivation must take temperament and personality (i.e., positive affect, fear and behavioral inhibition, frustration and aggressive behavior, and negative emotionality; Rothbart & Posner, 1999) into consideration. Individual differences in information processing reflecting personality may characterize styles of cognitive functioning which in turn could determine biases towards emotional information (Poy, del Carmen, & Avila, 2003). M. Eysenck (1987) suggested that extraversion represents susceptibility to positive affect and neuroticism represents susceptibility to negative affect. This hypothesis of differential susceptibility to positive and negative affect has been also advanced with respect to reward. Strelau (1987) suggested that, because signals of rewards are the source of positive affect, and because extraverts are more sensitive to signals of reward, extraverts should be more susceptible to positive affect than introverts. Similarly, because signals of punishment (non-reward) are the



source of negative affect, and because neurotics are sensitive to signals of punishment, neurotics should be more susceptible than stable or non-neurotic individuals to negative affect. This emotional susceptibility dependent on personality has received empirical support with laboratory mood induction procedures (Larsen & Ketelaar, 1991), and has been linked to central brain mechanisms (Depue et al., 1994).

Personality traits may thus mediate reward effects (Eisenberger and Cameron, 1996). Cheek and Stahl (1986) reported a particularly detrimental effect of tangible reward on creativity with shy individuals. Shyness is considered a kind of inhibitory tendency characteristic of negative affect (Watson & Clark, 1992) and of neuroticism (Eysenck, 1990); thus, it could be that centrally determined neurophysiological functioning related to both personality and emotionality (Rothbart, Derryberry, & Posner, 1994) may be involved in the detrimental effects of reward.

As is probably apparent, variables not traditionally studied in the past are now being considered. For example, the *maleness* factor has become a prominent variable in the study of creativity due to the overrepresentation of males among eminent creators (Andreasen, 1987; Jamison, 1989) and the association of mental illness and creativity among eminent creators, especially in the arts. Considering the high heritability of personality dispositions like extraversion, neuroticism, and psychoticism, and of abnormal and psychopathological traits like manic depression, and given the association of these traits with creativity, the inclusion of psychiatric family history, family environment, and other family influences (e.g., presence of artists in the family), has yielded most impressive findings (e.g., Andreasen, 1997; Andreasen, Endicott, Spitzer, et al., 1977; Gardner & Moran III, 1997; Richards, Kinney, Lunde, Bennet, & Merzel, 1998).

The general purpose of the present study was to assess the effects of material reward on artistic task performance. Given the findings from the research reviewed above, and the possibility that perceptual, cognitive, and affective factors are all relevant to motivation and creativity, several different measures, including a projective test, were employed. Hersch (1962) was able to distinguish accurately among eminent male artists, schizophrenics, and control participants using ink blots. The artists had both more primitive and more mature responses. Pine and Holt (1960) reported that creative college students (males) had more effective control and more adaptive regression. They differed significantly from non-creative normals in primary process functioning. Very similar results were reported by Cohen (1961): twenty art students (nominated as creative by their professors) had more adaptive regression and higher creativity than randomly selected art students.

Based on the arguments and the literature reviewed above, the following prediction seems justified:

**Hypothesis 1.** Rewarded art students will exhibit higher artistic creativity and intrinsic motivation than non-rewarded participants.

**Hypothesis 2.** Rewarded art students will have both more primitive and more mature responses on the Holtzman Inkblot Technique (HIT).

Although these hypotheses are based on the literature reviewed above, the present study is unique in its focus on the effects of monetary reward at each of the perceptual, emotional, cognitive and behavioral levels of human performance. This research also

offered an opportunity to reassess the developmental regression hypothesis, which posits that reward will have a detrimental effect on cognitive functioning but an enhancing effect on emotional functioning during inkblot perceptions. Likewise, an enhancing reward effect on artistic task performance and motivation; but, a detrimental reward effect on technical goodness would be predicted. Based on recent behaviorally oriented research (Eisenberger and associates, 1996, 1998, 1999, 2001), discussed above, an enhancing reward effect on artistic task performance and intrinsic motivation was expected.

## Method

### Participants

In all, 54 undergraduate art students participated in this research. They included everyone who was in attendance in four separate classes at a large US state university. There were 15 males and 39 females with a mean age of 25 years and a range from 18 to 35. The design (see also below) was a Solomon four group repeated measures design in which treatment conditions differed in terms of whether or not rewards were offered on either an art activity or the HIT protocol in either of two testing sessions. Consequently, each of the four classes was assigned in random fashion to one of four treatment conditions, yielding the following sample sizes: Group 1 (nN/nN) = 12; Group 2 (nR/nN) = 12; Group 3 (nN/rR) = 19; and Group 4 (nR/rR) = 11. The n's and r's refer to non-reward and reward respectively, with lower case pertaining to the art activity and capitals to the HIT, and the forward slash denoting the separation between first and second test sessions. Thus Group 1 (nN/nN) received no reward for either the art activity nor HIT in both the first and second test sessions. Final analyses of artistic creativity involved 51 participants, while analyses of HIT data involved all 54 participants.

### Materials

#### *Artistic Performance*

Artistic performance was assessed through a collage task, the rationale and construct validity of which have been discussed by Amabile (1979, 1982b). Objective ratings of the collages were obtained by a graduate student blind to the experimental conditions via a structured questionnaire developed by Amabile (1979).

#### *Aptitude and Attitude Self-Reports*

Participants' self-reports on motivational orientation toward the task, perceived self-competence, and affective state during task performance were assessed using a 13-item questionnaire. This consisted of a seven-point Likert type rating scale for each item, evaluating the adjective which "best described their attitudes and affective state during task performance."

#### *HIT Protocols*

To assess perceptual-cognitive-emotional functioning and correlates of creativity (Clark, Veldman, & Thorpe, 1965; Dudek, 1968; Holtzman, Thorpe, Swartz, & Herron, 1961; Holtzman, Swartz, & Thorpe, 1971; Insua, 1972; Lehrer, 1970; Loshak, 1976), the Holtzman Inkblot Technique (HIT) was also administered. The HIT is a well known and widely used instrument with readily available normative information and better

established estimates of reliability and validity than other projective techniques. Beyond this, factorial analysis of the HIT also provides composite scores on perceptual organization, intelligence and maturity, emotional responsiveness, and psychopathology.

### *Design*

The initial administration of the art activity was under non-reward conditions; this was done so that the results could be used as a baseline measure of creativity. There were no within-session shifts from reward to non-reward (i.e., rN). In fact, there was only a single shift between sessions from non-reward to reward, in groups 2 and 4. The point of running non-reward prior to reward treatments was to avoid having participants come into non-reward tasks expecting to be rewarded. The one reward-to-non-reward transition in the study (Treatment Group 2 = nR/nN) was, of course, not free of this problem of possible carry-over of expectation of reward. However, the inclusion of this condition was important to our inquiry and at least occurred on a between-sessions basis. The importance of the reward to non-reward transition lies in its potential contribution to understanding of the duration of reward's (detrimental or enhancing) effects on performance. If detrimental or enhancing effects of reward are found on immediate task performance (Session 1) and these carry over to subsequent performance (Session 2), as has been demonstrated with intrinsic motivation, then non-rewarded performance in Session 2 should not change and should be poorer/better than that of other non-rewarded participants in Session 2 who did not receive rewards in Session 1. On the other hand, if reward effects are immediate and short lived, then non-rewarded performance in Session 2 should show an improvement/leveling off relative to rewarded performance in Session 1, and should not be different from that of participants who were never rewarded.

Thus, although not the usual balanced factorial arrangement, the design does provide a basis for answering the questions raised. The initial comparability of the four groups can be determined by comparing initial creative performance. The initial effects of reward on HIT scores can be assessed by comparing the two reward conditions (nR/nN and nR/rR) with the two non-reward conditions (nN/nN and nN/rR). The cumulative effects of reward on HIT scores can be assessed by comparing HIT scores in Session 2 under reward (nN/rR and nR/rR) and non-reward (nN/nN and nR/nN), either directly or relative to initial performance. The effects of reward on artistic creative performance can be assessed by comparing Session 2 reward and non-reward groups, either directly or in relation to initial performance in Session 1. Finally, Session 2 HIT scores provide a basis for assessing R to N and N to R shifts relative to the R and N non-shift controls.

### **Procedure**

All participants designed the collage in their own classrooms at long tables. They were given identical sets of materials as designed by Amabile (1979): In all, 120 pieces of paper in various sizes, colors, and shapes, a 15" x 20" (38cm x 50 cm) piece of cardboard, and a container of glue. Non-reward and reward instructions for the art activity were given by the participants' own art professors. Non-reward instructions stated that: "this activity is part of an ongoing research project to study artistic attitudes, feelings and perceptions,

and I (the instructor) would like you to make a design that would be silly.” The “silliness” theme has been suggested and applied by Amabile (1979, 1982a) to secure a relatively high baseline level of creativity and reduce sources of extraneous variability. Reward instructions were as follows: “In order to help you display your highest technical skill and creativity you will receive \$5.00 upon completion of the activity”. The HIT protocol was administered in the participants’ regular class studios, which also included facilities for projection of HIT slides. These were presented while participants were in one of four groups. Validity data for group administration of the HIT protocols have been provided by Swartz and Holtzman (1963).

In Session 1, all participants performed the art activity under non-reward conditions followed by the administration of Form A of the HIT under either standard, non-reward or under reward conditions. In Session 2, half the participants were rewarded in the art activity and half in the HIT activity, yielding four different combinations of reward and non-reward, as stated above.

Instructions for reward and non-reward HIT sessions followed standard procedures (Swartz et al., 1963). The instructions given to the reward participants, in both activities, differed only with respect to the offer of reward. Reward instructions for the HIT read: “To encourage you to be as imaginative as possible I have university funds to pay you \$5.00 (in new one dollar coins) upon completion of the activity.” In all cases involving reward, to make sure participants believed this offer, the reward was visibly placed on top of the instructor’s desk.

## **Dependent Measures**

### *Creative Task Performance*

The subjective assessments of creativity were carried out using the procedures specified for the consensual assessment technique (Amabile 1982b), with some variations and fully described in Amabile (1979). Four university art professors served as judges. They independently rated the 102 collages on five dimensions, including creativity, craftsmanship, aesthetic value, maturity, and overall rating. Previous work (Amabile, 1982a; 1982b) identified three distinct dimensions of judgment from judges’ ratings: Creativity, Technical Goodness and Aesthetic Value. Maturity and Overall Rating were added because of the relevance of these dimensions for developmental regression. The judges were asked to use their own subjective definitions of these dimensions considering the following criteria: Novel use of materials, novel idea, evident effort, variation of shapes, detail, and complexity. Rating was made on 40-point scales.

An evaluation form was prepared for each judge with instructions which read as follows: “Using your own subjective definition of creativity and considering the following dimensions as additional criteria, rate each participant’s creativity”. Instructions for evaluation of Technical Goodness followed a similar style. Evaluation criteria for this dimension included: organization, neatness, evident planning, balance, and expression of meaning. No additional criteria were identified for Aesthetic Value, Maturity or Overall Rating.

Two kinds of scores were calculated, one based on average judges’ ratings and the other on individual judge’s ratings. Average judge ratings were computed by adding

judges' average scores from all 4 judges on each dimension for each of the four conditions and dividing this by four. This yielded 50 scores, one for each of the artistic dimensions under each condition. For calculating individual scores, an average score was obtained from each judge on each dimension by summing the judge's ratings and dividing by the number of artworks in the group. These were finally added together.

### *Objective Ratings*

Objective ratings of the designs included the following dimensions: number of pieces used, number of colors used, number of pieces made 3-dimensional, number of pieces altered, number of global shape categories used (e.g., circles, squares, etc.), number of individual shape categories used (e.g., small, medium, large circle), and percentage of area covered.

### *Aptitude and Attitude Self-Reports*

Participants' self-reports on motivational orientations towards the task, perceived self-competence, and affective state during task performance formed the variables in this measurement.

### *HIT Personality Variables and Composite Scores*

Two highly trained scorers, members of the original team who developed the HIT (Holtzman et al., 1961), scored the protocols of this study for 21 of the 22 variables: Location (L) (reversed scores), Space (S), Form Definiteness (FD), Form Appropriateness (FA), Color (C), Shading (Sh), Movement (M), Pathognomic Verbalization (V), Integration (I), Human (H), Animal (A), Anatomy (At), Gender (Sx), Abstract (Ab), Anxiety (Ax), Hostility (Hs), Barrier (Br), Penetration (Pn), Balance (B), and Popular (P). Sometimes the HIT provides a Reaction Time (RT) index, but not with group administration (Swartz & Holtzman, 1963). Form Definiteness (FD), Form Appropriateness (FA), and Color (C) scores were prorated to correct for differences in Rejection (R). Composite scores were also computed for "Perceptual Maturity and Integrated Ideational Activity" (Factor 1): M, I, H, P, FD, "Perceptual Sensitivity" (Factor 2): C, Sh, and FD (reversed), "Psychopathology of Thought" (Factor 3): V, M, Ax, Hs, and Creativity (L, M, V, Ax, H, C, Pn).

## **Results**

### **Artistic Performance**

#### *Judges' ratings*

Spearman-Brown inter-judge reliabilities of the dimensions of judgment ranged from .43–.59, apart from a single exception (Technical Goodness, Session 2, reliability = .28), with most reliabilities being around .50. Means and standard deviations for Session 1 and Session 2 for dimensions and treatment conditions are presented in Table 1. One-way ANOVAS on average judge ratings for each of the five dimensions indicated the initial comparability of the treatment conditions—there were no significant differences among groups in Session 1. However, Session 2 one-way ANOVA on average judge ratings for each of the five dimensions indicated that the groups experiencing different treatment conditions differed significantly on Maturity ( $F(3, 47) = 3.62, p < .01$ ) and approached significance in Creativity, Aesthetic Value, and Overall Rating. Scheffé's

follow up tests indicated that Conditions 3 and 4 significantly differed from Conditions 1 and 2. Condition 4 (nR/rR) ranked highest in Creativity, Maturity, and Overall Rating, followed by Condition 2 (nR/nN). Conditions 1 (nN/nN) and 3 (nN/rR) received the lowest ratings.

Table 1: Means of Judge Ratings of Creativity, Technical Goodness, Aesthetic Value, Maturity and Overall Rating

Artistic Dimension	Session 1				Session 2			
	(nN/nN & nR/nN)		(nN/rR & nR/rR)		(nN/nN & nR/nN)		(nN/rR & nR/rR)	
	M	SD	M	SD	M	SD	M	SD
Creativity	17.8	5.4	16.9	4.8	16.2	5.2	17.6	5.1
Technical Goodness	20.5	4.1	19.8	4.4	20.0	4.4	20.5	3.9
Aesthetic Value	16.6	4.0	17.4	4.7	16.6	4.0	17.0	4.7
Maturity	18.8	4.5	19.0	5.3	18.0	4.4	19.1	4.3
Overall Rating	18.0	4.9	17.6	4.8	17.4	3.9	17.8	4.5

A 2 x 2 (Reward x Art Training) ANOVA with the individual dimensions yielded a significant art training main effect for judges' ratings of Maturity ( $F(1, 50) = 4.90, p < .03$ ) and an Art Training x Reward interaction for Technical Goodness ( $F(1, 50) = 7.9, p < .007$ ). Participants with previous art training performed at a higher developmental level than those without such experience. Also, reward had a detrimental effect on Technical Goodness when participants had prior art training experience. A 2 x 2 (Reward x Artist in the Family) ANOVA on the individual dimensions yielded a significant Artists in the Family main effect for judges' ratings of Technical Goodness ( $F(1, 50) = 4.00, p < .05$ ). Participants with artists in the family outperformed technically those without artists in the family.

A 2 x 2 (Reward x Artist in the Family) ANOVA using difference scores revealed a significant reward main effects for Creativity ( $F(1, 50) = 5.76, p < .02$ ) and Technical Goodness ( $F(1, 50) = 3.79, p < .05$ ), with rewards related to higher creativity and technical goodness of the art. A 2 x 2 (Reward x Gender) ANOVA on difference scores revealed a Reward x Gender interaction for Technical Goodness ( $F(1, 50) = 3.79, p < .06$ ) which approached significance, with women receiving reward outperforming the men.

*Objective ratings*

Objective rating mean scores and their standard deviations are presented in Table 2. Preliminary planned comparison analysis indicated the comparability of experimental groups during baseline performance. A 2 (Reward) x 2 (Gender) ANOVA on difference scores failed to yield significant reward main effects; it did, however, reveal the existence of differences due to Reward x Art Training interaction for number of pieces used ( $F(1, 50) = 7.45, p < .01$ ), and number of pieces altered ( $F(1, 50) = 6.12, p < .02$ ), and a Reward x Artists in the Family interaction for number of pieces used ( $F(1, 50) = 7.82, p < .01$ ) and number of global shape category used ( $F(1, 50) = 5.17, p < .02$ ).

Table 2: Means of Objective Ratings of Creativity

Objective Dimension	Session 1				Session 2			
	(nN/nN&nR/nN)		(nN/rR &nR/rR)		(nN/nN&nR/nN)		(nN/rR &nR/rR)	
	M	SD	M	SD	M	SD	M	SD
No.pieces used	49.39	19.20	61.00	29.98	52.08	20.36	52.36	24.61
No.colors used	9.08	1.34	9.21	1.66	9.13	1.68	9.25	1.34
No. 3-D pieces	3.30	4.70	0.53	1.80	3.08	6.18	2.14	7.37
No.pieces altered	3.21	4.65	5.96	26.36	3.26	6.26	1.17	2.95
No.global shape cat.	5.08	1.16	5.46	0.96	5.04	1.18	5.46	1.10
No. individual shapes	8.73	1.93	9.10	1.89	8.69	1.79	8.71	1.88
Percentage of area covered	73.60	19.32	74.46	14.16	76.73	11.54	78.39	15.27

Participants with art training background, when compared with those without such training, utilized and altered significantly fewer pieces under reward than non-reward. This shift was not observed in these participants under non-reward. This is an instance of how previous art training mediates the effects of reward on objective measures of artistic creativity. Similarly, for those with artists in the family, in comparison with participants without artists in the family, this difference mediated the number of pieces altered and the number of global shape categories used in the collages.

*Correlations*

Of interest are the significant correlations obtained between judges’ ratings of creativity and technical goodness and objective measures. During Session 1, the baseline, only one measure correlated with Creativity (No. of 3-D pieces used,  $r = .39, p < .01$ ) and another was negatively correlated with Technical Goodness (No. of pieces altered,  $r = -.29, p < .04$ ). However, in Session 2, five of seven measurements were correlated with Creativity (No. of pieces used,  $r = .53, p < .001$ ; Number of pieces altered,  $r = .28, p < .05$ ; No. 3-D pieces used,  $r = .38, p < .01$ ; No. of pieces altered,  $r = .28, p < .04$ ; No. of individual shape categories,  $r = .38, p < .01$ ; Percentage of area covered,  $r = .35, p < .01$ ). Only one was associated with Technical Goodness in Session 2, and in the opposite direction (No. of 3-D pieces used;  $r = -.30, p < .03$ ). Given the number of correlations computed, these coefficients should be interpreted as exploratory.

*Planned Comparisons*

Planned comparison analysis on self-report data, depicted in Table 3, further supported the initial comparability of experimental groups during baseline performance in terms of motivation and attitudes toward the art activity. For Session 2, however, there were several significant differences between non-reward and reward groups: Intrinsic/extrinsic motivation for the task,  $t(51) = 2.64, p < .01$ , playful orientation,  $t(51) = 3.13, p < .003$ , task enjoyment,  $t(51) = 2.50, p < .01$ , competence on task,  $t(51) = 2.41, p < .02$ , willingness to volunteer,  $t(51) = 3.30, p < .004$ . Reward participants reported more intrinsic motivation and more playfulness while engaged in the activity. They perceived the task to be easier, expressed more willingness to volunteer in the future, and liked the reward very much (mean rating = 6.2 of 7.0)

Table 3. Means of Aptitude and Attitude Self-report Ratings

Attitude Questionnaire Item	Session 1				Session 2			
	(nN/nN nR/nN)		(nN/rR& nR/rR)		(nN/nN& R/nN)		(nN/rR& nR/rR)	
	M	SD	M	SD	M	SD	M	SD
General artistic ability	3.23	1.97	3.16	1.60	3.44	1.59	3.70	1.02
General interest in art	5.69	1.77	5.28	1.67	4.91	2.27	5.33	1.68
Motivation for task intrinsic / extrinsic	3.58	1.87	4.18	1.89	2.61	2.10	4.10	1.98
Orientation for task work / leisure	5.61	1.83	6.22	0.95	5.34	1.69	5.70	1.57
Playfulness	4.83	2.00	5.41	1.52	3.86	1.86	5.20	1.38
Task enjoyment	4.90	1.41	5.39	1.07	4.34	1.61	5.07	1.36
Satisfaction with performance	3.21	1.49	2.97	1.29	3.86	1.35	3.36	1.79
Perception of task easy / difficult	6.04	1.08	6.28	0.71	5.43	1.37	6.23	1.04
Ability for task	4.97	1.56	5.19	1.03	4.78	1.24	5.13	1.10
Rating of own design	3.96	1.56	4.51	0.56	3.59	1.99	4.17	1.66
Pressure felt during performance	6.00	1.80	5.89	1.66	5.91	1.50	6.10	1.82
Likelihood of volunteering again	3.87	1.85	4.68	1.39	2.79	2.55	4.70	1.66

### HIT Personality Correlates of Material Reward

Separate 2x2x2x2 (Reward x Gender x Art Training x Artists in Family) ANOVAs were conducted for each of the HIT variables on Session 1 and Session 2 scores.

#### First Time Reward - Session 1

Two sets of main effects corresponding to reward and art training were obtained. First, Reward main effects for Session 1 were found on Movement ( $M$ ,  $F(1, 53) = 12.68$ ,  $p < .001$ ), Human ( $H$ ,  $F(1, 53) = 4.83$ ,  $p < .03$ ), and Pathognomic Verbalization ( $V$ ,  $F(1, 53) = 12.67$ ,  $p < .001$ ). The increase in  $V$  scores (Pathognomic Verbalization) was mainly due to rewarding of Queer Response (QR),  $F(1, 53) = 4.09$ ,  $p < .05$  and Fabulized Combination (FC),  $F(1, 53) = 6.92$ ,  $p < .01$ . Composite scores for Perceptual Organization and Maturity (Factor 1,  $F(1, 53) = 8.75$ ,  $p < .001$ ) and Psychopathology of Thought (Factor 3,  $F(1, 53) = 9.39$ ,  $p < .001$ ) were also significant. The Creativity composite index only approached significance. Means and standard deviations for these variables are depicted in Table 4.



Table 4. Session 1 Differences Between Reward and Non-reward Groups on the HIT

<i>HIT Variable</i>	<i>Reward</i>		<i>Non-reward</i>		<i>F (1, 53)</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Reaction to stimuli					
<i>Rejection</i>	0.91	3.16	3.09	6.24	3.33 <sup>†</sup>
Manner of Approach and Organization of the Blot					
<i>Location (L)</i>	18.47	10.42	22.22	10.13	10.42 <sup>†</sup>
<i>Space (S)</i>	0.30	0.30	0.74	0.89	3.21 <sup>†</sup>
<i>Balance (B)</i>	0.19	0.51	0.21	0.54	–
<i>Form Definiteness (FD)</i>	88.21	12.42	86.29	13.60	–
Reality contact and Commonality Form					
<i>Appropriateness(FA)</i>	37.00	5.51	38.29	4.60	–
<i>Animal (A)</i>	22.73	6.63	20.48	7.9	–
<i>Popular (P)</i>	10.78	2.59	9.54	2.94	–
Intelligence and Maturity					
<i>Movement (M)</i>	42.43	11.58	31.71	11.08	12.68***
<i>Barrier (Br)</i>	8.43	3.71	8.22	3.79	–
<i>Human (H)</i>	28.95	7.32	24.96	7.81	4.83**
<i>Abstract (Ab)</i>	0.78	2.73	1.41	5.73	–
<i>Integration (I)</i>	6.95	3.14	5.90	2.24	3.14 <sup>†</sup>
Emotional Responsivity					
<i>Color (C)</i>	14.39	7.77	16.19	8.95	–
<i>Shading (Sh)</i>	6.04	8.62	6.06	5.93	–
<i>Anxiety (Ax)</i>	10.65	5.37	9.87	5.93	–
<i>Hostility (Hs)</i>	12.26	6.98	11.74	5.16	–
<i>Penetration (Pn)</i>	3.78	2.13	3.83	2.58	–
Psychopathology Pathognomic					
<i>Verbalization (V)</i>	12.52	9.46	5.58	4.89	12.67***
<i>Gender (Sx)</i>	1.41	1.17	0.54	0.91	–
<i>Anatomy (At)</i>	2.40	2.12	2.67	2.95	–
Composite Scores					
<i>Factor 1(M,I,H, P, FD)</i>	177.35	7.48	158.42	12.35	8.75***
<i>Factor 2 (C, Sh, FD)</i>	112.87	6.12	115.97	5.19	–
<i>Factor 3 (V, Ax, Hs)</i>	77.87	10.02	58.90	5.46	9.39***

† approaching significance; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$  (all two-tailed tests)

Significant art training main effects in Session 1 were obtained on Rejection (R),  $F(1,53) = 4.54, p < .03$ , Gender (Sx),  $F(1, 53) = 4.16, p < .04$  and Shading (Sh),  $F(1, 53) = 5.51, p < .02$ . Color (C) approached significance. The observed effects of past art training in the present sample are consistent with inkblot lore. Artists in the Family and Gender main effects approached significance for Human (H) and Integration (I). Participants with artistic family backgrounds obtained higher H scores and females obtained higher I scores.

Significant two-way interactions involving reward indicated the differential effects of reward depending on gender, previous experience with artistic training, and presence of artists in the family. In Session 1, reward significantly interacted with gender on the following HIT variables: FA, Ax, Hs, Factor 3, AL, and the Creativity composite index. The offer of rewards decreased Form Appropriateness (FA) scores in males,  $F(1, 53) = 5.72, p < .02$ ; however, it was associated with increased scores in Anxiety (Ax),  $F(1, 53) = 4.21, p < .04$ , Hostility (Hs),  $F(1, 53) = 13.01, p < .001$ , Psychopathology of Thought,  $F(1, 53) = 8.41, p < .001$ , Autistic Logic (AL),  $F(1, 53) = 5.95, p < .01$ —a psychosis-

like associative response not normal in college populations—and Creativity composite score ( $F(1, 53) = 5.60, p < .001$ ). Reward also increased male scores on M, H, Ab, V, QR, Sx, and Factor 1, but these results only approached statistical significance. Focused t-tests of uncorrelated mean scores yielded more pronounced effects of reward with male than female participants. Male reward-non-reward paired comparisons revealed significant differences on key perceptual, cognitive, and affect-related HIT personality correlates linked with developmental and creativity indices. Mean scores and standard deviations and t-test results for male participants are presented in Table 5. Again the number of statistical tests computed should be kept in mind.

Reward x Art Training interactions reached significance for Barrier (Br), ( $F(1, 53) = 3.84, p < .05$ ). A Reward x Artists in the Family interaction was significant: Fabulizations (FB), ( $F(1, 53) = 4.58, p < .03$ )—a psychosis-like associative response found in college populations. In both sets of interactions, rewards increased scores in the presence of previous art training and artistic family background.

One significant two-way interaction involving gender and artists in the family was found: Gender (Sx), ( $F(1, 53) = 4.27, p < .04$ ). Male participants with artistic background in their families obtained higher scores. Finally, Artists in the Family and Past art training interacted in the case of Movement (M), ( $F(1, 53) = 4.75, p < .03$ ) and Gender (Sx), ( $F(1, 53) = 4.50, p < .04$ ). These findings again are in agreement with performance of artists on projective tests.

Two sets of significant three-way interactions included significant Reward x Gender x Art Training on the Creativity composite score ( $F(1, 53) = 5.05, p < .03$ ). Reward increased creativity composite scores most in male participants with previous art training. Another set of three way interactions including Reward, art training and artists in the family, yielded significant results on FD ( $F(1, 53) = 4.44, p < .04$ ), P ( $F(1, 53) = 3.08, p < .05$ ), Sx ( $F(1, 53) = 4.93, p < .03$ ), and Factor 1 ( $F(1, 53) = 4.35, p < .04$ ) with enhancing effects of rewards depending on the scores of presence of art training and of artists in the family.

Significant Gender x Art Training x Artists in the Family interactions were obtained for FD, A, and Factor 1. The highest FD ( $F(1, 53) = 6.80, p < .01$ ) and perceptual organization and maturity scores, Factor 1, ( $F(1, 53) = 6.87, p < .01$ ), were obtained by females with past art training and artists in the family, while male participants with past art training or artists in the family obtained the highest scores on A ( $F(1, 53) = 6.56, p < .01$ ).

Table 5. Session 1 HIT Differences Between Rewarded and Non-rewarded Males

<i>HIT Variable</i>	<i>Reward</i>		<i>Non-reward</i>		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Reaction to stimuli					
<i>Rejection</i>	0	0	5.30	9.31	2.86 *
Manner of Approach and Organization of the Blot					
<i>Location (L)</i>	14.40	10.01	22.10	9.15	–
<i>Space (S)</i>	0.40	0.89	0.60	0.51	–
<i>Balance (B)</i>	0.19	0.51	0.21	0.54	–
<i>Form Definiteness (FD)</i>	89.40	12.21	83.80	10.10	–
Reality contact and Commonality Form					
<i>Appropriateness(FA)</i>	31.00	3.24	39.40	4.62	5.78 ***
<i>Animal (A)</i>	20.80	6.30	17.30	8.60	–
<i>Popular (P)</i>	10.40	2.40	8.90	2.84	–
Intelligence and Maturity					
<i>Movement (M)</i>	48.80	10.98	27.20	7.42	5.89 ***
<i>Barrier (Br)</i>	8.80	4.20	8.10	3.54	–
<i>Human (H)</i>	34.00	9.19	24.00	8.20	3.83 *
<i>Abstract (Ab)</i>	2.60	5.81	0.40	0.84	2.02 †
<i>Integration (I)</i>	6.20	1.64	4.40	2.11	–
Emotional Responsivity					
<i>Color (C)</i>	14.40	9.39	13.20	8.65	–
<i>Shading (Sh)</i>	1.60	2.19	6.60	6.22	3.64 *
<i>Anxiety (Ax)</i>	15.60	5.07	8.00	4.98	4.25 **
<i>Hostility (Hs)</i>	20.20	6.05	9.70	3.77	5.71 ***
<i>Penetration (Pn)</i>	3.40	1.14	5.00	2.66	–
Psychopathology Pathognomic					
<i>Verbalization (V)</i>	19.00	14.00	4.00	3.23	5.67 ***
<i>Gender (Sx)</i>	1.80	1.78	0.10	0.31	4.35 **
<i>Anatomy (At)</i>	3.80	1.92	3.20	2.20	–

† approaching significance, \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$  (all two-tailed tests)

### Repeated Reward Effects: Session 2

Repeated reward presentation as measured in Session 2 did not yield nearly as many significant main effects or interactions as first-time reward did. Reward x Gender x Art Training x Artists in Family (2x2x2x2) ANOVAs yielded only one (Sx,  $F(1, 53) = 5.03$ ,  $p < .03$ ). Second and third time reward deflated Sx scores. In addition, repeated reward presentation affected L, FA, Sh, and AB scores, but its effects depended on gender, art training, and artists in the family.

There was one significant Reward x Gender interaction effect for Sh, ( $F(1, 53) = 7.58$ ,  $p < .009$ ). Further analysis indicated that the interaction was due to a considerable decrease in Sh scores of rewarded male participants, whereas the scores of rewarded females increased. One Reward x Art training interaction was significant for Abstract (Ab) ( $F(1, 53) = 6.85$ ,  $p < .03$ ) and Reward x Artists in the Family interactions were also significant for Abstract (Ab) ( $F(1, 53) = 5.82$ ,  $p < .02$ ) and Sx ( $F(1, 53) = 5.52$ ,  $p < .02$ ).

Significant Reward x Gender x and Art Training interactions were found on L ( $F(1, 53) = 5.51$ ,  $p < .02$ ) and Sh ( $F(1, 53) = 7.12$ ,  $p < .01$ ). Under reward conditions, male participants without past art training obtained higher L scores (developmentally more primitive cognitive functioning) than male participants with previous art training

experience, while the opposite pattern was observed for females. No such interaction was observed under no reward.

Highly significant Reward x Art Training x Artists in the Family interactions were found on L, ( $F(1, 53) = 14.17, p < .0001$ ) and FA ( $F(1, 53) = 4.42, p < .04$ ). Under reward conditions, when participants had no past art training those without artists in the family obtained higher L and lower FA scores (developmentally more primitive cognitive functioning) than participants with artists in the family, while the opposite pattern was observed when participants had past training experience. Under non-reward conditions, no such interaction was observed.

Finally, Gender x Art Training x Artists in the Family interactions reached significance only on L ( $F(1, 53) = 4.81, p < .03$ ). In the case of male participants, those with past art training and no artists in their families obtained developmentally more advanced scores than their counterparts without the opposite pattern. No such effect was observed for females.

### *HIT Difference Scores and Evaluation of Non-reward-Reward Shifts*

The direction and magnitude of performance change between sessions were analyzed by means of difference scores computed on HIT mean scores by subtracting Session 1 from Session 2 scores. A positive difference score reflects higher scores in Session 2, while a negative difference reflects higher HIT scores in Session 1.

A 4 (Treatment Groups) x 2 (Sessions) analysis of variance yielded significant Treatment Groups main effects on C,  $F(1, 53) = 5.56, p < .002$  and Sh,  $F(1, 53) = 4.8, p < .005$ . Further analysis by Group revealed a drastic increase in perceptual sensitivity (C and Sh) scores (difference means: +17.67 and +9.08, respectively) in Condition 2 (nR/nN), reward-to-non-reward shift condition.

Treatment Group x Sessions interaction effects yielded significant results for Pathogenic Verbalization (V) ( $F(3, 51) = 6.68, p < .001$ ). The greatest variability of V scores came from the nN/rR treatment group (Condition 3) and the nR/rR group (Condition 4). In the former case, higher V scores were obtained under *first-time reward* (in Session 2) (difference means +1.47 and +1.05), and in the latter, much lower V scores were obtained under *second-time reward* (in Session 2) (difference means: -8.91 and -5.09). The remaining treatment groups, Condition 1 (nN/nN) and Condition 2 (nR/nN), also obtained lower scores in Session 2, but not of the same magnitude (-4.75 and -1.00) and (-1.16 and -1.00), respectively.

Groups x Gender interaction effects reached significance for Integration (I) ( $F(3, 51) = 3.99, p < .01$ ) and approached significance for Human (H) ( $F(3, 51) = 2.50, p < .07$ ). Males obtained higher I and H scores than females in Session 2 under non-reward in the nR/rN shift condition 2 and under first time reward in the nR/rR shift condition 4.

## Discussion

An important question within the creativity literature is whether extrinsic, contingent reward promotes or inhibits creative performance. Artistic creativity has been

recognized to be qualitatively different from other types of creativity, so that a specific analysis of the effects of material rewards on artistic creativity was desirable. Material rewards were not expected to detrimentally affect artistic creativity. From the standpoint of the developmental hypothesis, however, it was expected that rewards would detrimentally affect the maturity level and total aesthetic value of artistic performance, yielding works that could be considered appropriate for lower developmental levels. This hypothesis also calls attention to the short-lived versus long-lasting effects of material reward. It was possible that rewards may have an immediate, non-conscious effect on performance through primitivization of functioning; but previous research had not addressed the duration or the nature of these effects. The purpose of this study was to obtain objective as well as self-report measures of material reward effects on cognitive, motivational, and affective dimensions known to be intrinsic in the process of creative artistic production, which in the past have been examined mainly within the framework of non-artistic production, one-time reward, and without consideration of mediating variables.

In general, the results of the present study suggested that many of the inconsistent results obtained in previous investigations might be a function of the complexity of processes involved in artistic creative performance, as well as of the differential effects of one-time reward in comparison to repeated reward. Specifically, results showed that first-time contingent extrinsic reward was positively related to creativity as well as to personality process that would support both more mature functioning as well as developmental regression. However, the persistent role of mediating variables including maleness, art training experience, and presence of artists in the family in judges' ratings of art performance, objective ratings of art work, and inkblot (HIT) perception does suggest possible detrimental effects of reward on cognitive, motivational, and emotional functioning for men, when protecting factors are absent.

These findings provide substantial support for the notion that the effects of monetary incentives on artistic creativity and inkblot perception are not uniform across participants nor across different modes of reward presentation. Moreover, they suggest that neglecting those differences might be one reason previous research has failed to produce consistent and conclusive support for either positive or negative effects of rewards on various kinds of creativity.

The finding that art college students' artistic creativity was improved with reward, and that extrinsic reward induced a positive motivation state is consistent with the argument advanced by the developmental regression hypothesis. Tasks which depend on associational, affective processing may be enhanced by material reinforcement. However, the reward enhancing effect on maturity level apparent in the judgments of actual performance and self-report inkblot data challenges this hypothesis, or at least suggests some qualification.

The detrimental effects of reward varied by gender and previous art training. The men and those who had had prior art training seemed to adopt a "minimax" strategy (Kruglanski et al., 1977) in their artwork as indicated by a decrease in number of pieces used and altered and percentage of area covered by design. Given the positive correlations of these measurements with judge-rated scores of Creativity (but negative or non-significant correlations with Technical Goodness), a decrease in these objective ratings

under reward conditions would imply a possible reward-induced detrimental effect on creativity for male art students and art students with previous art training experience. This result stands in contrast to findings reported by Eisenberger and colleagues (1998, 1999, 2001). Of course their work focuses on children and adolescents, and the present research involved older more technically sophisticated participants.

The attitudinal data support the positive effects of reward on intrinsic motivation and self-determination, as Eisenberger and colleagues (1998, 1999, 2001) suggested. Of interest is that in the reward group condition 4 represented a within-session reward-to-reward shift, and this repeated reward offer could have affected the final results obtained. If so, the effect was positive, but nonetheless this matter should be further investigated. Motivational and attitudinal orientations are of great practical importance due to their positive influence on creativity (Amabile, 1979, 1990).

In terms of inkblot perception and considering the whole sample, first-time reward induced both more mature and more primitive cognitive, motivational, and affective states. This may be conducive to more dynamic, mature thought, with unusual content, a state of emotional lability and motivational strain. The personality profile including Rorschach constructs denoting more mature functioning, as well as adaptive regression has been strongly supported in the artistic creativity literature (Cohen, 1961; Herch, 1962; Pine et al., 1960).

Gender of participants, however, mediated the first-time reward for increasing scores in males more strongly than in females on key HIT variables, such as M, H, Ax, Hs, Creativity Composite Index, Perceptual Maturity and Integrated Intellectual Activity, and Autistic Logic. These findings are largely consistent with a pattern of developmental primitivization in males accompanied by pronounced changes in emotional sensitivity and psychopathology of thought (Swartz, 1970). Note that in the non-reward-to-reward shifts, males obtained lower Integration and Human scores under reward than non-reward to a more pronounced extent than females. High scores on I, H, and M indicate high intellectual ability, reward enhanced M scores having a detrimental effect on I and H. Thus, increases in M for males can not necessarily be interpreted as a cognitively more mature response but rather, in this combination, is reflective of capacity for imagination and fantasy (Holtzman et al., 1968). Additionally, cumulative reward interacted with art training or artists in the family and decreased male scores on cognitive variables including Location (reversed), Shading, and Form Appropriateness and Abstract. High elevations on M, H and Ab can be indicative of fairly well integrated ideational activity, accompanied by imaginative capacity and human content. Profile analysis of reward males did, however, reveal that three scales reached significantly low and high peaks in terms of absolute values. These scales included Shading (Sh), Anxiety (Ax), and Hostility (Hs).

Moderately higher Sh scores have been associated with greater maturity of the perceptual process, as characterized by a more active, delayed mode as opposed to a passive, undifferentiated mode of perception (Hardison, 1969) while highly elevated Sh and C scores are indicative of pathology (Moseley, Duffy, & Sherman, 1963). In the present study, the significantly lower Sh scores obtained by male participants as a result of reward offer, as well as whole sample significant gains in Color and Shading scores in the

Reward-to-Non-reward shift condition, may be indicative of detrimental reward effects on emotional sensitivity. Sensitivity has been associated with creative work in a number of previous investigations (e.g., Greenacre, 1957; Wallace, 1991).

High peak levels ( $T \geq 70$ ) on Ax and Hs are also of clinical significance. High correlations have been reported between HIT Ax and established measures of anxiety like the Taylor Manifest Anxiety Scale (TMAS; Taylor, 1953) and the Repression-Sensitization scale (R-S; Byrne, 1964) highlighting the relationship which exists between anxiety measures and mode of ego-defense. Moderate elevations of Ax and Hs scores reflect well integrated emotional responsiveness. In fact, college students have been found more likely than depressed patients or juvenile delinquents to have moderate elevation on these scales (Megargee et al, 1971). In addition, significant correlations have been also reported between HIT Ax and Hs scores and the number of words used in HIT responses (Megargee, Lockwood, Cato, & Jones, 1966). More extreme elevations, however, are indicative of emotional lability, if they are accompanied by high elevations in variables denoting cognitive functioning, Cluster VI (i.e., M, I, H, Ab, Br) and lower scores on Cluster III (FA, A, P-Reality Contact). In general, rewards tended to change performance in this direction for males only, so the possibility that reward operates by increasing the individual's emotional lability deserves further attention. The possibility that the reward effects obtained may be tapping negative emotional factors is further supported by the fact that the scales which were significantly altered by reward correspond to the very same HIT scales which have been found to be correlated with the Neuroticism scale of the Maudsley Personality Inventory (MPI; Megargee & Swartz, 1968). Significant correlations have been reported as follows: negative correlations between the N scale with R and FA, and positive correlations with M, V, Ax and Hs. Significant changes on these scales and in the same direction were obtained as a result of reward offer, specially with male participants. To conclude then, significantly lower Sh accompanied by very high M, V, Ax, and Hs scores may be indicative of a developmentally more primitive mode of functioning, tied to emotional lability. These findings are in agreement with previous research by Fabes, McCullers, and Moran (1983) who provided evidence for the detrimental effects of rewards on inkblot perception and organization.

The data reported here are relevant to several theories of creativity and psychopathology. Eysenck (1994), for example, tied creativity to both personality variables (high psychoticism, low conformity, high impulsivity, venturesomeness), and demographic variables (*maleness* and *youth*). Here, reward induced a psychopathological pattern of response consisting of high V, Sx, and At and low FA, A, and P. This did depend on gender, skill level, and artistic family background. It was most apparent in the men. Not only was a statistically significant finding obtained for Pathognomic Verbalization and Gender (and for Anatomy in the expected direction), but also the type of psychosis-like verbalization (Autistic Logic) induced by reward was of a pathological nature. In addition, only reward males displayed significant reductions of Form Appropriateness scores, which, when considered together with FD scores, is indicative of a deficient motivational disposition, and when paired with elevated V and Sx scores indicates a withdrawal from reality. A compulsive pattern was also observed by the zero Rejection rate. The absence of repeated reward effects on this Cluster, which denotes a tendency towards psychopathology of thought, is of interest, given the pronounced effect of reward duration

obtained with more cognitive variables, such as L, Sh, and Ab. This finding indicates that reward effects on psychopathology of thought are immediate and short-lived.

For the whole sample, second- and third-time reward did not have the same effect on inkblot performance as first-time reward. This difference was both quantitative and qualitative. With repeated reward, performance on most HIT dimensions leveled off, including variables related to emotional and psychopathological ideation as well as variables denoting perceptual maturity and well-integrated cognition and motivation. The few significant effects of reward that persisted have been addressed above.

Practically speaking, the results of the present study suggest that when monetary incentives are offered to artists and art college students, a selective approach would be most beneficial. Programs that address art college students irrespective of their gender, previous art training, or the presence of artists in their family may be ineffective in stimulating creative contributions. It was primarily male art college students who were highly responsive and sensitive to enhancing and detrimental effects of reward. Two additional factors, previous experience with art training and presence of artists in the family served as protective factors. When one was absent, the other would, by itself, prevent detrimental effects of reward. This immunizing role was most observed with HIT variables influencing cognitive functioning and developmental maturity, and is consistent with previous research (Amabile, 1996; Hennessey et al., 1989). This research suggest that such immunization might be the result of a match between mode of reward presentation, type of activity, and the developmental level and technical skill of male art college students. This conclusion is compatible with Baer, Oldham, and Cummings' (2003) finding regarding the need to match individual cognitive style and level of job complexity in order to immunize employees from the detrimental effects of reward.

Although the present study has some clear practical and theoretical implications, it also has some limitations. First, although significant reward effects were found for judges' ratings of creativity, reliabilities were only moderate. For future research, it would be desirable to increase inter-judge reliability, either by increasing the number of judges or by increasing the units of judgment by including all the criteria of judgment suggested by Amabile (1979) in her original work. That is, instead of having one general dimension of judgment such as Creativity and Technical Goodness, as was the case in this study, it would be advisable to have several questions addressing each of these dimensions. Furthermore, in the absence of any effects of reward in repeated measures studies, the investigation of cumulative effects of reward should be conducted with performance as well as self-report measures.

Other potential avenues for future research might include joint examination of Rorschach constructs together with other scales from major models of personality like the Big Five, and with scales used for diagnostic of personality psychopathology which are derived from personality theory or from clinical practice like the DSM IV (cf. Mihura, Meyer, Bel-Bahar, & Gunderson (2003). In addition, recent psychometric advances in validating scales that measure Rorschach constructs (Weiner, 2001) and general validity of Rorschach Inkblot Methods (RIM; Viglione & Hilsenroth, 2001; Weiner, 2001), such as the Ego Impairment Index (EII; Perry, 2003) would be most helpful in determining the meaning and validity of the present findings.



## References

- Amabile, T.M. (1979). Effects of external evaluation on artistic creativity. *Journal of Personality and Social Psychology*, 37, 221–233.
- Amabile, T.M. (1982a). Children's artistic creativity: Detrimental effects of competition in a field setting. *Personality and Social Psychology Bulletin*, 8, 3, 573–578.
- Amabile, T.M. (1982b). The social psychology of creativity: A consensual assessment technique. *Journal of Personality and Social Psychology*, 43, 5, 997–1013.
- Amabile, T.M. (1986). Social influences on creativity: The effects of contracted-for reward. *Journal of Personality and Social Psychology*, 50, 1, 14–23.
- Amabile, T.M. (1990). Within you, without you: The social psychology of creativity and beyond. In M.A. Runco and R.S. Albert (Eds.) *Theories of Creativity*. Ablex.
- Amabile, T.M. (1996). *Creativity in context*. Boulder, CO: Westview Press.
- Amabile, T.M., Hennessey, B.A., & Grossman, B.S. (1986). Social influences on creativity: The effects of contracted-for-reward. *Journal of Personality and Social Psychology*, 50, 14–23.
- Andreasen, N. C. (1987). Creativity and mental illness: Prevalence rates in writers and their first degree relatives. *American Journal of Psychiatry*, 144(10), 1288–1292.
- Andreasen, N. C. (1997). Creativity and mental illness: Prevalence in writers and their first degree relations. In M. A. Runco & R. Richards (Eds.), *Eminent creativity, everyday creativity and health*. Greenwich, CT: Ablex.
- Andreasen, N. C., Endicott, J., & Spitzer, R. A., et al. (1977). The reliability and validity of the family history method using Family History Research Diagnostic Criteria. *Archives of General Psychiatry*, 34, 1229–1235.
- Baer, M., Oldham, G.R., & Cummings, A. (2003). Rewarding creativity: when does it really matter? *Leadership Quarterly*, 14(4 &5), 569–586.
- Bandura, A., Cioffi, D., Taylor, B., & Brouillard, M. E. (1988). Perceived self efficacy in coping with cognitive stressors and opioid activation. *Journal of Personality and Social Psychology*, 55, 479–488.
- Barron, F. (1972). *Artists in the making*. New York: Seminar Press.
- Byrne, D. (1964). Repression-sensitization as a dimension of personality. In B.A. Maher (Ed.), *Progress in experimental personality research* (pp. 169–220). Vol I. NY: Academic Press.
- Cameron, J., & Pierce, W. D. (1994). Reinforcement, reward and intrinsic motivation: A meta-analysis. *Review of Educational Research*, 64, 363–423.
- Cheek, J. M. & Stahl, S. S. (1986). Shyness and verbal creativity. *Journal of Research in Personality*, 20, 51–61.
- Clark, C.M., Veldman, D.J., & Thorpe, J.S. (1965). Convergent and divergent -thinking abilities of talented adolescents. *Journal of Educational Psychology*, 56, 157–163.
- Cloninger, C. R. (1986). A unified biosocial theory of personality and its role in the development of anxiety disorders. *Psychiatric Developments*, 3, 167–226.
- Cohen, I.H. (1961). *An investigation of the relationship between adaptive regression, dogmatism and creativity using the Rorschach and Dogmatism scales*. Doctoral dissertation, Michigan State University, Lansing.
- Damásio, A. R. (1995). *The feeling of what happens: Body and emotion in the making of consciousness*. New York: Harcourt-Brace.

- Deci, E. L., & Ryan, R. (1985). *Intrinsic Motivation and Self Determination in Human Behavior*. NY: Plenum.
- Dudek, S. Z. (1960). *Creativity and the Rorschach human movement response: An analysis of the relationship between quantity and quality of M and creative expression in artists and non-artists groups*. Unpublished doctoral dissertation, New York University, New York.
- Dudek, S.Z. (1968). Regression and creativity: a comparison of the Rorschach records of successful versus unsuccessful painters and writers. *Journal of Nervous and Mental Disease*, 146, 535–547.
- Depue, R. A., Luciana, M., Arbisi, P., Collins, P. & Leon, A. (1994). Dopamine and the structure of personality: Relation of agonist-induced dopamine activity to positive emotionality. *Journal of Personality and Social Psychology*, 67, 3, 485–498.
- Eisenberger, R. (1992). Learned industriousness. *Psychological Review*, 99, 248–267.
- Eisenberger, R., Armeli, S., & Pretz, J. (1998). Can the promise of reward increase creativity? *Journal of Personality and Social Psychology*, 74, 704–714.
- Eisenberger, R., & Cameron, J. (1996). Detrimental effects of reward: Reality or Myth? *American Psychologist*, 51, 11, 1153–1166.
- Eisenberger, R., Haskins, F., & Gambleton, P. (1999). Promised reward and creativity: Effects of prior experience. *Journal of Experimental Social Psychology*, 35(3), 308–325.
- Eisenberger, R. & Rhoades, L. (2001). Incremental effects of reward on creativity. *Journal of Personality and Social Psychology*, 81, 728–741.
- Eysenck, M. (1987). Trait theories of anxiety. In J. Strelau, & H. J. Eysenck (Edits), *Personality Dimensions and Arousal*, (pp. 79–97). NY: Plenum Press.
- Eysenck, H. J. (1990). Biological dimensions of personality. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 244–276). New York: Guilford.
- Eysenck, H. J. (1994). Creativity and personality: Word association, origence and Psychoticism. *Creativity Research Journal*, 7, 209–216.
- Fabes, R.A. (1982). *The effects of rewards and perceived competence on children's intrinsic motivation and performance*. Unpublished doctoral dissertation, Oklahoma State University.
- Fabes, R. A., McCullers, J. C., & Moran, J. S. (1983). The effects of material reward on inkblot perception and organization. *American Journal of Psychology*, 96, 211–226.
- Fabes, R. A., Moran, J. S., & McCullers, J. C. (1981). The hidden costs of reward and WAIS sub-scale performance. *American Journal of Psychology*, 94, 3, 387–398.
- Galton, F. (1869). *Hereditary genius*. New York: MacMillan.
- Gardner, K. G., & Moran III, J. D. (1997). Family adaptability, cohesion, and creativity. In M. A. Runco & R. Richards (Eds.), *Eminent creativity, everyday creativity and health*. Greenwich, CT: Ablex.
- Gray, J.A., & McNaughton, N. (2000). *The neuropsychology of anxiety*. New York: Oxford University Press.
- Hackman, J.R., & Oldham, G.R. (1980). *Work redesign*. Reading, MA: Addison Wesley.
- Hardison, J.L. (1969). *An investigation of the relationships between several inkblot variables and impulse control*. Doctoral Dissertation, University of Kentucky.
- Hartung, J., & Skorka, D. (1980). The HIT clinical profile of psychedelic drug users. *Journal of Personality Assessment*, 44, 237–245.
- Hayes, J.R. (1978). *Cognitive psychology*. Homewood, IL: Dorsey.

- Hennessey, B. A. (1989). The effect of extrinsic constraints on children's creativity while using a computer. *Creativity Research Journal*, 2, 151–168.
- Hennessey, B.A., Amabile, T.M., & Martinage, M. (1989). Immunizing children against the negative effects of reward. *Contemporary Educational Psychology*, 14, 212–227.
- Hersch, C. (1962). The cognitive functioning of the creative person: a developmental analysis. *Journal of Projective Techniques*, 26, 195–200.
- Holtzman, W.H., Thorpe, J.S., Swartz, J.D., & Herron, E.W. (1961). *Inkblot Perception and Personality*. Austin: University of Texas Press.
- Holtzman, W.H., Swartz, J.D., & Thorpe, J.S. (1971). Artists, architects and engineers: Three contrasting modes of visual experience and their psychological correlates. *Journal of Personality*, 39, 3, 433–449.
- Insua, A.M. (1972). The Holtzman Movement variable in relation to problem-solving processes of college students. *Journal of Clinical Psychology*, 1972, 28, (2), 199–202.
- Jamison, K. R. (1989). Mood disorders and patterns of creativity in British writers and artists. *Psychiatry*, 52, 125–134.
- Kruglanski, A.W., Friedman, I., & Zeevi, G. (1971). The effects of extrinsic incentive on some qualitative aspects of task performance. *Journal of Personality*, 39, 606–617.
- Kruglanski, A.W., Stein, C. & Riter, A. (1977). Contingencies of exogenous reward and task performance: On the 'minimax' principle in instrumental behavior. *Journal of Applied Social Psychology*, 7, 141–148.
- Larsen, R.J., & Ketelaar, T. (1991). Personality and susceptibility to positive and negative emotional states. *Journal of Personality and Social Psychology*, 61, 132–140.
- Lehrer, A.C. (1970) *The personality correlates of creativity in undergraduates*. Doctoral Dissertation, Colorado State University.
- LeDoux, J. E. (1987). Cognitive-emotional interactions in the brain. *Cognition and Emotion*, 3(4), 267–289.
- Loshak, L.J. (1976). Creativity and body-image boundaries. *Journal of Personality Assessment*, 40, 1, 81–90.
- MacKinnon, D. (1983). The highly effective individual. In R. S. Albert (Ed.), *Genius and eminence: A social psychology of creativity and exceptional achievement* (pp. 114–127). Oxford: Pergamon. (Original work published 1960).
- MacLean, P.D. (1970). The triune brain, emotion, and scientific bias. In F. O. Schmitt (Ed.), *The neurosciences: second study program*. (336–349), NY, NY: Rockefeller University Press.
- MacLean, P.D. (1973). A triune concept of the brain and behavior. In T. Boag & D. Campbell (eds.), *The Hicks Memorial Lectures* (6–66). Toronto: University of Toronto Press.
- Maier, S.F., Sherman, J. A., Lewis, J. W., Terman, G. W., & Liebeskind, J. C. (1983). The opioid/nonopioid nature of stress-induced analgesia and learned helplessness. *Journal of Experimental Psychology, Animal Behavioral Processes*, 9, 80–90.
- McCullers, J.C., Fabes, R.A., & Moran, J.D. III. (1979). *The detrimental effects of reward and the concept of regression*. Oklahoma Psychological Association, Oklahoma City, Oklahoma.
- McCullers, J.C., Fabes, R.A., & Moran, J.D. III. (1983). The effects of material reward on the human figure drawings of preschool children. *Child Development*.
- Megargee, E. I., Lockwood, V., Cato, J. L. & Jones, J. K. (1966). The relation of response length to Holtzman Inkblot Technique scores. *Journal of Consulting Psychology*, 30, 415–419.

- Megargee, E. I. & Diaz-Velez, A. (1971). A profile sheet for the clinical interpretation of the Holtzman Inkblot Technique. *Journal of Personality Assessment*, 35, 545–560.
- Megargee, E. I. & Swartz, J. D. (1968). Extraversion, Neuroticism, and the scores on the Holtzman Inkblot Technique. *Journal of Projective Techniques & Personality Assessment*, 32, 262–265.
- Mihura, J.L., Meyer, G.L., Bel-Bahar, T., & Gunderson, J. (2003). Correspondence among observer ratings of Rorschach, Big Five Model, and DSM IV personality disorder constructs. *Journal of Personality Assessment*, 81, (1), 20–39.
- Moran, J.D. III, McCullers, J.C., & Fabes, R.A. (1984). Developmental analysis of the effects of reward on selected Wechsler subscales. *American Journal of Psychology*, 90, 103–119.
- Moseley, E. C., Duffey, R. F., & Lewis, J. S. (1963). An extension of the construct validity of the Holtzman Inkblot Technique. *Journal of Clinical Psychology*, 19, 186–192.
- Nicholls, J. (1983). Creativity in the person who will never do anything usual or useful. In R. S. Albert (Ed.), *Genius and eminence: A social psychology of creativity and exceptional achievement*. Oxford: Pergamon. (Original work published 1972).
- Overmair, J. B. (1985). Towards a reanalysis of the causal structure of the learned helplessness syndrome. In F.R. Brush & J. B. Overmier (Eds.), *Affect conditioning, and cognition: Essays on the determinants of behavior* (pp. 211–227), Hillsdale, NJ: Erlbaum.
- Panksepp, J., Herman, B., Conner, R., Bishop, P., & Scott, J.P. (1978). The biology of social attachments: Opiates alleviate separation stress. *Biological Psychiatry*, 13, 607–618.
- Panksepp, J., Herman, B., Vilberg, T., Bishop, P., & De Esquinazi, F.G. (1980). Endogenous opiates and social behavior. *Neuroscience and Biobehavior Reviews*, 4, 473–487.
- Panksepp, J. (1998). *Affective neuroscience: The foundations of human and animal emotions*. New York: Oxford University Press.
- Perry, W. (2003). Let's call the whole thing off: a response to Dawes (2001). *Psychological Assessment*, 15, (4), 582–585.
- Pine, F. & Holt, R.R. (1960). Creativity and primary process: a study of adaptive recession. *Journal of Abnormal and Social Psychology*, 61, 370–379.
- Poy, R., del Carmen, M., & Avila, C. (2003). On the relationship between attention and personality: Covert visual orienting of attention in anxiety and impulsivity. *Personality and Individual Differences*.
- Reiss, & Sushinsky, (1976). The competing response hypothesis of decreased play effects: A reply to Lepper and Green. *Journal of Personality and Social Psychology*, 33, 223–245.
- Richards, R. L., Kinney, D. K., Lunde, I., Benet, M., & Merzel, A. P. C. (1988). Creativity in manic depressives, cyclothymes, their normal relatives and control participants. *Journal of Abnormal Psychology*, 97, 281–288.
- Rothbart, M. K., & Posner, M. I. (1999). Temperament, Attention, and Developmental Psychopathology. In D. Cicchetti (Ed.), *Handbook of Developmental Psychopathology*. New York: Wiley.
- Rothbart, M. K., Derryberry, D., & Posner, M. I. (1994). A psychobiological approach to the development of temperament. In J. E. Bates & T. D. Wachs (Eds.), *Temperament: Individual differences at the interface of biology and behavior* (pp. 83–116). Washington, DC: American Psychological Association.
- Rubenson, D., & Runco, M. A. (1992). The psychoeconomic approach to creativity. *New Ideas in Psychology*.

- Rubenson, D. L., & Runco, M. A. (1995). The psychoeconomic view of creative work in groups and organizations. *Creativity and Innovation Management*, 4, 232–241.
- Runco, M. A. (2005). Motivation, competence, and creativity. In A. Elliott & C. Dweck (Eds.), *Handbook of achievement motivation and competence* (pp. 609–623). New York: Guilford Press.
- Seligman, M. E. P. (1975). *Helplessness*. San Francisco: Freeman.
- Sternberg, R.J., & Lubart, (1991). An investment theory of creativity and its development. *Human Development*, 34, 1–31.
- Strelau, J. (1987). Emotion as a key concept in temperament research. *Journal of Research in Personality*, 21, 510–518.
- Swartz, J. D. (1970). *Pathognomic verbalization in normals, p sychotics, and mental retardates*. Dissertation Abstracts International, XXX, 12, (Order No. 70-10,872). University of Texas at Austin.
- Swartz, J. D., & Holtzman, W. H. (1963). Group method of administration of the Holtzman Inkblot Technique. *Journal of Clinical Psychology*, 19, 433–441.
- Taylor, J. A. (1953). A personality scale of manifest anxiety. *Journal of Abnormal and Social Psychology*, 48, 285–290.
- Viglione, D.J., & Hilsenroth, M.J. (2001). The Rorschach: Facts, fictions, and future. *Psychological Assessment*, 13, (4), 452–471.
- Wallace, D. B. (1991). The genesis and microgenesis of sudden insight in the creation of literature. *Creativity Research Journal*, 4, 41–50.
- Watson, D., & Clark, L. A. (1992). Toward a consensual structure of mood. *Psychological Bulletin*, 98, 219–235.
- Weiner, I. B. (2001). Advancing the science of psychological assessment: The Rorschach Inkblot Method as Exemplar. *Psychological Assessment*, 13, 423–432.
- Zuckerman, M. (1984). Sensation seeking: A comparative approach to a human trait. *Behavioral and Brain Sciences*, 7, 413–471.

## Humorous Personality: Relationship to Stress and Well-being

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Recent studies on individual differences of humour-related traits and their relationship to stress coping focus on a humour style approach. The present study was aimed at cross-cultural validation of the Humor Style Questionnaire in Latvia. Participants were 183 undergraduates. Results provide support for a four humour style model and its relation to personality dimensions and stress coping. With only one exception (Extraversion), adaptive and maladaptive humour differentially related to personality dimensions and well-being. Affiliative and self-enhancing humour scales were positively related with Extraversion and Openness, and self-enhancing humour correlated negatively with Neuroticism. Aggressive humour was negatively related with Agreeableness and both aggressive and self-defeating scales were negatively related with Conscientiousness. Self-enhancing and self-defeating humour correlated inversely with stress and well-being.

**Key words:** humour style, personality, stress, well-being.

### Introduction

Traditionally a person with a good sense of humour is conceived of as an extraverted individual who smiles frequently, laughs a lot, and loves to amuse others. At the same time there may be an impression that such a person is trying to cover up his or her personal problems, and trying to raise his or her self-esteem by laughing at someone else's expense. Interest in individual differences in humour-related traits and the role of sense of humour in coping with stress has motivated a wide variety of research in this field. Most often different self-report measures of sense of humour have been used for this purpose (Ruch, 1996). They measure different aspects of humour, such as smiling and laughing behaviour in a variety of situations (Martin & Lefcourt, 1984), or the use of humour as a coping strategy (Martin & Lefcourt, 1983), the ability to notice and enjoy humour (Svebak, 1996), and the ability to create and appreciate humour (Thorson & Powel, 1993). However, there is empirical evidence that these measures are highly interrelated, and it has been suggested that they may reflect nothing more than some of the dimensions related generally to extraversion and cheerfulness (Kohler & Ruch, 1996; Martin, 1998).

Since the early eighties many studies have been conducted to investigate the beneficial effect of humour on stress coping and well-being (Lefcourt & Thomas, 1998). Empirical evidence related to this assumption is contradictory. Sense of humour has been associated with more positive evaluations of potential stressors, and emotion-focused stress coping strategies, such as distancing and positive reframing (Kuiper, Martin, & Olinger, 1993; Abel, 2002), and overall healthier well-being indicators, such as lower ratings of depression, anxiety, perceived stress and negative mood (Martin & Lefcourt, 1983; Nezu, Nezu, & Blisset, 1988; Kuiper et al., 1993; Martin, Kuiper, Olinger, & Dance,

1993; Abel, 2002). However some of these findings have not been replicated (Porterfield, 1987; Overholser, 1992).

Recent studies show an increasing interest in humour style in order to explain earlier inconsistent and contradictory results (Craik & Ware, 1998; Martin, Puhlik-Doris, Larsen, Gray, & Weir, 2003; Kuiper, Grimshaw, Leite, & Kirsh, 2004). The humour style concept was developed on the basis of the assumption that the nature of humour can be either adaptive or maladaptive in regard to psychosocial well-being. According to this assumption, aggressive, sarcastic and hostile humour represents “the dark side” of humour and cannot be considered a positive, adaptive stress coping strategy, but rather as deleterious to well-being. Healthy functioning has been associated with certain forms of humour (e.g., humorous perspective-taking, enhancing humour), but not with other forms of humour (e.g., sarcasm, ridicule, jeering). Measurements of individual differences on humour-related traits have largely focused on positive, potentially adaptive humour (Kuiper & Martin, 1998), ignoring potentially harmful and maladaptive aspects of humour use.

Martin and associates (Martin et al., 2003) have developed and validated a measurement of individual humour style based on a 2 x 2 conceptualization – adaptive vs. maladaptive and interpersonal vs. intrapersonal. The Humour Style Questionnaire (HSQ) includes four humour style dimensions based on this conceptualization. The first, *affiliative* humour (adaptive and interpersonal), reflects the tendency to share humour with others, amuse them, and facilitate cohesiveness. People high on this dimension tend to joke with others, say witty things, tell amusing stories, laugh with others, and cheer others up. The second, *self-enhancing* humour (adaptive and intrapersonal), involves a generally humorous outlook on life, not necessarily shared with others, a tendency to be frequently amused by the incongruities of life, and an ability to maintain a humorous perspective in stressful situations. People high on this dimension use humour as an emotional coping mechanism in order to keep up their spirits. The third, *aggressive* humour (maladaptive and interpersonal), is a tendency to use humour to disparage, put down or manipulate others. It includes sarcasm, the ridiculing of others, and expression of humour even when it is inappropriate. Finally, the fourth, *self-defeating* humour (maladaptive and intrapersonal), is associated with the use of humour for self-disparaging purposes. It allows making oneself the butt of others’ jokes, and includes the use of humour as defensive denial in order to hide true feelings from self and others.

Validation studies of the Humour Style Questionnaire (HSQ) have provided evidence of satisfactory psychometric qualities and a clear component structure according to the four humour style dimensions for English-speaking Canadian (Martin et al., 2003; Kuiper et al., 2004), French-speaking Belgian (Saroglou & Scariot, 2002), native Armenian living in Lebanon (Kazarin & Martin, 2006) and Chinese (Chen & Martin, 2007) samples. Peer ratings and daily behaviour records provide additional support for the validity of the Humour Style Questionnaire (Martin et al., 2003). Correlations between the adaptive humour dimensions and other self-reports of one’s sense of humour provide support for convergent validity of the HSQ, but the two maladaptive humour dimensions have a weak or non-significant correlation with other measures of sense of humour, thereby supporting the assumption that aggressive and self-defeating humour

styles are different constructs from those measured by scales used previously (Martin et al., 2003; Kuiper et al., 2004).

There were several aims of the current study. The first aim was to translate into Latvian and validate the HSQ within the Latvian sociocultural context. Component structure, psychometric qualities and gender differences were analyzed for this purpose. The second aim of this study was to investigate personality correlates of the four humour style dimensions and to compare these with results from the Canadian sample, where the HSQ was developed and originally validated. The third aim of the study was to test the hypothesis that adaptive and maladaptive humour styles relate differently to stress coping and well-being measures of depression, anxiety and dominating mood.

The Five-Factor Model of personality dimensions has been used in validation samples and similar patterns of correlation have been found in several studies (Martin et al., 2003; Saroglou & Scariot, 2002). Based on those previous findings and extant theoretical assumptions, it might be expected that affiliative and self-enhancing humour style dimensions will correlate positively with Extraversion and Openness, and self-enhancing humour will relate negatively to Neuroticism. In addition, it might also be expected that the aggressive humour style dimension will have a negative correlation with Agreeableness, and that both maladaptive humour dimensions will have negative correlations with Conscientiousness and positive correlations with Neuroticism.

The hypothesis that adaptive and maladaptive humour style dimensions will be related to adaptation outcomes in opposite directions has been examined in previous studies (Martin et al., 2003; Kuiper et al., 2004; Chen & Martin, 2007). Based on previous findings and theoretical assumptions, it was expected that affiliative and self-enhancing humour ratings would be associated with higher ratings of positive mood, and lower ratings of anxiety, depression and negative mood. It was also expected that maladaptive humour style, particularly self-defeating humour ratings, would be associated with higher ratings of anxiety, depression and bad mood.

## Method

### Participants

One hundred and eighty three students from psychology, communications and political science courses participated in this study (152 females and 31 males, ranging in age from 18 to 38 years,  $M = 20.01$ ,  $SD = 2.02$ ) on a voluntary basis.

### Measures

*Humor Style Questionnaire* (HSQ; Martin et al., 2003) is a 32-item self-report measure of humour style. Four dimensions measuring different humour styles involve affiliative humour (e.g. "I enjoy making people laugh"); self-enhancing humour (e.g. "My humorous outlook on life keeps me from getting overly upset or depressed about things"); aggressive humour (e.g. "If someone makes a mistake I will often tease them about it"); and self-defeating humour (e.g. "I let people laugh at me or make fun at my expense more than I should"). Participants were asked to rate the degree to which each item characterizes them on a 7-point Likert-scale ranging from "totally disagree" to "totally agree."



The Latvian version of the HSQ was developed by the author of this study. The following procedure was used for translation of the HSQ. First, one interpreter translated the scale from English to Latvian. Afterwards another interpreter back-translated from Latvian to English. Discrepancies were noted and discussed with the translators.

*Revised NEO Personality Inventory* (NEO PI-R, Costa & McCrae, 1992) is a 240-item measure of the five major domains of the Five Factor Model of personality: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience. The domain scales show internal reliability coefficients which range from .86 to .92 and test-retest reliabilities above .75 (Costa & McCrae, 1992). The preliminary Latvian adaptation of NEO PI-R shows good agreement with the factor structure of the original test, and has satisfactory reliability indicators which range from .76 to .87 (Gabrane, 2007).

*Positive and Negative Affects Scale* (PANAS; Watson, Clark, & Tellegen, 1988) assesses the degree to which an individual has experienced each of 20 emotions during the last month, as rated on a five-point scale ranging from “very slightly or not at all” to “extremely”. The measure consists of 10 positive mood and 10 negative mood adjectives, resulting in two subscales, one for positive affect and one for negative affect. Internal consistency analyses have yielded Cronbach alphas in the .87 to .90 range for both subscales in previous research (Watson, Clark, & Tellegen, 1988; DePaoli & Sweeney, 2000). The Latvian version of the PANAS was developed by the author of this study. The following procedure was used for translation of the PANAS. First, one interpreter translated the scale from English to Latvian. Afterwards another interpreter back-translated from Latvian to English. Discrepancies were noted and discussed with the translators.

*Beck's Depression Inventory II* (BDI-II, Beck, Steer, & Brown, 1996) Latvian version (Voitkane & Mieziņa, 2001) is a 21-item self-report measure of depression for adults and adolescents. Each item includes a list of four statements arranged in increasing severity, regarding a particular symptom of depression, on a 4-point scale ranging from 0 to 3. The sum of item scores makes up the total depression score. Psychometrically, studies of the BDI-II indicate an average reliability coefficient of .86 and a test-retest reliability coefficient of .90, as well as substantial diagnostic efficiency and correlations with other tests purporting to measure the construct of depression (Beck et al., 1996). The Latvian version of the BDI-II shows reliability coefficients from .87 to .91 (Voitkane, 2003).

The Latvian version of the 20-item trait-anxiety scale of *The State-Trait Anxiety Inventory* (STAI; Spielberger, 1983; Skuskovnikā, 2003) was used to assess the extent to which participants typically experience a variety of anxiety-related symptoms. Sample items from this scale include “I feel nervous and restless” and “I make decisions easily” (negatively keyed). Participants are asked to respond on a 4-point scale that ranges from “not at all” to “very much so”. The Latvian adaptation of the STAI has demonstrated reliability coefficients from .83 to .91 (Skuskovnikā, 2003).

*The Inventory of College Student's Recent Life Experiences* (CSLE; Kohn, Lafreniere, & Gurevich, 1990) consists of 49 potential daily stressors (“hassles”) in the areas of student life, health, family, friends, the environment, practical life, and chance occurrences. Sample items include “conflict with professor”, “financial burdens”, “conflicts with friends”, and “not enough time for sleep”. Participants respond by indicating from 1 (“not at all”) to 4 (“very much”) regarding the extent to which the relevant aspect has been

present in their lives over the last month. The Latvian version of the survey was developed by the author of this study. The following procedure was used for translation of the scale. First, two independent interpreters translated the scale from English to Latvian. Afterwards discrepancies were noted and discussed with the translators and experts in psychology. The sum of these evaluations is used to determine the level of recent daily stress events.

*Perceived Stress Scale* (PSS; Cohen, Kamarck, & Mermelstein, 1983) was designed to provide a global measure of the perceived stress in an individual's life, and more specifically of how unpredictable, uncontrollable and overloaded the individual has felt over the last month. Respondents are asked to respond to 14 items using a 5-point scale ranging from "never" to "very often". A sample item is: "In the last month, how often have you been upset because something happened unexpectedly?" This measure has strong psychometric properties with coefficient alpha reliabilities ranging from .84 to .86 (Cohen et al., 1983). The Latvian version of the PSS was developed by the author of this study. The following procedure was used for translation of the HSQ. First, one interpreter translated the scale from English to Latvian. Afterwards another interpreter back-translated from Latvian to English. Discrepancies were noted and discussed with the translators.

## Procedure

Data were collected in groups of 10 – 30 people between November 29 and December 20, 2005. There was no time limit for this task. Questionnaires administered included the NEO PI-R personality inventory based on the Five Factor Model, the HSQ, and stress and well-being measures. The questionnaires were administered in randomized order – six versions in total. Statistical analyses showed no impact of survey order.

## Results

### Psychometric Properties of the Humor Style Questionnaire Latvian version

A principal component analysis with Varimax-rotation supported the four factor solution of the HSQ. The first four factors had eigenvalues of 3.5, 3.4, 3.0 and 2.4 respectively and accounted for 38.5% of the variance (the remaining factors had eigenvalues under 1.6). Results of the confirmatory principal component analysis with extraction of four factors are shown in Table 1. All items (with only two exceptions) had a first loading on the same factor as in the original scale, and almost all second loadings on the other factors (with only three exceptions) were lower than .3. The factors were extracted in the following order: self-enhancing humour (loadings from .80 to .19), affiliative humour (from .75 to .39), self-defeating humour (from .73 to .31) and aggressive humour (from .71 to .09). Corresponding eigenvalues of the rotated four factors were 3.85, 3.49, 3.20 and 2.51 explaining 40.76% of the total variance. Four scales were obtained, each summing the scores of eight items, and these corresponded to the factors in the original scale. Reliability analyses yielded satisfactory results (see Table 2). Only the aggressive humour scale dimension had an alpha under .70. Factor loadings for this scale were also not as high as expected, and two items did not have their first factor loading on the corresponding scale.

**Table 1. Results of confirmative principal component analysis with Varimax-rotation of the HSQ scales**

	<i>Factor</i>			
	<i>Self-en- hancing</i>	<i>Affilia- tive</i>	<i>Self-de- feating</i>	<i>Aggres- sive</i>
	<i>Affiliative</i>			
1. I usually don't laugh or joke around much with other people.	.26	<b>.39</b>	-.14	-.11
5. I don't have to work very hard at making other people laugh—I seem to be a naturally humorous person.	.22	<b>.66</b>	.13	.08
9. I rarely make other people laugh by telling funny stories about myself.	-.10	<b>.52</b>	.03	-.07
13. I laugh and joke a lot with my closest friends.	.39	<b>.45</b>	.04	.13
17. I usually don't like to tell jokes or amuse people.	.16	<b>.75</b>	.01	-.01
21. I enjoy making people laugh.	.20	<b>.69</b>	.19	.11
25. I don't often joke around with my friends.	-.02	<b>.53</b>	-.10	.05
29. I usually can't think of witty things to say when I'm with other people.	.12	<b>.66</b>	-.11	.04
	<b>Self-enhancing</b>			
2. If I am feeling depressed, I can usually cheer myself up with humor.	<b>.58</b>	.34	-.01	-.07
6. Even when I'm by myself, I'm often amused by the absurdities of life.	<b>.56</b>	.18	.13	-.00
10. If I am feeling upset or unhappy I usually try to think of something funny about the situation to make myself feel better.	<b>.77</b>	.00	.05	-.15
14. My humorous outlook on life keeps me from getting overly upset or depressed about things.	<b>.46</b>	.37	.15	-.09
18. If I'm by myself and I'm feeling unhappy, I make an effort to think of something funny to cheer myself up.	<b>.80</b>	.06	.09	-.08
22. If I am feeling sad or upset, I usually lose my sense of humor.	<b>.19</b>	-.01	-.04	.10
26. It is my experience that thinking about some amusing aspect of a situation is often a very effective way of coping with problems.	<b>.62</b>	.26	-.01	-.03
30. I don't need to be with other people to feel amused – I can usually find things to laugh about even when I m by myself.	<b>.66</b>	-.08	-.04	-.12
	<b>Aggressive</b>			
3. If someone makes a mistake, I will often tease them about it.	.31	.05	.09	<b>.49</b>
7. People are never offended or hurt by my sense of humor.	-.12	-.05	.06	<b>.63</b>
11. When telling jokes or saying funny things, I am usually not very concerned about how other people are taking it.	.10	.26	.28	<b>.09</b>
15. I do not like it when people use humor as a way of criticizing or putting someone down.	.01	-.04	.09	<b>.65</b>
19. Sometimes I think of something that is so funny that I can't stop myself from saying it, even if it is not appropriate for the situation.	.45	.28	.13	<b>.16</b>
23. I never participate in laughing at others even if all my friends are doing it.	-.21	.14	-.01	<b>.71</b>
27. If I don't like someone, I often use humor or teasing to put them down.	.05	-.01	.26	<b>.57</b>
31. Even if something is really funny to me, I will not laugh or joke about it if someone will be offended.	-.10	.07	-.00	<b>.63</b>
	<b>Self-defeating</b>			
4. I let people laugh at me or make fun at my expense more than I should.	.21	-.04	<b>.48</b>	.09
8. I will often get carried away in putting myself down if it makes my family or friends laugh	-.06	.08	<b>.73</b>	.05
12. I often try to make people like or accept me more by saying something funny about my own weaknesses, blunders, or faults.	.06	.02	<b>.67</b>	.04
16. I don't often say funny things to put myself down.	-.09	.18	<b>.55</b>	.15
20. I often go overboard in putting myself down when I am making jokes or trying to be funny.	-.08	-.25	<b>.69</b>	.10
24. When I am with friends or family, I often seem to be the one that other people make fun of or joke about.	.06	-.16	<b>.53</b>	.12
28. If I am having problems or feeling unhappy, I often cover it up by joking around, so that even my closest friends don't know how I really feel.	.31	.05	<b>.31</b>	-.06
32. Letting others laugh at me is my way of keeping my friends and family in good spirits.	.06	.11	<b>.70</b>	-.07
Eigenvalues	3.85	3.49	3.20	2.51
% of variance	12.0%	10.9%	10.0%	7.8%

Note. N=183.

Original items in English (Martin et al., 2003) are used in the table.

Inter-scale correlations between different humour styles were generally weak (see Table 2) indicating that they measure different dimensions of humour. As expected affiliative and self-enhancing humour ratings were positively correlated, indicating that people who use humour as an adaptive strategy to enhance social relationship also tended to use it for self-enhancement. (The correlation decreased when controlled for Extraversion,  $r = .33, p < .01$ .) Aggressive and self-defeating humour scales were positively correlated, indicating that those who use humour in hostile ways also tended to engage in self-disparaging use of humour.

Table 2. Descriptive statistics and Pearson correlations between HSQ scales

	<i>Alphas</i>	<i>M</i>	<i>SD</i>	<i>Self-enhancing</i>	<i>Aggressive</i>	<i>Self-defeating</i>
Affiliative	.76	40.00	7.67	.42**	.20**	.06
Self-enhancing	.78	34.49	7.60		.05	.15*
Aggressive	.65	29.34	6.68			.26**
Self-defeating	.74	27.33	7.55			

Note. N = 183

\*\* $p < .01$ , \* $p < .05$ . (Two-tailed.)

Gender differences were analysed using t-tests, and as expected males had significantly higher results than females in aggressive humour ratings (respectively for men and women  $M = 33.42$  ( $SD = 7.22$ ) and  $M = 28.51$  ( $SD = 6.27$ ),  $t(181) = 3.52, p < .01$ ). Other scales showed no gender differences, in contrast with previous findings (Martin et al., 2003; Saroglou & Scariot, 2002).

When cross-cultural comparisons were conducted, Latvian students showed lower ratings of affiliative humour than Canadians and Belgians ( $t(1376) = 11.14, p < .001$  and  $t(362) = 9.52, p < .001$ , respectively). Latvians also reported less self-enhancing humour than Canadians ( $t(1376) = 4.30, p < .01$ ) and less aggressive humour than Belgians ( $t(362) = 2.83, p < .01$ ). At the same time, Latvians showed higher ratings of self-defeating humour than Canadians and Belgians ( $t(1376) = 2.00, p < .05$  and  $t(362) = 2.69, p < .01$ , respectively).

### Psychometric Properties of Latvian versions of the PANAS, PSS and CSLE

Confirmatory principal component analysis with extraction of two factors and Varimax rotation was used to test the factorial validity of the Latvian version of the PANAS. All items (with only one exception in the Positive affect scale) had a first loading on their corresponding factor as in the original scale, while all second loadings on the other factors were lower than .3 and most were negative. The factors were extracted in the following order: negative emotions (loadings from .74 to .57) and positive emotions (from .73 to .39). Corresponding eigenvalues of the rotated factors were 4.84 and 3.75 explaining 24.19% and 18.76% of the total variance respectively. The Cronbach alpha was .74 for positive affect ( $\alpha = .81$  with item 2 deleted) and .86 for the negative affect scale. Scales used in this study were obtained by summing items corresponding to factor loadings on each factor in the original scale; item 2 was not included in the final score (see Table 3).

Scale reliability was also analysed for PSS and CSLE and the Cronbach alphas was .83 and .89 respectively. Scales used in this study were obtained by summing items in each scale (see Table 3).

**Table 3. Descriptive statistics for stress events, perceived stress, depression, anxiety, and negative and positive mood**

	$\alpha$	M	SD
Stress events	.89	91.64	15.69
Perceived stress	.83	21.71	5.60
Depression	–	11.87	8.16
Anxiety (trait)	–	46.05	9.04
Negative mood	.86	25.18	7.28
Positive mood	.81	29.26	5.40

Note. N = 183

**Correlations among Humour styles, Personality, Stress and Well-being**

The Five-Factor Model was used to examine the relationships among different humour style ratings and broader dimensions of personality. Multiple correlations with each personality dimension and the HSQ dimensions taken together ranged from .31 to .49 (See Table 4). Results showed that Extraversion and Agreeableness and also Neuroticism are personality dimensions which are related to humour style. As expected, Extraversion correlated positively with affiliative humour ( $r = .38, p < 0.01$ ) and also with self-enhancing humour ( $r = .35, p < .01$ ) although this relation was expected to be weaker. Both affiliative and self-enhancing humour style ratings were positively correlated with Openness ( $r = .26, p < .01$  and  $r = .25, p < .01$ ), yet aggressive and self-defeating humour ratings showed no significant correlation with this personality dimension. As expected, Neuroticism had a negative correlation with self-enhancing humour ( $r = -.31, p < .01$ ), and a positive correlation with aggressive humour ( $r = .15, p < .05$ ), although this correlations was weak.

**Table 4. Pearson correlations and multiple correlations for HSQ scales, personality, stress and well-being**

	<i>Affiliative humour</i>	<i>Self enhancing humour</i>	<i>Aggressive humour</i>	<i>Self defeating humour</i>	<i>R</i>
Five Factor Model					
Neuroticism	-.14	-.31**	.15*	.13	.38**
Extraversion	.38**	.35**	.16*	0	.45**
Openness	.26**	.25**	0	.03	.31**
Agreeableness	0	.19*	-.42**	-.08	.49**
Conscientiousness	-.12	.09	-.20**	-.20**	.31**
Stress					
Stress events	0	-.16*	.15*	.31**	.39**
Perceived stress	.02	-.16*	.05	.25**	.33**
Well-being					
Depression	-.04	-.14	.14	.33**	.38**
Anxiety (trait)	-.05	-.24**	.11	.23**	.36**
Negative mood	-.09	-.21**	.11	.23**	.34**
Positive mood	.17*	.22**	-.04	-.11	.28**

Note. N = 183

In multiple regression analysis humour styles were used as independent factors in all cases.

\*\* $p < .01$ , \* $p < .05$ . (Two-tailed.)

A negative correlation between aggressive humour style ratings and Agreeableness ( $r = -.42, p < .01$ ) was found as expected. Although it was predicted, there was no significant

correlation between Neuroticism and self-defeating humour ratings ( $r = .13$ , ns). Both aggressive and self-defeating humour ratings had negative correlation with Conscientiousness (both  $r = .20$ ,  $p < .01$ ).

In order to test the hypothesis of different patterns of relationships with stress and well-being measures for different humour style dimensions, several measures were used. As shown in Table 4, most of the reported measures have a significant, but rather weak correlation in opposite directions for self-enhancing in contrast with self-defeating humour style ratings. Self-enhancing humour was positively related to positive mood, and negatively related to perceived stress and anxiety ( $r = .22$ ,  $p < .01$ ;  $r = -.16$ ,  $p < .05$ ;  $r = -.24$ ,  $p < .01$  respectively), but self-defeating humour was positively associated with negative mood, higher depression, anxiety (all of them  $r = .23$ ,  $p < .01$ ), perceived stress ( $r = .25$ ,  $p < .01$ ), as well as a higher level of recent hassle ratings ( $r = .31$ ,  $p < .01$ ). As expected, a positive although weak correlation was found between affiliative humour and positive mood ( $r = .17$ ,  $p < .05$ ). Results showed a clear difference between the correlations of the adaptive and maladaptive dimensions of the HSQ with such well-being measures as perceived stress, depression, anxiety and positive/negative mood. Of note is that these associations were found consistently with both adaptive and maladaptive self-directed humour style dimensions, but not the interpersonal dimensions.

## Discussion

The purpose of the current study was to validate the HSQ within the Latvian sociocultural context, to investigate the personality correlates of four humour style dimensions, and to test the hypothesis that adaptive and maladaptive humour style dimensions relate differently to stress and well-being measures such as depression, anxiety and general mood.

The HSQ was adapted and validated in a language and culture different from the original, with the same four factor structure as the four humour style dimensions conceptualized by HSQ authors Martin and colleagues (Martin et al., 2003) replicated in a Latvian student sample. Items from the Latvian version loaded similarly to the original version, except that two items from the original aggressive humour dimension did not show the first loading on the original corresponding factor. Both items characterise humour use with no concern for social norms: *“When telling jokes or saying funny things, I am usually not very concerned about how other people are taking it”* and *“Sometimes I think of something that is so funny that I can’t stop myself from saying it, even if it is not appropriate for the situation”*. It can be speculated that people in Latvia tend to associate this kind of joking with being a nonconformist and freedom of speech rather than hostility. In future studies these items should be reformulated in order to add more emphasis to the aspect of aggressive behaviour demonstration through humour use. However, additional analysis is necessary to improve item factor loadings and reliability of the Latvian version of HSQ, especially for the aggressive humour scale.

Inter-scale correlations were generally weak, although the correlation between affiliative and self-enhancing humour was stronger than expected. The moderate correlation that was found can be explained by a consistent association with Extraversion of both

humour dimensions, which is recognized as the problem for sense of humour measures used so far (Kohler & Ruch, 1996). Weak correlations between affiliative and aggressive humour can be explained by the social aspect of these humour style dimensions, because both of them include use of humour in front of an audience. Affiliative humour can also include aggressive elements (e.g., teasing somebody or making jokes about an out group) which are sometimes not so easy to differentiate.

However, other inter-scale correlations provide support for the assumption that the HSQ dimensions indeed measure aspects of different types of humour. In general inter-scale correlations replicate findings from English-speaking Canadians (Martin et al., 2003; Kuiper et al., 2004), French-speaking Belgians (Saroglou & Scariot, 2002), native Armenians living in Lebanon (Kazarin & Martin, 2006) and Chinese (Chen & Martin, 2007). Discrepancies between the mean scores of the four humour style dimensions were similar to those of the original data. No differences were observed between the Latvian and Canadian sample regarding aggressive humour ratings. However Latvians reported significantly less affiliative and self-enhancing humour as well as more self-defeating humour than Canadians. Further research is necessary to explain whether cultural background influences appreciation and recognition of different humour styles. Gender differences were similar to those found in the Canadian as well as in the Belgian sample, with men tending to show more aggressive humour than women. There were no gender differences on other humour style dimensions. This result supports findings from a wide variety of studies of gender differences in humour use – men consistently tend to use humour in an aggressive and hostile manner more often than women (Lampert & Ervin-Tripp, 1998).

Correlations of personality variables with the four humour style dimensions generally replicated findings of previous studies, providing support for the external validity of the Latvian version of the HSQ. As expected, Extraversion showed a consistently medium strength correlation with affiliative and self-enhancing humour, despite the prediction that the correlation would be weaker for self-enhancing than affiliative humour. This finding provides support for the traditional view of a humorous person as being social, active and people-focused (Cann & Calhoun, 2001; Kuiper & Martin, 1998). However, maladaptive humour was found to have only a weak or a non-significant correlation with Extraversion, suggesting that the HSQ measures humour style dimensions which were not covered by previous sense of humour measures. This relationship can be partly explained by the social aspect of both affiliative and aggressive humour, which includes the use of humour for regulating social relationships – sometimes it is hard to draw a strict line between friendly teasing and nasty sarcasm. In the same vein, laughing at an out-group can increase cohesiveness among in-group members, but creates feelings of being ridiculed for the out-group members (Martin et al., 2003).

The consistent negative relation between Agreeableness and aggressive humour supports the validity of the HSQ. Aggressive humour is most readily understood in the light of superiority theories suggesting that the main function of this form of humour is to put down others (Zillmann, 1983). The tendency to use humour in a hostile way in relation to others or oneself is also associated with lower scores on Conscientiousness, which can be explained by more negative feelings of self-efficacy and weak self-control.

At the same time, an unexpected relationship between Openness to Experience and aggressive humour style was found. To some degree this relation can be explained by readiness to challenge ordinary perspectives and intellectual curiosity, which can also lead to innovative humour use when others do not feel it is appropriate. These findings may also be linked to a cognitive approach analysing the relation between creativity and humour (Ziv, 1976). Another explanation for this finding is the mixed factor loading of the items corresponding to the aggressive humour style dimension, as discussed earlier.

The Neuroticism dimension had an inverse relationship to the adaptive and maladaptive humour styles. This finding provides support for an understanding of the self-enhancing humour style as an adaptive, emotion-focused stress coping strategy. The positive aspects of the self-enhancing dimension can be linked to the historical understanding of humour as a healthy ego-defence mechanism (Freud, 1928). In sum, it seems that personality dimensions such as sociability, readiness to take new perspectives and overall emotional stability are crucial in order to benefit most readily from humour use.

The distinction between the other-focused and self-focused humour styles seems to be beneficial for further studies of the role of humour use in understanding the stress coping process. Only self-focused humour styles showed consistent relationships to the stress and well-being measures, while self-enhancing and self-defeating styles demonstrated opposite patterns of relationship. However, these relationships were generally weak, suggesting that humour style may influence stress and well-being less directly and more through mediation by other variables.

If one tries to characterise the “humorous person” on the basis of previous findings (Martin et al., 2003; Kuiper et al., 2004) and the results of the present study, it is possible to draw four different portraits. The first is a highly extraverted person, quite open to experience and in a good mood – he or she can be referred to as the “soul of the company”. He or she is able to utilize resources from the group - social support, shared good mood and membership. The second is an emotionally stable and extraverted individual in a good mood, internally open to new, unusual experiences, and quite agreeable. This person has a “humorous view of life” and has adequate individual cognitive resources – readiness and ability to take new perspectives and to laugh at everyday life and oneself. The third is an extraverted person who is neither agreeable, nor conscientious. He or she uses rude, hostile, and cynical jokes. This is “the bad boy” in the group who uses the strategy of fight (as opposed to flight) and finds resources for stress coping in social power. The fourth character is a stressed, depressed and anxious person, with quite a low sense of conscientiousness – overwhelmed with daily problems. He or she has difficulty coping with stress and allows and provokes others to ridicule him or her in order to gain at least some degree of attention from others. “The sad clown” is a target for ridicule or pity.

Stereotypically people with a high sense of humour are perceived to be low in neuroticism and high in agreeableness, as well as being characterised by more socially desirable adjectives when compared with average people or those with a low sense of humour (Cann & Calhoun, 2001). In the light of the recent findings it can be assumed that the



stereotype of the “humorous person” includes an optimal combination of high self-enhancing and low aggressive humour dimensions.

In conclusion, it has been found that different humour style dimensions have different patterns of relation to the main personality dimensions and general well-being measure ratings. It seems obvious that the humour style concept explains more completely the way different people use humour in their daily lives, in comparison with a unidimensional approach to sense of humour. The main question should no longer be whether or not humour helps to cope with stress, but rather what kind of personality uses what kind of humour in order to reach inter-individual and intra-individual goals.

## APPENDIX

### Latvian version of the HSQ scales

#### **Affiliative**

1. Parasti es ar citiem daudz nejokojos un nesmejos.
5. Man nav īpaši jāpiepūlas, lai citus sasmīdinātu – šķiet, ka pēc dabas esmu jokdaris.
9. Es reti smīdinu citus, stāstot jautrus atgadījumus par sevi.
13. Es daudz jokoju un smejos ar saviem tuvākajiem draugiem.
17. Parasti man nepatīk stāstīt jokus vai uzjautrināt citus.
21. Citu smīdināšana man sagādā prieku.
25. Es nemēdzu bieži jokoties ar draugiem.
29. Parasti, kad esmu kopā ar citiem, es nevaru izdomāt neko asprātīgu ko pateikt.

#### **Self-enhancing**

2. Es parasti varu sevi uzmundrināt ar humoru, ja jūtos nomākts.
6. Pat tad, kad esmu viens pats, es bieži uzjautrinos par dzīves absurdumu.
10. Kad jūtos nomākts vai nelaimīgs, es parasti cenšos šai situācijā iedomāties ko jautru, lai justos labāk.
14. Mans humorpilnais skats uz dzīvi pasargā mani no pārmērīga apbēdinājuma vai nomāktības.
18. Ja esmu viens pats un jūtos nelaimīgs, es cenšos domāt par kaut ko jautru, lai sevi uzmundrinātu.
22. Parasti es zaudēju savu humora izjūtu, ja esmu bēdīgs vai nomākts.
26. Mana pieredze rāda - lai tiktu galā ar problēmām, bieži ir derīgi saskatīt situācijas uzjautrinošo pusi.
30. Man nav jābūt ar citiem cilvēkiem, lai uzjautrinātos – parasti arī vienatnē atrodu lietas, par ko pasmieties.

#### **Aggressive**

3. Es bieži ķircinu citus par viņu kļūdām.
7. Mana humora izjūta nekad neaizvairo un nesāpina citus cilvēkus.
11. Kad es stāstu jokus vai saku ko smieklīgu, parasti mani īpaši neuztrauc, kā citi to uztvers.
15. Man nepatīk, ja humoru izmanto, lai citus kritizētu vai pazemotu.

19. Dažkārt es iedomājos kaut ko tik smieklīgu, ka nespēju atturēties to nepasakot, pat ja tas ir situācijai nepiemēroti.
23. Es nekad nepiedalos citu apsmiešanā, pat ja to dara visi mani draugi.
27. Ja man kāds nepatīk, es bieži izmantoju humoru vai ķircinu viņu, lai pazemotu.
31. Pat tad, ja kaut kas man liksies ļoti smieklīgs, es par to nespīdēšu un nejokošu, ja kādu tas varētu aizvainot.

### Self-defeating

4. Es ļauju citiem smieties par mani vai uzjautrināties uz mana rēķina vairāk nekā vajadzētu.
8. Es bieži varu aizrautīgi noniecināt pats sevi, ja tā varu sasmīdināt ģimenes locekļus vai draugus.
12. Smejoties par savām vājībām, kļūdām vai trūkumiem, es bieži cenšos iepatīkties vai panākt, lai mani labāk pieņem.
16. Tas negadās bieži, ka saku smieklīgas lietas, lai sevi noniecinātu.
20. Es bieži pārcenšos, pazemojot sevi, kad jokoju vai mēģinu būt jautrs.
24. Šķiet, ģimenē vai starp draugiem, es bieži esmu tas, ko citi izsmej vai par kuru joko.
28. Ja man ir problēmas vai jūtos nelaimīgs, es bieži to slēpju aiz jokiem, tādēļ pat mani tuvākie draugi nezina, kā es patiesībā jūtos.
32. Ļaujot citiem par sevi smieties, es uzturu savus draugus un ģimenes locekļus labā noskaņojumā.

### References

- Abel, M. H. (2002). Humor, stress, and coping strategies. *Humor: International Journal of Humor Research, 15*, 365–381.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *BDI – II Beck Depression Inventory 2nd edition. Manual*. San Antonio: The Psychological Corporation.
- Cann, A., & Calhoun, L. G. (2001). Perceived personality associations with differences in sense of humor: Stereotypes of hypothetical others with high or low senses of humor. *Humor: International Journal of Humor Research, 14*, 117–130.
- Cann, A., Holt, K., & Calhoun, L. G. (1999). The roles of humor and sense of humor in responses to stressors. *Humor: International Journal of Humor Research, 12*, 177–193.
- Chen, G., & Martin, R. A. (2007). A comparison of humor styles, coping humor, and mental health between Chinese and Canadian university students. *Humor: International Journal of Humor Research, 20*, 215–234.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A Global Measure of Perceived Stress. *Journal of Health and Social Behaviour, 24*, 385–396.
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory and Five-factor Model Inventory Professional Manual*. Odessa, FL: Psychological Assessment Resources.
- Craik, K. H., & Ware, A. P. (1998). Humor and personality in everyday life. In W. Ruch (Ed.), *The Sense of Humor. Exploration of a Personality Characteristic* (pp. 63–94). New York: Mouton de Gruyter.
- DePaoli, L. C., & Sweeney, D. C. (2000). Further validation of the positive and negative affect schedule. *Journal of Social Behavior & Personality, 15*, 561–569.
- Freud, S. (1928). Humour. *International Journal of Psychoanalysis, 9*, 1-6.

- Gabrane, L. (2007). Secondary adaptation of the NEO PI-R. Unpublished master thesis, University of Latvia, Riga, Latvia.
- Kazarin, S. S., & Martin, R.A. (2006). Humor styles, culture-related personality, well-being, and family adjustment among Armenians in Lebanon. *Humor: International Journal of Humor Research*, 19, 405–423.
- Kohler, G., & Ruch, W. (1996). Sources of variance in current sense of humor inventories: How much substance, how much method variance? *Humor: International Journal of Humor Research*, 9, 363–397.
- Kohn, P. M., Lafreniere, K., & Gurevich, M. (1990). The inventory of college student's recent life experiences: A decontaminated hassles scale for a special population. *Journal of Behavioral Medicine*, 13, 619–630.
- Kuiper, N. A., Grimshaw, M., Leite C., & Kirsh, G. (2004). Humor is not always the best medicine: Specific components of sense of humor and psychological well-being. *Humor: International Journal of Humor Research*, 17, 135–168.
- Kuiper, N. A., & Martin, R. A. (1998). Is sense of humor a positive personality characteristic? In W.Ruch (Ed.), *The Sense of Humor: Explorations of a personality characteristic* (pp. 159–178). New York: Mouton de Gruyter.
- Kuiper, N. A., Martin, R. A., & Olinger, J. L. (1993). Coping Humor, Stress, and Cognitive Appraisals. *Canadian Journal of Behavioural Science*, 25, 81–96.
- Lampert, M. D., & Ervin-Tripp, S. M. (1998). Exploring paradigms: The study of gender and sense of humor near the end of the 20<sup>th</sup> century. In W.Ruch (Ed.), *The Sense of Humor: Exploration of a Personality Characteristic* (pp. 231–270). New York: Mouton de Gruyter.
- Lefcourt, H. M., & Thomas, S. (1998). Humor and Stress Revisited. In W.Ruch (Ed.), *The Sense of Humor. Exploration of a Personality Characteristic* (pp. 179–202). New York: Mouton de Gruyter.
- Martin, R. A. (1998). Approaches to the sense of humor: A historical review. In W.Ruch (Ed.), *The Sense of Humor: Exploration of a Personality Characteristic* (pp. 15–60). New York: Mouton de Gruyter.
- Martin, R. A., Kuiper, N. A., Olinger, L. J., & Dance, K. A. (1993). Humor, coping with stress, self-concept, and psychological well-being. *Humor: International Journal of Humor Research*, 6, 89–104.
- Martin, R. A., & Lefcourt, H. M. (1983). Sense of humor as a moderator of the relation between stressors and moods. *Journal of Personality and Social Psychology*, 45, 1313–1324.
- Martin, R. A., & Lefcourt, H. M. (1984). Situational Humor Response Questionnaire: Quantitative measure of sense of humor. *Journal of Personality and Social Psychology*, 47, 145–155.
- Martin, R. A., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the Humor Styles Questionnaire. *Journal of Research in Personality*, 37, 48–75.
- Nezu, A. M., Nezu, C. M., & Blissett, S. E. (1988). Sense of humor as a moderator of the relation between stressful events and psychological distress: A prospective analysis. *Journal of Personality and Social Psychology*, 54, 520–525.
- Overholser, J. C. (1992). Sense of humor when coping with life stress. *Personality and Individual Differences*, 13, 799–804.
- Porterfield, A. L. (1987). Does sense of humor moderate the impact of life stress on psychological and physical well-being? *Journal of Research in Personality*, 21, 306–317.

- Ruch, W. (1996). Measurement approaches to the sense of humour: Introduction and overview. *Humor: International Journal of Humor Research*, 9, 239–250.
- Saroglou, V., & Scariot, C. (2002). Humor Styles Questionnaire: Personality and Educational Correlates in Belgian High School and College Students. *European Journal of Personality*, 16, 43–54.
- Skuskovnika, D. (2003). Psychometric properties of the Latvian and Russian version of the State Trait Anxiety Inventory (Form Y). *Baltic Journal of Psychology*, 4, 7–15.
- Spielberger, C. D. (1983). *Manual for the State-Trait Anxiety Inventory (STAI)*. Palo Alto, CA: Consulting Psychologists Press.
- Svebak, S. (1996). The Development of the Sense of Humor Questionnaire: From SHQ to SHQ-6. *Humor: International Journal of Humor Research*, 9, 341–361.
- Thorson, J. A., & Powel F. C. (1993). Development and validation of a multidimensional sense of humor scale. *Journal of Clinical Psychology*, 49, 13–23.
- Voitkane, S. (2003). The relationship of social support, anxiety, depression, and student needs to psychological well-being in first year university students. *Baltic Journal of Psychology*, 4, 31–43.
- Voitkane, S., & Miezite, S. (2001). First year university students adjustment problems. *Baltic Journal of Psychology*, 2, 43–58.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070.
- Zillmann, D. (1983). Disparagement humor. In P. E. McGhee & J. H. Goldstein (Eds.), *Handbook of humor research* (Vol. 1, pp. 85–108). New York: Springer.
- Ziv, A. (1976). Facilitating effects of humor on creativity. *Journal of Educational Psychology*, 68, 318–322.

## Job Applicants' Attraction to Declared Family-Friendly Employment Policy: An Intergroup Approach

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The study applies intergroup relations framework to examine the effect of declared family-friendly employment policy (operationalized by an affirmation and a picture emphasizing family identity in a job ad of a fictitious organization) on the perceived organizational attraction to applicants with and without children. The sample was community-based,  $N = 134$ , 50 % without children, age 20 - 45, 38 males. The study employed a 2 (affirmation) x 2 (picture) x 2 (parental status) mixed design. Dependent variables were 3 dimensions of organizational attraction (general attractiveness, job pursuing intentions and organizational prestige) measured by Organizational Attraction Measurement. Results of MANOVA reveal no main effect of affirmation, nor did the effects differ by parental status. There was a significant interaction between affirmation, picture, and status in relation to prestige,  $F(1, 134) = 4.27, p = .04$ . Contrary to prediction, the presence of both affirmation and picture decreased attraction to the parents. Implications for recruitment practice are discussed.

**Key words:** social identity, social categories, employee recruitment, organizational attraction, family-friendly employment policy.

### Introduction

Organizations increasingly target specific, previously discriminated social groups in their recruitment activities (Avery & McKay, 2006; Rynes & Barber, 1990), including women and parents with small children (Burke, 2004; Lewis & Cooper, 1999). Policies supporting employees with some kind of family responsibilities are implemented in organizations worldwide (Aryee, Srinivas, & Tan, 2005) and are used to make organizations more attractive to job applicants (Jahn, Thompson, & Kopelman, 2003). The practice is supported by growing research evidence on the benefits of employer branding as a specific form of managing corporate identities by creating an image of the organization as a distinct and desirable employer, applying marketing principles to the field of personnel recruitment (Lievens, Van Hove, & Anseel, 2007). However, some researchers suggest that family-friendly policies may have adverse effect on other employee groups (Harrison, Kravitz, Mayer, Leslie, & Lev-Arey, 2006; Hegtvædt & Ferrigno, 2002; Smithson & Stokoe, 2005).

The research regarding applicant targeting and family-friendly policies originated in Western countries (mainly in the United States) with established traditions of promoting diversity and family-friendly policies at the workplace. The country of the present study, Latvia, has different socio-political and socioeconomic settings; however, recruitment practitioners use to derive ideas from Western recruitment research and practices. During recent years some explicit initiatives promoting family-friendly employment policies

have been introduced, related to both increased need to compete for job applicants and rising birth rate in 2006-2007 (BGLM, 2008). For example, a supermarket chain made information about their day care facilities for employees' children a central part of one of their employment ads. Despite the mentioned factors, advertised family-friendly policies have not become part of mainstream recruitment practices in Latvia. The results of recent public opinion survey suggest that these practices might be considered ambivalent, as 66 % of Latvian population still believe that mothers with small children are not welcome as job applicants (SKDS, 2008).

To understand intergroup processes underlying job applicants' reactions to the targeted job ads, more empirical research is needed, especially comparing different applicant categories (Barber, 1998; Highhouse, Stierwalt, Bachiochi, Elder, & Fisher, 1999). Testing of previous findings in different social contexts would give an additional value to the study.

Haslam (2004) asserts that organizational processes depend on the way individuals define and present themselves in relation to others. A general proposition based upon identity theory (Tajfel, 1982) is that applicants' intentions (and also subsequent actions) regarding recruiting organizations are predicted by the extent to which applicants' salient social identities are congruent with their perceptions of the organizational identity, that is, the perceived category of persons to which applicants believe they might belong (Herriot, 2004). Discrimination against individuals who belong to a certain group is a widespread human tendency. When an individual is categorized as an outgroup member, stereotypical traits are often attributed to him or her. There are groups that deviate from the culture's standard (in Western settings it is a white, middle-class, heterosexual male, neither too old nor too young). People tend to linguistically mark groups differing from the standard and categorize them more readily than nondistinctive groups (Fiske, 2000). Women with children are considered non-traditional job applicants or a marked group, but having a child does not influence categorization of men in organizational settings (Cuddy, Fiske & Glick, 2004). According to Cuddy et al., some groups are simultaneously viewed as positive on one dimension and negative on the other. Categorization and related attitudes might be quite specific, for instance, Bridges, Etaugh and Barnes-Farell (2002) note that there are different perceptions of mothers working for a living and those working for their professional fulfilment.

Upon reviewing research on targeted recruitment of specific applicant groups, such as women and minorities, Avery and McKay (2006) agreed that in general individuals tend to be attracted by explicitly similar persons to themselves. However, several studies do not confirm this paradigm. One of the possible explanations is that some social categories are more complicated (e.g., Bridges et al, 2002) and more heterogeneous than others and that they therefore induce different reactions (Eberhardt & Fiske, 1994). Avery and McKay (2006) concluded that the effect of targeted recruitment should depend on job candidate's respective identity salience. An individual has many social identities hierarchically arranged depending on their salience, but circumstances or situations may also activate certain identities. In general, individuals tend to act on the basis of their most salient identity. Honeycutt and Rosen (1997) demonstrated that job applicants felt most attracted by organizations whose human resource strategies matched

their salient identities (career, family or balance between work and family). According to Herriot (2004), a job applicant enters the recruitment process with a repertoire of social identities that differ in their centrality to the self and their salience within specific social situations. A job applicant's important identity is especially salient when the individual representing an organization is a prototypical representative of a distinctive social group. The decision to apply is likely to result from the match between one's own and the organization's perceived identities. Some empirical support for this preposition was provided by Perkins, Thomas and Taylor (2000) who found that minority candidates' racial compatibility with persons pictured in an employment ad increased perceived organizational attractiveness. However, they also found that the compatibility did not affect applicants belonging to the majority race; probably because the experimental stimuli included no ad that featured only minority pictures. These findings suggest that in the recruitment context individuals tend to maintain a positive self-esteem derived from their perception of belonging to a certain salient identity over their rational evaluation of the job ad's content. For some groups (e.g., students, when compared to professionals) the perceptions of organizations are relatively easily manipulated (Gatewood et al., 1993). In real-life contexts, job ad effectiveness is likely to depend on interaction with other possible information sources (Hoye & Lievens, 2005).

Turban and Greening (1996) found that organizations engaging in socially responsible actions (e.g., providing day care for employees' children) are perceived as more attractive to job applicants. As applicants do not have much information about the organization, they generalize from the known organizational policies to its other characteristics. Also Bretz and Judge (1994, referred to in Rynes, 1992) propose that positive work-family policies differentiate organizations above others and that eventually job candidates end up perceiving them as attractive. To the extent that family-friendly career policies provide some general benefits (e.g., flexibility) they may also be attractive to job applicants without family responsibilities (Honeycutt & Rosen, 1997). Such job applicants, viewing an employment ad affirming family-friendly employment policy and having little information about the organization, may perceive this information as an indicator for other human resources strategies. This perception may make the organization generally appear to be more attractive. This would be especially the case with job applicants with children who would be attracted to organizations whose human resource strategies are compatible with their salient identities, such as family-friendly employment policies. Consequently, they would be more likely to apply for a job in such organizations. Alternatively, such a diffuse concept as 'family-friendly', especially with its historical relation to stereotypic gender roles (Swanberg, 2004) may trigger prejudiced thinking in some applicants.

Both identity theory and social categorization predict that categories most likely to be used are those that are most 'accessible' to a person and those that best fit the stimulus variations represented in the immediate situation (Brewer & Brown, 1998). It is expected that job applicants, who look at an employment ad that both affirms family-friendly employment policies and contains a picture emphasizing family identity, will perceive the social context and obvious social identities of individuals represented in an employment ad. This process will accentuate certain identities from job applicant's identity repertoire (parental identity for those having a child or non-parental identity for those not having a child), influencing their perceptions of organizational identity and, subsequently,

attraction to such an organization. When applicants' salient social identity and organizational identity are perceived as incompatible the organization will be considered less attractive, and applicants will be less interested to seek further contact with the organization.

Organizational attraction has been a leading outcome measure in assessing recruitment effectiveness (Barber, 1998; Chapman, Uggerslev, Carroll, Piasentin & Jones, 2005). Most recruitment researchers investigate organizational attraction in fictitious job seeking situations where participants receive information about an organization and respond to items regarding their attitude and hypothetical intentions towards the organization as potential employer. The stated attitude and the hypothetical intentions serve as a substitute choice in real life (e.g., Cober, Brown, Levy, Cober & Keeping, 2003; Feldman, Bearden & Hardesty, 2006; Highhouse et al., 1999; Perkins et al., 2000; Turban & Greening, 1996). However, researchers have not yet clearly differentiated between the various aspects of organizational attraction, which has limited comparison and application of their findings. Highhouse, Lievens and Sinar (2003) have made an important contribution by reducing confusion about the measures of organizational attraction and by explicitly differentiating the three dimensions of organizational attraction. They defined general organizational attractiveness as an attitude toward an organization as a potential employer. General attractiveness implies a certain degree of passivity because an individual may consider many organizations attractive, but this may not result in submitting an actual application. Researchers assess general attractiveness by such items as, "I like this organization" (Feldman et al., 2006). Although the attraction to a particular job vacancy (job attraction) is a different concept, other studies do not differentiate between the above two concepts but use them as equivalent (e.g., Cober et al., 2003). Intentions regarding an organization imply an activity towards an organization (e.g., submitting an application). An organization's prestige reflects purported social opinion about an organization, whether or not it is viewed positively by the society at large. The present study will extend previous research, by examining effects of manipulations on these specific dimensions.

The aim of the present study is to apply intergroup theories framework to explore how an affirmation of family-friendly employment policies and a picture emphasizing family identity ('employees with children'), incorporated into an employment ad, would affect perceived organizational attraction, specifically, general attraction, intentions toward company, and company prestige, for applicants with or without a child.

Hypothesis 1: An affirmation of family-friendly employment policy will increase the perceived organizational attraction and will make such an organization more attractive for job applicants with children than for childless job applicants.

Hypothesis 2: An affirmation of family-friendly employment policy provided with a picture emphasizing parental identity will increase the perceived organizational attraction for job applicants with children, but decrease organizational attraction for childless job applicants.



## Method

### Participants

The sample was community-based,  $N = 134$ , age 20 - 45 ( $M = 29$ ,  $SD = 5.98$ ), 38 males and 96 females. Fifty percent were parents, of mainly one child (53 % of parent sub-sample) or two children (38 % of parent sub-sample), with the youngest (or the only) children's age range from zero to 18 years, 82 % under seven years of age. Fifty-five percent of childless participants reported intention not to have a child in the next couple of years; the others did not exclude possibility to become a parent.

All except four participants had some work experience, but only 62 % had found their job through a job ad. Most participants (69 %) worked full time (40 or more hours per week), 8 % part time (15 to 40 hours per week), and 9 % were students, the rest worked less than 15 hours per week or were unemployed.

Participants were mostly from the capital city (78 %). Volunteers were recruited via popular Latvian websites on the basis of three demographic selection criteria relevant to this study: age range, education level, and occupation or field of study. Participants' occupation or study fields were education, economics, management, finance, psychology and law or other social sciences with at least secondary education and their age range was generally characterized both by an active professional life and by taking on family responsibilities.

### Apparatus

The stimulus material was a job ad (identical in all conditions except for the manipulated variables) that referred to several non-specific vacancies (e.g., manager) in a fictitious multi-profile consulting firm, worded to make it interesting for job seekers across genders, occupations and levels of job experience. The study applied employment ad paradigms from previous recruitment research (e.g., Feldman et al., 2006), but the ad was tailored to include typical phrases from job ads published in a national newspaper. The two manipulated variables pertained to family-friendly employment policy. The family-friendly employment policy was described as follows: "CONSULTO pays a special attention to implementing family-friendly employment policies, providing its employees with varied opportunities of facilitation of balance between work and family life" (further referred as 'affirmation'). The picture emphasizing parent identity was a collage of photos depicting men and women in business dress with children in different settings (further referred as 'picture').

Organizational attraction was assessed by Organizational Attraction Measurement (Highhouse et al., 2003), adapted by the author for the purpose of this study. It consists of 15 items, rated on a five-point Likert type scale. It measures three dimensions of organizational attraction: general attractiveness (e.g., "A job at this company is very appealing to me"), job pursuing intentions (e.g., "I would accept a job offer from this company") and organizational prestige (e.g., "This is a reputable company to work for"). Cronbach alphas were .83 for the general attractiveness scale, .87 for job pursuing intentions scale, and .87 for organizational prestige scale.

## Design

Block grouping of participants was based on their gender and parental status, and participants from each block were randomly assigned to one of the four experimental conditions. The study had a 2 (affirmation: included vs. not included) x 2 (picture: included vs. not included) x 2 (parental status: having vs. not having a child) mixed design.

## Procedure

The study was conducted in accordance with the advisory standards for internet-based experimenting (Reips, 2002; Stanton, 1998). The stimuli and the survey were administered in the web environment to increase the validity of the study in the following ways: by reaching the necessary quotas of participants matching the selection criteria; by reducing the influence of the experimenter; by administering the survey to all participants simultaneously; by reducing the risk of information exchange among participants; and by bringing experimental conditions closer to reality (respondents did the survey at a familiar place and a convenient time, just as they would while viewing job ads on the Internet). The instructions were tailored carefully, the contact phone and e-mail of the author were provided for questions and for reporting technical problems, and the procedure and the materials were tested in a pilot study ( $N = 21$ ).

Volunteers confirmed their consent to participate in the study, to evaluate the attractiveness of an organization by submitting their e-mail address and the necessary demographic data. All participants simultaneously received an e-mail with the instructions and a survey link to survey software providing for anonymous participation. They were instructed not to exchange information and to complete the survey within 48 hours. The participants imagined themselves to be job seekers, viewed the stimulus (employment ad), completed the organizational attraction measure and answered demographic questions. Medium response time was seven minutes. The response rate was 91.2 %. Participants received debriefing by e-mail after collecting the data.

## Results

The actual equivalence of experimental groups was assessed before analysis. There were no differences in distribution in experimental groups by parental status ( $\chi^2 = 0.69, p = .88$ ) or gender ( $\chi^2 = 1.18, p = .76$ ). Participants age, reflecting actual demographic differences, was significantly related to distribution by parental status ( $U = 826.5, p < .001$ ), as childless participants were younger ( $M = 25, SD = 4.54$ ) than parents ( $M = 32, SD = 5.61$ ), which had to be accounted for in interpreting results.

The three dimensions of organizational attraction (general attractiveness, job pursuing intentions and organizational prestige) were subjected to a 2 (picture yes/no) x 2 (affirmation yes/no) x 2 (having child yes/no) analysis of variance. There were 15 to 20 participants in each cell of the factorial design.

It was hypothesized that the affirmation of family-friendly employment policy would increase the perceived organizational attraction for all applicants and that job applicants with children would be more attracted to such organization than childless job applicants (Hypothesis 1). Analysis of variance revealed no main effect of affirmation on organizational attraction: general attractiveness,  $F(1, 134) = 1.84, p = .18, ns$ , job

pursuing intentions  $F(1, 134) = 3.00, p = .09$ , ns, and organizational prestige,  $F(1, 134) = 0.01, p = .92$ , ns. The influence of affirmation on organizational attraction did not differ for job applicants with different parental status: general attractiveness,  $F(1, 134) = 0.30, p = .58$ , ns, job pursuit intentions,  $F(1, 134) = 1.13, p = .29$ , ns, and organizational prestige,  $F(1, 134) = 0.35, p = .55$ , ns.

It was also hypothesized that the affirmation about family-friendly employment policy together with a picture emphasizing family identity would increase the perceived organizational attraction for job applicants with children, but that it would decrease the perceived organizational attraction for childless job applicants (Hypothesis 2). A significant interaction among parental status, affirmation and picture in relation to organizational prestige was found,  $F(1, 134) = 4.27, p = .04$ . However, the pattern of this interaction did not conform to the expected direction. There were no significant interactions in relation to general attractiveness or job pursuing intentions.

For the childless job applicants, affirmation about family-friendly employment policy, together with a picture emphasizing family identity, resulted in the highest perceived organizational prestige ( $M = 3.5, SD = 0.59$ ). The affirmation alone resulted in the least prestige ( $M = 2.96, SD = 0.79$ ), with the ad without affirmation and picture and the ad with the picture alone scoring in between ( $M = 3.24, SD = 0.62$  and  $M = 3.33, SD = 0.79$  respectively).

In contrast, the job applicants with children considered the organization to be highest in prestige when the job ad had only the picture (no affirmation) ( $M = 3.38, SD = 0.53$ ) and only slightly lower in prestige when the job ad had only the affirmation and no picture ( $M = 3.33, SD = 0.79$ ). An organization having an ad with both affirmation and picture scored lower ( $M = 3.19, SD = 0.73$ ), with the least prestige being assigned to an organization with the 'bare' ad (no affirmation, no picture) ( $M = 2.98, SD = 0.65$ ).

When there was no picture in the job ad (see Figure 1), childless job applicants considered an organization represented in the work ad with the affirmation to be less prestigious than an organization without the affirmation. Job applicants with children considered an organization represented in the ad with the affirmation to be more prestigious compared to the one without the affirmation.

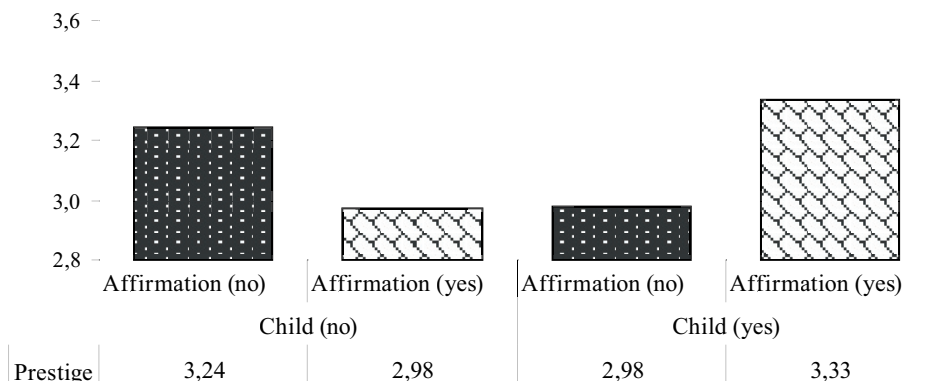
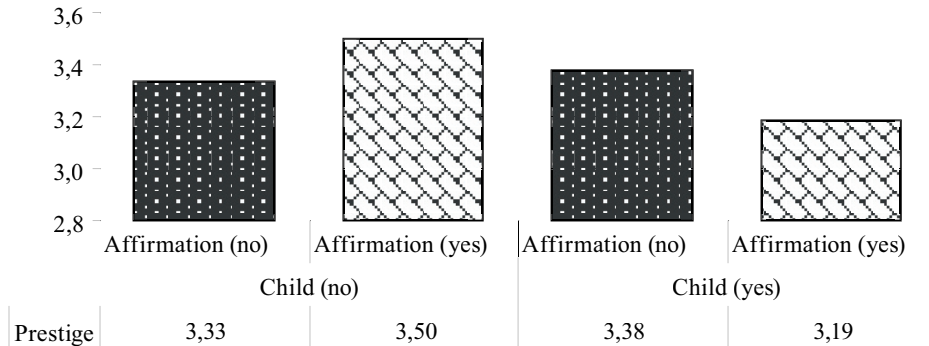


Figure 1. The means of the perceived organizational prestige comparing participants without and with children in the different conditions when there is no picture in the job ad and the presence of the affirmation is manipulated

When the picture was included in the job ad (see Figure 2), the following interaction with the affirmation took place: perceived organizational prestige was decreased for job applicants with children and increased for the childless job applicants.



*Figure 2.* The means of the perceived organizational prestige comparing participants without and with children in the condition when there is the picture in the job ad and the presence of the affirmation is manipulated

## Discussion

Results of testing Hypothesis 1 do not support previous suggestions that positive work-family policies would be attractive for nearly all applicants (Bretz & Judge, 1994) or that applicants would be particularly attracted to organizations whose human resources policies conform to their identities (Herriot, 2004). They differ from the results obtained in the study where individuals with different salient identities differed in their attraction to organizations due to the different family-friendly policies (Honeycutt & Rosen, 1997). This inconsistency may be explained by differences in manipulations and dependent variables. The current study inferred parent identity from parental status and from experimentally manipulated identity salience on the basis of context and picture while Honeycutt and Rosen assessed participants' self-reported identity salience. Honeycutt and Rosen also used more extensive, detailed and contrasting employment policy descriptions, they did not integrate the descriptions in employment ads (thus making them more salient for participants but more distant from the typical real life situation), and they had three levels of the independent variable and used a different organizational attraction measure.

Contrary to the prediction in Hypothesis 2, the study did not find support for the prediction based on identity theory that applicants' intentions (and subsequent actions) would be likely to result from a match between the applicants' own and their perceived organizational identities. It was found that participants without children consider an organization most attractive and prestigious that is represented by individuals dissimilar to them. These results support the previous studies as reported by Avery & McKey, 2006 that also failed to confirm the attraction by similarity paradigm. In agreement with Eberhard and Fiske (1994), findings of the previous studies suggest that parents belong to social categories that are more complicated and more heterogeneous than others are and therefore induce different reactions. The context provided in the present study could

have represented more specific (e.g., working mother of an infant) identities more salient, as opposed to the general parental and non-parental identities. Findings by Cuddy et al. (2004) are also promising; not all outgroups are perceived negatively, e.g., working fathers, unlike working mothers, induce positive feelings for both men and women. Categories such as 'parents' and 'childless' are specific because boundaries between these categories are likely to be crossed only in one direction and, as suggested by one of the reviewers, the picture could actualize child intention for childless participants. It could be especially true regarding those ambiguous about having a child in the nearest future because it could diffuse their child-related identity.

Significant interaction with perceived organizational prestige but not with other dimensions of organizational attraction implies that even when applicants rate an organization as *prestigious* ("There are probably many who would like to work at this company", item 15), it does not mean that they personally consider it attractive ("This company is attractive to *me* as a place for employment", item 3) or that they intend to actively pursue the vacancy ("I would exert a great deal of effort to work for this company", item 9). Probably this effect reflects the childless (and younger) respondents' view that many applicants (especially those with family responsibilities) would like to work for an organization whose human resource policies are family-friendly. The inclusion of family-friendly policies in recruitment activities may not necessarily raise the level of general organizational attractiveness and result in intention to pursue a job, even if parents are targeted as an applicant group.

Contrary to the prediction, participants with children did not consider an organization more attractive or prestigious that matches their identity most closely by affirming family-friendly policy and emphasizing parental identity through pictures. The most likely explanation for lower level of perceived prestige is that probably participants have already faced some negative attitude toward them as parents in their workplaces and are therefore more sceptical about explicit declarations of family-friendly policies by employers. The different social context regarding applicant targeting and family-friendly policies likely also has some impact on perceiving advertised family-friendly policies. In addition, participants without children tend to be younger, and findings by Gatewood et al. (1993) suggest that younger persons are more susceptible to manipulations of organizational image.

Additional information collected in this study suggests that searching and accepting a job through job ads is a far less popular practice in Latvia than it is in Western Europe and North America, where it is the main recruiting source (Barber, 1998). Individuals in Latvia may have more trust in other information sources, like personal contacts.

The study has contributed to a domain that has received little attention in previous empirical research, namely the effects of family-friendly policies on applicant attraction, by discriminating between different dimensions of organizational attraction and testing hypotheses derived from social identity theory. Further research should focus on various ways of manipulating and assessing of identity salience in the job choice context. Assessing gender differences with respect to parent identity salience and its effect on organizational attraction is a promising objective that could not be realized in this study because of the insufficient number of male participants.

## References

- Aryee, S., Srinivas, E., & Tan, H. (2005). Rhythms of Life: Antecedents and Outcomes of Work-Family Balance in Employed Parents. *Journal of Applied Psychology, 90*, 132–146.
- Avery, D., & McKay, P. (2006). Target practice: an organizational impression management approach to attracting minority and female job applicants. *Personnel Psychology, 59*, 157–187.
- Barber, A. (1998). *Recruiting Employees*. Thousand Oaks, CA: Sage Publications.
- BGLM (2008). *Demogrāfiskās attīstības rādītāji [Demographic tendencies]*. Retrieved December 13, from Ministry of Children and Family Affairs web site, [http://www.bm.gov.lv/lat/gimenes\\_valsts\\_politika/demografiskas\\_attistibas\\_raditaji](http://www.bm.gov.lv/lat/gimenes_valsts_politika/demografiskas_attistibas_raditaji)
- Bretz, R., & Judge, T. (1994) The role of human resource systems in job applicant decision processes. *Journal of Management, 20*, 531–551.
- Brewer, M., & Brown, R. (1998). Intergroup relations. In Gilbert D., Fiske S., Lindzey G.(Eds.) *The handbook of social psychology*, Vol 2. (pp.554–594). Boston: Hebron-Hill.
- Bridges, J., Etaugh, C., & Barnes-Farell, J. (2002). Trait Judgments of Stay-At-Home and Employed Parents: A Function of Social Role and/or Shifting Standards? *Psychology of Women Quarterly, 26*, 140–151.
- Burke, R. (2004). Work and Personal Life Integration. *International Journal of Stress Management, 11*, 299–304.
- Chapman, D., Uggerslev, K., Carroll, S., Piasentin, K., & Jones D. (2005). Applicant Attraction to Organizations and Job Choice: A Meta-analytic review of the Correlates of Recruiting Outcomes. *Journal of Applied Psychology, 90*, 928–944.
- Cober, R., Brown, D., Levy, P., Cober, A., & Keeping, L. (2003). Organizational Web Sites: Web Site Content and Style as Determinants of Organizational Attraction. *International Journal of Selection and Assessment, 11*, 158–169.
- Cuddy A., Fiske, S., & Glick, P.(2004). When Professionals Become Mothers, Warmth Doesn't Cut the Ice. *Journal of Social Issues, 60*, 701–718.
- Eberhardt J., & Fiske S. (1994). *Affirmative Action in Theory and Practice: Issues of Power, Ambiguity, and Gender versus Race. Basic and Applied Social Psychology, 15*, 201–221.
- Feldman, D., Bearden, W., & Hardesty, D. (2006). Varying the content of job advertisements: The effects of message specificity. *Journal of Advertising, 35*, 123–141.
- Fiske, S. (2000). Stereotyping, prejudice, and discrimination at the seam between the centuries: Evolution, culture, mind, and brain. *European Journal of Social Psychology, 30*, 299–322.
- Gatewood, R., Gowan, M., Lautenschlager, & Gary, J.(1993). Corporate image, recruitment image and initial job choice decisions. *Academy of Management Journal, 36*, 414–428.
- Harrison, D., Kravitz, D., Mayer, D., Leslie, L., & Lev-Arey, D. (2006). Understanding Attitudes toward Affirmative Action Programs in Employment: Summary and Meta-Analysis of 35 Years of Research. *Journal of Applied Psychology, 91*, 1013–1036.
- Haslam, S.A. (2004). *Psychology in organizations: The Social Identity Approach*. Sage publications.
- Hegtvedt, C., & Ferrigno, E. (2002). Reactions to Injustice: Factors Affecting Workers' Resentment toward Family-Friendly Policies. *Social Psychology Quarterly, 65*, 386–401.
- Herriot, P. (2004). Social Identities and Applicant Reactions. *International Journal of Selection and Assessment, 12*, 75–83.

- Highhouse, S., Stierwalt, S., Bachiochi, P., Elder, A., & Fisher, G. (1999). Effects of advertised human resource management practices on attraction of African American applicants. *Personnel Psychology*, 52, 425–442.
- Highhouse, S., Lievens, F., & Sinar, E. (2003). Measuring attraction to organizations. *Educational and Psychological measurement*, 63, 986–1001.
- Honeycutt, T., & Rosen, B. (1997). Family friendly human resource policies, salary levels and salient identity as predictors of organizational attraction. *Journal of Vocational Behavior*, 50, 271–290.
- Hoye, G., & Lievens, F. (2005). Recruitment-Related Information Sources and Organizational Attractiveness: Can Something Be Done about Negative Publicity? *International Journal of Selection and Assessment*, 13, 179–187.
- Jahn E., Thompson, C., & Kopelman, R. (2003). Rationale and construct validity evidence for a measure of perceived organizational family support (POFS): because purported practices may not reflect reality. *Community, Work & Family*, 6, 123–140.
- Lewis, S., & Cooper, C. (1999). The Work-Family Research Agenda in Changing Contexts. *Journal of Occupational Health Psychology*, 4, 382–393.
- Lievens, F., Van Hoye, G., & Anseel, F. (2007). Organizational Identity and Employer Image: Towards a Unifying Framework. *British Journal of Management*, 18, 45–59.
- Perkins, L., Thomas, K., & Taylor, G. (2000). Advertising and recruitment: Marketing to minorities. *Psychology & Marketing*, 17, 235–255.
- Reips, U. (2002). Standards for Internet-Based Experimenting. *Experimental Psychology*, 49, 243–256.
- Rynes, S., & Barber, A. (1990). Applicant Attraction Strategies: An Organizational Perspective. *Academy of Management Review*, 15, 286–310.
- SKDS (2008). *Demogrāfija un ģimenes stāvoklis Latvijā [Demography and family status in Latvia]*. Retrieved December 13, 2008, from Ministry of Children and Family Affairs web site, [http://www.bm.gov.lv/lat/informacija\\_jums/petijumi/?doc=11019](http://www.bm.gov.lv/lat/informacija_jums/petijumi/?doc=11019)
- Smithson, J., & Stokoe, E. (2005). Discourses of Work–Life Balance: Negotiating ‘Genderblind’ Terms in Organizations. *Gender, Work and Organization*, 12, 147–168.
- Stanton, J. (1998). An empirical assessment of data collection using the internet. *Personnel Psychology*, 51, 709–725.
- Swanberg, J. (2004). Illuminating gendered organization assumptions: An important step in creating a family-friendly Organization. *Community, Work & Family*, 7, 3–28.
- Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33, 1–30.
- Turban, D., & Greening D. (1996). Corporate social performance and organizational attractiveness to prospective employees. *Academy of Management Journal*, 40, 658–672.

## **Mourning Experiences, Risks and Possibilities in Representations of Bereaved Women in Latvia: A Qualitative Study**

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The aim of this study was to explore the mourning experiences, risks and possibilities in the representations of bereaved women and to analyze the related cultural aspects of bereavement and mourning in Latvia. The representations of bereavement experiences are described and categorized according to the following themes: the experience of the loss; changes related to the loss; the meaning of the loss; the role of one's beliefs and philosophy of life in understanding and coping with the loss; and the factors that inhibit and facilitate the adjustment process; based on the written narratives of Latvian women (N=128) who have lost someone close during the past five years.

**Key words:** bereavement, mourning representations, qualitative study, Latvian women

### **Introduction**

Each year more than 100.000 or 4–7% inhabitants of Latvia experience bereavement personally. However, as in many former Soviet Union countries, there is a lack of relevant theories or studies in the field. Also the number of publications providing relevant information and support is limited for a Latvian reader. At the same time, the necessity for such information, to better understand bereavement and where to get the necessary support, can be surmised not only in everyday conversations but also from previous studies which also include national level data (Maslovska, 2001; Sīmane, Kalniņa, Meņšikovs, Sebre, Bite, et al., 2003).

In a major overview, Robert Neimeyer and Nancy Hogan (Neimeyer & Hogan, 2001) point to more than 2,000 published books and articles in the area of grief and mourning. The high number of publications refers mainly to the developments in Western society, which include theoretical models and analyses (Worden, 1991), comparisons of different bereavement experiences (Murphy et al., 2003), analyses and discussions of the complications of mourning (Prigerson & Jacobs, 2001) and cultural differences in mourning (Lalande & Bonanno, 2006). Nevertheless, many questions still need to be answered, including those pertaining to the possible risk factors and the best ways to facilitate coping with bereavement, as well as, the necessity to examine bereavement process in the context of different cultures.

This study aims to address the scientific, social and practical necessity to explore bereavement and mourning in the Latvian cultural context. In particular, this study



explores the mourning experiences, risks and possibilities in the representations of bereaved women and interprets these in relation to the cultural aspects of bereavement and mourning in Latvia.

## **Theory and Related Literature Review**

The scientific study of bereavement started in the 1960s when open discussions arose amongst Western practitioners about the role of bereavement in people's lives. Even today, the best known bereavement theories are grounded in Western societies.

Bereavement is understood through different psychological theories and the most popular are the models of attachment and psychodynamic theories (Middleton et al., 1993). Historically, bereavement has been contextualized within stress, trauma and crisis theories, but, during the last decades independent bereavement theories have also been developed (Stroebe & Schut, 2001a).

Over time, some core beliefs have been questioned and challenged. For example, the concept of grief work proposed by Freud (1917) has been widely discussed, and as a result, the bereaved are not expected to sever ties with the deceased in order to successfully adjust to the loss. Instead, maintaining bonds with the deceased is considered a common experience and a characteristic of adaptive grieving (Klaas, Silverman & Nickman, 1996). The Two-Track Model of Bereavement makes a clear distinction between the bio-psycho-social reactions to the loss, and the track that focuses on attachment to and an on-going relationship with the deceased (Rubin, 1999). The well known "stage" or "phase" model (shock, disorganization and recovery), developed in the field of psychoanalysis, has been modified to reflect a more dynamic process, for example, by investigating the tasks of mourning (Worden, 1991). Another change in earlier beliefs is the shift in focus from intrapersonal to interpersonal perspectives represented in "narratives" and "biographies" (Walter, 1996) about the life and death of the deceased. A further example comes from Cook and Oltjenbrun's (1998) Model of Incremental Grief, which states that one loss can often trigger another loss, placing individual coping reactions within the context of the social environment in which they take place.

In the past 20 years, a number of studies have been conducted that confirm some of the previous assumptions about the myths of coping with loss. Even the necessity to disclose one's feelings and emotions has been challenged. Thus, the Dual Process Model of Coping with Bereavement (Stroebe & Schut, 1999) proposes the necessity to assess the need to confront aspects of loss, and the need at other times, to focus instead on the tasks of restoration and the secondary stressors, as the consequences of bereavement. The latest developments place more emphasis on spiritual change (Balk, 1999), meaning reconstruction (Neimeyer, Baldwin & Gillies, 2006) and post-traumatic growth (Calhoun & Tedeschi, 2001). Even though theories have been criticized for oversimplifying grief and the mourning process and for their limitations when studying grief in different cultures, they do provide some guidelines to help understand bereavement and offer suggestions for clinical practice.

In the literature bereavement reactions are grouped in psycho-physiological and cognitive-behavioral categories (Worden, 1991). Current research also emphasizes other

natural reactions to the loss of someone close, such as spiritual change (Balk, 1999), adaptation to secondary losses (Cook & Oltjenbruns, 1998), changes in social relationships (Walter, 1996), and maintaining bonds with the deceased (Klaas et al, 1996).

A number of studies also discuss bereavement related risk factors, which include an increase in disease, psycho-emotional disturbances, engagement in health-risk and criminal behavior, increase in mortality, as well as, decrease in quality of life.

Grief complications arise from the loss, and the surrounding circumstances, reflecting the emotional ties and relationship to the deceased, circumstances of death, concurrent stressors, as well as personal characteristics of the bereaved. However, studies report contradictory results about the role of demographic and bereavement related variables (Stroebe & Schut, 2001b). Hence, the risk factors of coping with loss are not yet clear.

Regardless of the many risk factors, most bereaved individuals can adjust to the loss without professional help (Stroebe & Schut, 2001a). With the spread of the positive psychology movement during the past decade researchers and practitioners have been urged to focus more on psychological health and ways of fostering well-being instead of concentrating their efforts solely on pathology and fighting disease (Seligman & Csikszentmihaly, 2000). To date a number of personal and social resources have been identified to help cope with the loss, but studies show conflicting results regarding the positive role of different psychosocial resources.

### **Relevant aspects of Latvian culture in the context of bereavement and mourning**

Through the centuries Latvia has been under occupation by various invaders, and thus has experienced the impact of several cultures and ideologies, which have affected the self-concept and self-expression of people deprived of sovereignty. Nonetheless, Latvians have maintained their national identity and traditions. Even today national folksongs, dances and traditions are taught in schools and are an integral part of celebrations.

According to the Latvian philosophy of life, nature plays a major role in overcoming difficulties. There are many folksongs that teach people how to survive in times of despair, and it is believed that different forces of nature come together to help people, especially those who do not have any other source of support. For example, folk songs reassure us that Mother-Sun takes care of all orphans and dries their tears, and that one can cling to the Apple-tree, as mother, to relieve one's sorrow. As part of the belief in afterlife Latvians have developed a friendly relationship with death. Therefore, an important aspect of mourning is continuation of the relationship with the deceased by keeping memories alive, incorporating the deceased in one's everyday life, or having spiritual contact with the deceased.

Current world views are still impacted by the 50 years after World War II spent under the Soviet regime which denied the value of human individuality through political restrictions on the expression of free will as well as the denial of personal emotions. Life in the Soviet system required high level skills to adapt, strong self-control, constant caution, and the ability to remain 'invisible'. Still, the emphasis on integrating every citizen within the political regime, in some ways guaranteed the presence of a social network

and guided the individual toward integration in society regardless of circumstances. Topics such as grief and mourning were excluded from scientific and educational discussions to avoid touching upon 'forbidden themes,' such as God, conscience, or the soul. As a result, during the post-Soviet period of transition a great deal of interest was shown towards different religions, philosophies, pagan traditions, as well as, beliefs based in astrology, parapsychology and esotericism.

Since regaining independence ongoing discussions about psychological and social trauma have been widely represented in the mass media. Although, human sorrow and grief are often disclosed they are not acknowledged in press reports that focus on attributing guilt without any further attempt to find solutions for those who are suffering. As a result individuals still struggle with doubts about the necessity, safety and right to talk openly about their feelings and experiences.

Both, the historical heritage and the influence of the transition period are reflected in social representations. The following beliefs were identified by analyzing mass media, laws and regulations, as well as from personal observations: mourning is self-evident and there is no need to discuss it; mourning is private and requires keeping distance; mourning is sorrow; mourning is irrational; death does not refer to me (us); death is caused by a guilty party.

However, the bereaved also have rights under the Labor law and can receive social benefits. The remembrance of the dead is sanctified and requires honoring the deceased, an attitude reflected in the proverb "speak well, not ill, about the deceased". This social attitude is further reinforced by various collective rituals on remembrance days, such as commemoration festivities, processions to cemeteries and religious services, placing candles and flowers on graves and cultivating plants. Formally respect for the deceased, especially the many lost during the wars and deported to Siberia is reflected in the fact that in Latvia there are now more official public commemoration than celebration holidays.

## Method

The data for this study were collected as part of a multi-measures research project, but only the qualitative data will be reported in this article.

### Sample

Initially, women who had experienced the death of someone close in the last five years were invited to participate in the bereavement study. However, women who had experienced an earlier loss, that they considered significant, were also included. The research sample consisted of 128 participants who live in Latvia, are fluent in Latvian and consider themselves ethnically Latvian.

*The demographic characteristics of the sample obtained from a questionnaire are as follows:*

- Age: 18-25 (26.8%), 26-50 (60.6%), 51-72 (12.6%);
- Level of education: higher education (46.4%), secondary education (53.6%);
- Place of residence: city/town (69.9%), village/rural area (30.1%);
- Employment: employed (80.8%), unemployed (20.2%);

- Financial situation: adequate (45.5%), below subsistence level (54.5%);
- Belief in God: yes (87.9%), no (12.1%);
- Previous experience of psychological support: yes (27.2%), no (72.8).

*Bereavement characteristics of the sample:*

- Relationship to the deceased: first level relative (54%), second level relative (24%), someone close (22%);
- Emotional relationship to the deceased: one of the closest (40.5%), very close (41.3%), close (18.3%);
- Anticipation of the loss: sudden (31.3%), anticipated (68.8%);
- Time since loss: less than one year (29.9%), within one to two years (17.3%), within two to four years (25.2%), more than four years (27.6%);
- Age of the deceased: 9-24 (10.2%), 25-49 (22.7%), 50-64 (26.6%), 65-96 (40.6%);
- Presence at the death: was present (18%) was not present (82%);
- Severity of the loss: severe (6.3%), very severe (30.7%), extremely severe (63%);
- Intensity of guilt: low (59.1%), moderate (32.2%), high (8.8%).
- Intensity of anger: low (47%), moderate (17.4%), high (35.6%).
- Search for the meaning of death: did not search for the meaning (6.5%), could not find an explanation (36.6%), found an explanation (56.9%).

## Measures

*The Bereavement Experience Questionnaire* was developed for this study to collect information about the bereavement, grief and mourning experience of participants. The questionnaire consists of multiple choice and 5-point Lickert scale questions related to the characteristics of loss and grief. Open-ended questions and an invitation to write a narrative about the loss were introduced at the end of the questionnaire to provide the participants with an opportunity to express their individual mourning experiences and representations about bereavement. The questions addressed the mourning representations by bereaved women in Latvia in the following areas: (a) What are the mourning reactions and how do they change over time? (b) What changes occurred with the loss of the deceased? (c) How do women explain the death? (d) What is the philosophy of life of the bereaved women? (e) What helped them to cope with the loss? (f) What created additional problems for coping with the loss?

## Procedure

Data were gathered in 2002-2003 from Latvian speaking women. Three approaches were used to recruit participants: an invitation letter to participate in the study was emailed to several personal and professional list serves; colleagues and acquaintances volunteered to distribute questionnaires to bereaved women in their networks; some participants were also recruited from university classes. Participants were asked to individually complete the questionnaires in a place of their choice without time limit. During data collection participants were reminded that they were free to withdraw from the study at any point.

## Ethics

The study was designed and carried out in accordance with the Scientist's Code of Ethics in Latvia and the Code of Ethics of the Latvian Association of Clinical Psychology.

## Data analysis

Qualitative analysis was based on the hermeneutic approach and content analysis principles (Cropley, 2002).

The hermeneutic approach does not require the analysis of a text to be based on a theory. The aim of the analysis is to derive meaning by analyzing the relationship of the successive parts of the narrative to the text as a whole. The interpreter has to focus both on the overt and covert aspects of the narrative and to take into consideration the broader socio-cultural context. To offset the risk of personal bias, the interpreter respects the principles of: cohesion by avoiding contradictions and inconsistencies; comprehensiveness by reflecting back to the text as a whole; penetration by taking into consideration "hidden" or indirectly expressed ideas; and contextuality by clarifying the cultural context within which the narrative was constructed.

The process of analysis involved breaking the narrative into "content units", that is fragments that contain individual statements that describe the narrator's experience. The meanings of the content units were clarified and the units were grouped into broader analytic categories that referred to basic psychological ideas that linked the individual's experiences to those of other people. These categories were more general and abstract and formed concepts that revealed an underlying psychological structure of the respondent's construction of reality. The concepts were then evaluated in terms of their nature and range of applicability, its limitations or special relationship to existing theories or a new one.

During the analysis individual responses were coded as content units and combined into categories to form the concepts. New categories were added as new units emerged that did not fit into previous categories. All responses were checked to ensure that they fit into the selected categories and that these in turn form consistent wholes that represent meaningful psychological concepts. A final analysis of the entire text focused on the written structure of the text and its emotional tone. The development and the examples of the categories are described in Table 1.

*Table 1. Categories and examples of grief dynamics*

<i>Categories</i>	<i>Examples</i>
Decrease	Grief has decreased. I remember mostly the nice moments. I think less of the funeral. (21 year-old woman, three years after the death of her grandfather)
Remain	...the feeling of grief has not changed. I am still the apathetic and crying being. (32 year-old woman, one-and-a-half years after the death of her mother)
Increase	...in the beginning when I felt relief, I did not cry. Now, I have only to think about ... (30 year-old woman, five years after the death of her grandmother) In the course of time, the feeling of loss increased. (28 year-old woman, two months after the death of her father)
Cyclic changes	...it seemed the grieving had stopped but not for very long. After a short period of time, it came back again. (44 year-old woman, nine months after the death of her father)
Personal growth	In the beginning – loneliness, despair, pain and suffering; in the middle – pulling myself together, a light at the end of the tunnel and believing that it is possible to survive enormous pain; now – independence, taking into consideration my own strength, building my new identity, being a grown-up. However, I still miss her very, very much! (31 year-old woman, seven years after the death of her mother)

## Results and Interpretation

Responses to the open-ended questions and the narratives were analyzed to identify Latvian women's representations of bereavement in relation to their mourning experiences, risks and possibilities. The overview of all categories is presented in Table 2.

Table 2. Overview of bereavement representation categories

Themes	Categories	Sub-categories
Grief	Expressions	Emotional. Physical. Cognitive. Spiritual. Behavioral.
	Dynamics	Decrease. Remain. Increase. Cyclic changes. Personal growth.
	Initiators of change	Intensifiers (anchors). Reducers (coping activities).
Changes created by loss	Intrapersonal change	Psychological reactions and health consequences. Personal characteristics: independence, empathy, maturity. Personal qualities: identity, self-concept, motivation. World-view: attitude, understanding, values.
	Interpersonal change	Relationship with others. Family relationships. Relationship with the deceased.
	External change	Occupation. Lifestyle. Living arrangements. Financial situation. Environment.
	Evaluation of change	Secondary losses. Additional responsibilities. Change in faith. Benefits. Life transitions.
Explanation of reasons of death	Causes of death	Attribution of the fault to the deceased: addiction, stress and overload, not taking care of oneself, difficulties to adapt to new circumstances. Survivor's feelings of guilt: lack of ability, not doing enough. The other's fault: professional negligence, emotional violence. Socio-political circumstances: transition times, social environment. Accident. The order of the universe: destiny, circle of life, God's wish, mysticism.
	Effects of death	The best outcome for deceased: relief in suffering, reconnecting with deceased relatives and friends, completion of life tasks. Opportunity for survivor: source of wisdom for life, atonement.
Philosophy of life	Sources	Christianity. Eastern religions. Folklore. Astrology. Biology. Philosophical reflections.
	Content	The order of the universe. The wisdom of life. Values in life: health, children, intimates, living here and now, self care. The role of a human being in the universe: fatality, trust, self-reliance. Role of loss in life of survivor: change, responsibilities, difficulties, lessons, a sign.
	Awareness	Well-defined and conscious. Vague. Confused.
Coping support	Other people	Informative support. Practical and managerial support. Emotional support. Intellectual support. Social acceptance.
	Personal qualities and processing of loss	Philosophy of life. Focusing on the positive. Focusing on continuation of life. Cognitive processing. Letting go. Age. Experience. Relief of tension: crying, praying, doing something physical. Keeping active: working, taking care of responsibilities, offering help. Maintaining the bond with the deceased: memories, dreams, spiritual legacy, emotional connection, belief in afterlife, inclusion of the deceased in everyday life, contact with common friends, fulfillment of his/her desires, continuation of his/her work, commemoration.
	Circumstances	Socio-cultural circumstances. Circumstances of death. Circumstances of daily life. Nature and weather conditions. Time.
	Remedies	Literature. Medication.
Interferences with coping	Other people	Communication. Attitude. Emotions. Responsibilities. Offensiveness towards the deceased.
	Oneself	Intensity of grief. Self-created burdens. Age. Lack of experience.
	Circumstances	Changes. Uncertainties.
	Deceased related	Reminders. Former relationships. Unfinished business.

Mourning is characterized by different expressions of grief, its dynamics and initiators of change in bereavement reactions. Grief, for bereaved Latvian women, is mainly represented as an emotional experience and reflections about the deceased in the

context of life and death. Emotional experience includes different aspects of feelings and thoughts: grief and yearning, anger and blame, as well as, relief and peace. Along with the emotional reactions there are also physical (pain, weakness, sickness), cognitive (difficulties to concentrate, thoughts and memories about the deceased), spiritual (search for meaning in life, challenging values, revision of beliefs about God), and behavioral (putting funeral photos aside, working hard) bereavement reactions. However, physical reactions to bereavement are mainly associated with health impairments while behavioral reactions are recognized only in relation to coping. Overall, the findings correspond to the bereavement reactions described in modern literature.

Grief dynamics are characterized by decreasing, maintaining, increasing or cyclic bereavement reactions and by personal growth experiences. The dynamics of grief foster qualitative and quantitative changes in bereavement reactions, as well as, a different understanding and approach toward management of individual experiences. “Anchors”, which serve as reminders, trigger or intensify mourning and also help to heal the pain. Coping activities serve to decrease the intensity of bereavement reactions and diminish grief.

The loss of someone close evokes intrapersonal, interpersonal and external changes in the life of the survivor, which are interpreted by the women as secondary losses, additional responsibilities, benefits, changes in faith and life transitions. As such the change might be perceived as an additional stressor and impediment, or a benefit and facilitator; it can be also recognized simply as a life transition.

Making sense of loss includes the analysis of death, both in terms of its causes and effects. Responsibility for the death can be attributed to the deceased, to the survivor herself, to another person, to social and political circumstances, to an accident or to the order of the universe. Death can be seen as the best outcome for the deceased and also as an opportunity for the bereaved.

With the advent of the socio-economical and political transition, the philosophy of life for Latvian women tends to involve different beliefs. The philosophy of life integrates various philosophical, religious, esoteric and scientific thoughts to create a personal representation of the order of the universe. Taking into account the individual responses as a whole, women with a well-defined and conscious philosophy of life seem to be more successful in adjusting to loss than women with less clarity about their philosophy of life.

Perceived sources of support are from other people (informative, practical, emotional, intellectual support and social acceptance), oneself (personal qualities and coping activities), the deceased (mutual guardianship and respect), and circumstances (nature, everyday life experiences and passage of time). In addition, women who demonstrate reliance on their capacities and focus on the positive aspects of their life, as well as, those who are open to accept the situation seem to be better adjusted to the loss.

Bereavement distress can also be activated by other people (the way they communicate, express attitudes and emotions, impose responsibilities or offend the deceased), oneself (strong emotions and self-imposed burdens), the deceased (reminders, former relationships, and unaccomplished things) and circumstances (uncertainties and changes arising from the loss). Women whose narratives emphasize emotional expression rather than a rational way of thinking seem to struggle more with the difficulties in adjusting to the loss of someone close.

## **Discussion**

### **Mourning experiences and bereavement representations**

Bereavement representations of women in Latvia describe their grief, changes related to the death, search for the meaning of death and philosophy of life, as well as, the supportive and interfering factors in coping with bereavement. The bereavement representations include the dynamic changes in bereavement reactions, different coping behaviors, the search for causal relationships, the attribution of responsibility for the death, as well as, different evaluations and attitudes toward death. The death of someone close can trigger intrapersonal, interpersonal and external changes, which require personal, social and practical resources.

The bereavement experiences of Latvian women substantiates findings on secondary losses published in bereavement literature (Cook & Oltjenbruns, 1998) and the resources for recovery, such as a focus on positive outcomes (Schaefer & Moos, 2001), meaning-making (Davis et al., 2002), spiritual change (Balk, 1999) and post-traumatic growth (Calhoun & Tedeschi, 2001).

A very substantial aspect of the mourning experience relates to spirituality – the contemplation of spiritual matters and the search for causal relationships in the context of loss, the survivor's life and understanding the order of the universe. The search for causal relationships includes different orientations in time (past, present, and future) and space (internal world, physical world, and cosmic space). Differences appear in the delegation of responsibilities and attribution of guilt. Guilt is attributed to the deceased (due to addiction, stress and overload, not taking care of oneself, problems in adapting to new circumstances), the survivor (sense of guilt because of the lack of ability to help or not doing enough) and other people (guilty of professional negligence or emotional violence), to circumstances (transition times or social environment) or the order of the universe (destiny, circle of life, God's wish or mysticism). Although feelings of guilt are acknowledged as part of the process of grieving in many cultures, the focus on guilt in Latvia is reinforced by several external sources such as the mass media. Thus the cultural context that emphasizes guilt, and hence evokes the need to avoid condemnation, probably caused some participants to respond according to perceived social expectations.

### **Risks in mourning**

The intensity of grief, especially the intensity of guilt, anger and insecurity appear to create difficulties in adjusting to the loss of someone close. These findings have particular significance in the Latvian cultural context where blame and attribution of guilt prevails and can stand in the way of successful bereavement resolution.

Among self-created problems are the inability to allow oneself to grieve, to accept the inevitable and a tendency to feel sorry for oneself. The study shows that women who described their experience in an emotional way have greater difficulty in adjusting to the loss and managing bereavement reactions. On the other hand, women who demonstrated a more rational approach seem to struggle less with the difficulties and cope more successfully. However, studies by Calhoun and Tedeschi (2001) propose that people, who exhibit the most intense emotions and adaptation difficulties during some stages of the coping process, may be the ones who subsequently show personal growth. Thus,



different approaches can lead to different outcomes. This was observed, for example, in the women's subjective interpretations about the effect of their participation in the study. For some participation reactivated the sense of loss and intensified the bereavement reactions. Others considered it an opportunity to review and re-evaluate the experience.

Personal factors such as youth and limited life experience, as well as lack of control over external factors related to changes in circumstances and uncertainty, are also perceived risk factors. Bereaved women who focus on the closeness of their relationship to the deceased perceive their preoccupation as an impediment to coping with loss. Similar observations have been reported by other researchers, for example, conflicts and complicated prior relationships prevent successful adjustment to life without the deceased. Yet, it is possible that participants in this study did not talk much about the stressful aspects of their former relationship to conform with social expectations to speak well of the deceased or say nothing. More likely, women who had not resolved their previous conflicts with the deceased refused to take part in the study. This was confirmed by the comments of one of the women who dropped out of the study.

### **Resources in coping with loss**

Results of the content analysis reveal that a conscious and purposeful approach to managing the bereavement experience plays a key role in coping and re-establishing the quality of one's life. The bereaved stress the empowering role of self-reflection and self-help activities, as well as, social support, passage of time and changes in the external environment or circumstances.

According to the present study, bereaved women in Latvia value different types of support including informative, practical, managerial, emotional, spiritual, and intellectual, as well as, social acceptance.

Respondents mention five major sources of support that facilitate readjusting to life: other people; one's attitudes and personal resources; one's connection to the deceased; and various external factors. The category "other people" includes references to helpful others, to the ways in which help is offered and how it is interpreted. Among those who offer support, women talk about very special people (husband, brother, sister, friend), the family network as a whole, specific groups of people (friends, relatives, colleagues, people in their vicinity), as well as specialists (medical personnel, psychologists, psychotherapists, priests). It was not always clear how these various people were being helpful. One could surmise that people were perceived as helpful when they could demonstrate their understanding and respond to the needs of the bereaved at the right moment. Support might be conveyed through one's attitude or behavior; it could be expressed through sharing silence, listening, talking with the bereaved or offering advice. Women had different expectations from people that they were close to (help and support) than from those more distant (understanding and acceptance). It became evident that not only was receiving support important, but also the opportunity to offer help to others.

There were real differences between the women in terms of their need for distance in social contacts and conversations about the loss. Contrary to the assumptions in the support literature, some women consider keeping a distance and masking their grief as helpful: "it helped that I felt strong, it made it easier not to disclose my feelings in front

of others. It helped too that I avoided talking about the loss.” (46 year-old woman, two years after the death of her brother). The following comment refers to the limited impact of social support in adjusting to the loss: “People’s friendship and ability to convey their understanding non-verbally were helpful in getting back to work after two months of sitting at home in a depressed state, but it did not free me from the deep sense of loss that keeps gnawing at me and bringing tears to my eyes.” (41 year-old woman, four years after the death of her father, and six years after the death of her mother). These observations are consistent with Stroebe’s conclusion that others can provide support and prevent social isolation but that they cannot replace the deceased and fill the emotional void (Stroebe, Stroebe, Abakoumkin & Schut, 1996).

The qualitative analysis identifies different activities and approaches to facilitate changes in bereavement reactions. These are related to internal cognitive processing (thoughts, analysis, looking for positive aspects, acceptance, revision or re-interpretation, and search for answers to spiritual questions), relief of tension (crying, praying, doing something physical) and investment of one’s energy (taking care of others, being active, and working hard). Staying active, taking care of responsibilities and helping others according to the Dual Process Model theorists (Stroebe & Schut, 1999) allows the bereaved to distance oneself from grief and achieve balance in focusing on loss and recovery. In addition, active involvement also affirms one’s sense of self-worth and social usefulness (Vasiluk, 1984). Moreover, physical activity can also help to release emotional distress initiated by delving into existential questions.

The use of distancing as a coping mechanism in mourning is a controversial issue in Western literature. Some writers (Parkes, 1998; Worden, 1991) view confronting the pain as essential for arriving at a resolution in the mourning process, but this view is not always supported by research findings (Wortman & Silver, 2001). Although a number of women in this study viewed distancing as helpful, possibly as a confirmation of the strength they needed to mobilize themselves to overcome their loss, these observations require further investigation.

Other factors, such as having an opportunity to say goodbye to the deceased in reality, at the emotional level, or at least in their dreams, plays an important role in letting go. Similarly young age and previous experience with bereavement were also mentioned as assets in coping.

The qualitative analysis clearly indicates signs of personal growth represented by changes in personal identity, self-concept, motivation, appreciation for life, worldview and values, as well as self-reliance, maturity and empathy.

A significant element in coping with bereavement is one’s philosophy of life, its clarity and level of awareness. The analysis of the philosophy of life of bereaved women indicates that spiritual resources, which include reliance on God or the order of the universe; acceptance when facing out-of-control situations; and a positive outlook on life, can facilitate the coping process. Women possessing a clear and meaningful philosophy of life demonstrated less difficulty in adjusting to loss, in comparison to those having a diffuse philosophy of life. Furthermore, a strong philosophy of life was helpful in making sense of death; thus, arrive at a better resolution of the grieving process. Similar conclusions have been reported in other recent studies (Holland et al. 2006).

The women in this study mentioned a wide variety of other factors that assisted them in coping, such as the sociopolitical changes, specific events and life circumstances, and their relationship to nature. It is possible in fact, that it is the mourners' attitude, the ability to look for sources of support in various life situations and to interpret events as guides to make sense of their experiences that ultimately helps them succeed.

Some women also referred to the use of medicinal remedies, while another researcher in Latvia (Lūse, 2003) stated that among the people who shared their crisis experience with her, she did not find a single one who affirmed that antidepressants helped to overcome their depression, although it may have helped to somewhat stabilize their condition at the time. However, some women in the present study, as well as in a previous investigation (Maslovska, 2004) found relief from their suffering by using tranquilizers.

Qualitative analysis of the responses reveals generational differences in coping strategies and resources. Older women find hope in the political processes and developments in the newly independent Latvia. They also seek solace by emotionally investing in their children. Younger women seek relief by speaking with others or distract themselves by engaging in entertainment, whereas, middle-aged women tend to rely on themselves. These generational differences in coping can be related to the previous experiences under different political ideologies before, during and after the period of Soviet occupation of Latvia.

Overall, the various coping strategies, including receiving support at a spiritual, emotional, informative or practical level, can serve to calm or activate the bereaved women.

The identified coping behaviors and strategies concur with the coping strategies utilized in stress and crisis situations (Lazarus & Folkman, 1984; Moos & Schaefer, 1986). In terms of coping with bereavement, the specific aspect is the integration of death into life, which is supported by maintaining a bond with the deceased, commemoration and being open to guardianship by the deceased. This is also considered helpful by the women in this study. Maintaining a bond with the deceased is integrated into the lives of bereaved Latvian women in memory, dreams, paying respect to their spiritual legacy, contact with the deceased, belief in life after death, involving the deceased in daily life, staying in touch with common friends, fulfillment of the wishes of the deceased, continuation of his/her works and commemoration. Such an approach reflects the cultural traditions and world view about life and afterlife, and the different options of reunion with the deceased, as described in Latvian folklore. The belief in the link between life and after-life, rooted in ancestral customs, also remains important at the present time. "The intimate and significant closeness with the souls of the deceased" (Mūks, 1999, pp.23) provides the opportunity for mutual guardianship: the survivor can help the deceased through certain activities such as praying, lighting candles, respecting funeral rituals, etc; and the deceased can help the survivor by warning about problems and giving advice (mainly in dreams), in addition to playing the role of guardian angel and saving the survivor when faced with difficulty. Women in this study confirmed the role of dreams in the linkage of life and afterlife – "dreams are the bridge or common space where the living (in their sleep) and their deceased relatives meet" (Kursīte, 1999, pp.283).

Maintaining a bond with the deceased is a common theme in describing mourning experiences and an important part of coping with loss. It appears to be successfully integrated into the lives of bereaved Latvian women. The concept of guardianship was not only significant in ancestral times but is also important to Latvian women in modern understanding of death and mourning.

The loss can be perceived as a reason for introspection and change; and death becomes a bridge between the past and the future. Space for personal change is liberated, illustrating that growth and development ought to be as important as attachment in the course of mourning. Mourning is not just a category of disease and rehabilitation; it needs to be explored in the context of 'wisdom of life' by analyzing the meaning of bereavement in terms of its interrelationships, the role of death and mourning in the life of the bereaved and in understanding life in its entirety.

### **General conclusions**

Bereavement representations by women in Latvia include emotional, physical, cognitive, spiritual and behavioral categories. The intrapersonal, interpersonal and external changes elicited by the death of someone close tend to be interpreted as secondary losses, additional responsibilities, benefits, change in faith or life transitions. Mourning is accompanied by the search for causal relationships and has different orientations in time perspective (past, present, future) in space (internal world, physical world, and cosmic space), attribution of responsibility for the death and the necessity to maintain a bond with the deceased and keep remembrance alive.

Risk factors in mourning include difficult relationships with others, self-created burdens and strong emotions, especially related to anger, guilt and insecurity; unresolved issues with the deceased, as well as surrounding changes and uncertainties.

Latvian women report that the following resources help to cope with bereavement: social support; philosophy of life; focus on positive outcomes and continuation of life; cognitive processing and reorganizing of one's experience; relieving tension; keeping active; and constructively investing one's energy. Guardianship by the deceased, passage of time and changes in the surrounding environment are also reported as helpful. Different coping activities and received social support facilitate calming and self-activation; they provide emotional, informative and instrumental support, ensure social interaction, sustain social usefulness, increase understanding, stimulate thinking about the importance of spiritual matters and facilitate the integration of loss into one's life.

### **Further research**

Future bereavement studies should investigate short and long-term effectiveness of different coping behaviors. Further research is needed to clarify how the bereaved internalize or externalize responsibility for the death; how they manage their emotional engagement; what they are focusing on; and where their energy is invested, for example, in the role of forgiveness versus the attribution of guilt. Future research also should study bereavement and coping reactions of men, as well as different subgroups in demographic and bereavement related characteristics.

## **Practical implications and recommendations**

The identification of risks and possibilities in mourning and coping with bereavement provide valuable information for grief consultants and for the development of psychological support services. Since guilt and anger reaction in particular are embedded in Latvian cultural attitudes, skills and strategies need to be developed to constructively respond to situations provoking such reactions. As well, it is important to respect the different strategies that the bereaved use to help themselves: internal cognitive processing in managing and understanding their experience; investing energy in different activities; meaning-making; strengthening their philosophy of life; learning to rely on God, destiny or the order of universe; learning to accept situations out of their control; focusing on positive outcomes and living in the moment; trying to enjoy the momentum of life; trusting and believing in themselves; and learning to live with uncertainty. In addition, the dynamics of the relationship with the deceased are important: saying goodbye and letting go of the deceased's physical presence; sustaining a spiritual bond; and accepting her/his guardianship. It is necessary to recognize the fact that different generations may have different preferences and approaches in coping with bereavement.

To increase societal awareness and to develop a common understanding about bereavement, the role of different aspects of bereavement and coping with loss need to be explained. This may increase acceptance of the bereavement experience and suggest different possibilities for coping with loss and obtaining support, as well as providing necessary guidance to people who have doubts about how to best support the bereaved and worry about what is abnormal. It is also important to challenge existing social representations and myths (e.g. mourning is only sorrow) and to educate society about the less known aspects of bereavement. A particular issue that needs to be addressed relates to the Latvian focus on the attribution of guilt by helping people to develop more constructive strategies to deal with challenging situations.

Since Latvians tend to view physical bereavement reactions as medical issues in need of medical treatment, it is crucial to broaden societal awareness of bereavement as an emotional, cognitive and spiritual experience with physical and behavioral reactions. This attitude tends to limit the search for psychological support when in fact emotional and physical reactions are closely interconnected. Consequently, educating society about bereavement and mourning could help the bereaved to seek and accept psychological support when experiencing physical symptoms. Hence in many cases reliance solely on medication could be replaced by more constructive alternative approaches, for example, physical and emotional release of tension, talking about the experience and related fears and reconsidering the meaning of the experience, and seeking psychological help.

Overall it is essential to understand bereavement as part of life experience, which can contribute to the development of wisdom.

## **References**

- Balk, D. E. (1999). Bereavement and spiritual change. *Death Studies*, 23(6), 485–494.
- Calhoun, L. G., & Tedeschi, R. G. (2001). Posttraumatic growth: The positive lessons of loss. In R. A. Neimeyer (Ed.), *Meaning reconstruction and the experience of loss* (pp. 157–172). Washington, DC: American Psychological Association.

- Cook, A. S., & Oltjenbruns, K. A. (1998). The bereaved family. In A. S. Cook, K. A. Oltjenbruns (Eds.), *Dying and grieving: Life span and family perspectives* (pp. 91–115). Fort Worth, TX: Harcourt Brace.
- Cropley, A. (2002). *Qualitative research methods. An introduction for students of psychology and education*. Riga: Zinatne.
- Davis, C. G., Wortman, C. B., Lehman, D. R., & Silver, R. C. (2002). Searching for meaning in loss: Are clinical assumption correct? *Death Studies*, 24(6), 497–541.
- Freud, S. (1917). Mourning and melancholia. *The standard edition of the complete works of Sigmund Freud*, 14. London: Hogarth Press.
- Holland, J. M., Currier, J. M., & Neimeyer, R. A. (2006). Meaning reconstruction in the first two years of bereavement: the role of sense-making and benefit-finding. *Omega: The Journal of Death and Dying*, 53(3), 175–191.
- Klaas, D., Silverman, P. R., & Nickman, S. L. (Eds.), (1996). *Continuing bonds: New understandings of grief*. Washington, DC: Taylor & Francis.
- Kursīte, J. (1999). *Mītiskais folklorā, literatūrā, mākslā*. Rīga: Zinatne. [Kursite, J. (1999). *The mythical in folklore, literature and art*. Riga: Zinatne.]
- Lalande, K. M., & Bonanno, G. A. (2006). Culture and continuing bonds: A prospective comparison of bereavement in the United States and the People's Republic of China. *Death Studies*, 30(4), 303–324.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lūse, A. (2003). Patības balss un cēloņsakarību atbalss stāstos par krīzes pieredzi. *Konferences "Dzīvesstāsti – vēsturē, kultūrā, sabiedrībā. Mutvārdu vēstures loma personīgās un kultūras identitātes vērtējumā" materiāli*. Rīga: LU. [Luse, A. (2003). The voice of self and the echo of the causal relationships in the narratives of crisis experiences. *Conference proceedings of the University of Latvia*. Riga: LU.]
- Maslovksa, K. (2001). Understanding and assisting the bereaved: Responses of Latvian teachers. *In Proceedings of the 24-th International School Psychology Colloquium, July 25–29, 2001, Dinan, France*, <http://www.afps.info/vieinternationale.htm>
- Maslovksa, K. (2004). Sērošanas pieredze Latvijas sieviešu priekšstatos: tuva cilvēka nāves izpratne un zaudējuma integrācija dzīvē. *Latvijas Universitātes Raksti. Psiholoģija*, 682, 63–82.lpp. [Maslovksa K. (2004). Bereavement experiences in Latvian women's representations of the death of a close person and integration of the loss. *Scientific Papers. University of Latvia*, 682, pp. 63–82]
- Middleton, W., Moylan, A., Raphael, B., Burnett, P., & Martinek, N. (1993). An international perspective on bereavement related concepts. *Australian and New Zealand Journal of Psychiatry* 27(3), 457–463.
- Moos, R. H., & Schaefer, J. A. (1986). Life transitions and crises: A conceptual overview. In R. H. Moos (Ed.), *Coping with life crises: An integral approach*. New York: Plenum Press, pp. 3–28.
- Murphy, S. A., Johnson, L. C., Wu, L., Fan, J. J., & Lohan, J. (2003). Bereaved parents' outcomes 4 to 60 months after their children's deaths by accident, suicide, or homicide: a comparative study demonstrating differences. *Death Studies*, 27(1), 39–61.
- Mūks, R. (1999). *Latvju velis Junga un arhetipiskā psiholoģijas skatījumā*. Rīga: Valters un Rapa. [Muks, R. (1999). *Latvian 'velis' (soul of the deceased) in the view of Jung's and archetypical psychology*. Riga: Valters un Rapa.]

- Neimeyer, R. A., Baldwin, S. A., & Gillies, J. (2006). Continuing bonds and reconstructing meaning: Mitigating complications in bereavement, *Death Studies*, 30(8), 715–738.
- Neimeyer, R. A., & Hogan, N. S. (2001). Quantitative or qualitative? Measurement issues in the study of grief. In M. S. Stroebe, R. O. Hansson, W. Stroebe, H. Schut (Eds.), *Handbook of bereavement research. Consequences, coping, and care* (pp. 89–118), Washington, DC: American Psychological Association.
- Parkes, C. M. (1998). *Bereavement: Studies of grief in adult life*. London: Penguin Books.
- Prigerson, H. G., & Jacobs, S. C. (2001). Traumatic grief as a distinct disorder: A rationale, consensus criteria, and a preliminary empirical test. In M. S. Stroebe, R. O. Hansson, W. Stroebe, H. Schut (Eds.), *Handbook of bereavement research. Consequences, coping, and care* (pp. 647–670). Washington, DC: American Psychological Association.
- Rubin, S. S. (1999). The Two-Track Model of Bereavement: Overview, retrospect, and prospect. *Death Studies*, 23, 681–714.
- Schaefer, J. A., & Moos, R. H. (2001). Bereavement experiences and personal growth. In M. S. Stroebe, R. O. Hansson, W. Stroebe, H. Schut (Eds.), *Handbook of bereavement research. Consequences, coping, and care* (pp. 145–167). Washington, DC: American Psychological Association.
- Seligman, M., & Csikszentmihalyi, M. (2000). Positive psychology: An Introduction. *American Psychologist*, 55, 5–14.
- Šimane, M., Kalniņa, A., Meņšikovs, V., Sebre, S., Bite, I., et al. (2003). *Latvija. Pārskats par tautas attīstību 2002/2003. Cilvēkdrošība*. Rīga: UNDP Latvija. [Simane, et al. (2003). *Latvia. Human development report 2002/2003. Human security*. Riga: UNDP Latvia.]
- Stroebe, M., & Schut, H. (1999). The dual process model of coping with bereavement: rationale and description. *Death Studies*, 23, 197–225.
- Stroebe, M. S., & Schut, H. (2001a). Models of coping with bereavement: a review. In M. S. Stroebe, R. O. Hansson, W. Stroebe, H. Schut (Eds.), *Handbook of bereavement research. Consequences, coping, and care* (pp. 375–403). Washington, DC: American Psychological Association.
- Stroebe, W., & Schut, H. (2001b). Risk factors in bereavement outcome: a methodological and empirical review. In M. S. Stroebe, R. O. Hansson, W. Stroebe, H. Schut (Eds.), *Handbook of bereavement research. Consequences, coping, and care* (pp. 145–167). Washington, DC: American Psychological Association.
- Stroebe, W., Stroebe, M., Abakoumkin, G., & Schut, H. (1996). The role of loneliness and social support in adjustment to loss: A test of attachment versus stress theory. *Journal of Personality and Social Psychology*, 70(6), 1241–1249.
- Walter, T. (1996). A new model of grief: Bereavement and biography. *Mortality*, 1, 7–25.
- Worden, J. W. (1991). *Grief counseling and grief therapy: A handbook for the mental health practitioner*. New York: Springer Publishing Company.
- Wortman, C. B., & Silver, R. C. (2001). The myths of coping with loss revisited. In M. S. Stroebe, R. O. Hansson, W. Stroebe, H. Schut (Eds.), *Handbook of bereavement research. Consequences, coping, and care* (pp. 405–429). Washington: American Psychological Association.
- Васильюк, Ф. (1984). *Психология переживаний. Анализ преодоления критических ситуаций*. Москва: Московский Университет. [Vasiluk, F. (1984). *Psychology of experiences. Analysis of coping with critical situations*. Moscow: University of Moscow.]

# Children's Narrative Attachment Representations in Relation to Experience of Abuse

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The aim of this study was to identify if there are any discernible differences in children's attachment-related narrative themes that are associated with the experience of emotional and/or physical abuse in the family. Participating in the study were 76 fifth grade children living in Latvia. The Childhood Trauma Questionnaire was used as a measure of self-reported experience of abuse. The Rochester Parenting Stories story stem method was used to assess the children's narrative attachment representations. The results of the narrative analysis show that children who reported experience of abuse also included more negative themes in their narrations, and children without experience of abuse included more positive themes in their narrations. This study provides a new coding schema for the evaluation of the Rochester Parenting Stories narratives, which can be used in both scientific research and clinical work with children.<sup>1</sup>

**Keywords:** attachment stories, attachment representations, experience of abuse.

## Introduction

During the past decade there has been increasing attention paid to the theoretical significance of children's narrative attachment representations, which develop in response to the parent-child relationship and which subsequently serve to influence the child's cognitions and interpretations of the social world, thereby also affecting behavioural reactions. During the past decade there has also been a rapid development of various narratively-based methods by which to assess narrative attachment representations, the most widely used of which is the story stem method. This study is the first study in Latvia to use the Rochester Parenting Stories story stem method and to develop a new coding schema which provides opportunity to examine differences in the narrative content of stories from children who have suffered experience of abuse and those who have not

*Attachment relationships.* John Bowlby (1988) considered the propensity to form close emotional relationships to be an essential aspect of human nature. The formation of the attachment pattern is influenced by relationships formed between child and his/her primary caregiver, usually mother during the first years of life. Secure attachment is promoted by comforting, suggestive and cooperative relationships, initially with primary caregiver (Posada, Kaloustian, Richmond, & Moreno, 2007). Typically, the nature of parent to child relationships remains relatively stable; therefore, most often attachment styles or patterns gradually strengthen with time. During the rest of his/her life, the individual forms his/her relationships completely or partially according to the initial attachment pattern (Bowlby, 1988). Formation of the secure attachment pattern can be



prevented or disrupted by disturbances of the primary relationship, violent behaviour towards the child, and/or the impact of environmental factors on existing child-to-parent relationships. This can result in unfavourable changes affecting the child's personality and emotional sphere (Bowlby, 1969; Waters & Cummings, 2000). Generally, secure attachment developed during childhood is associated with social competency, autonomy, positive self-esteem, appropriate interpersonal relationships, cognitive development and psychological well-being during adolescence and further in life (Allen, Hauser, & Borman-Spurrell, 1996; Allen et al., 2007).

According to attachment theory (Bowlby, 1969, 1973, 1980), the experience of the early child-mother relationship results in the development of "mental representations" of this experience. These representations are generalizations of the child's early experience of the self and the other in interaction, formed by repeated daily experience with the attachment figure. They are referred to as "internal working models" by Bowlby, who conceptualized these models as forming the basis of personality. These mental representations provide the structure for self-perception and social cognitions in interaction with other persons (Hill et al., 2007). Internal working models are confirmed within the environment; therefore they strengthen and become more consistent as the child grows older. Child behaviours are guided by these mental representations, because they form the basis of an individual's expectations of relationship formation in compliance with the conditions set by the internal working model. The outcome of any single interaction can strengthen the existent internal working model, and thereby enhance the likelihood that similar behaviours will continue (Belsky & Cassidy, 1994).

*Child abuse.* A parent's violent behaviour towards the child influences not only the immediate parent-child relationship, but also affects the relationship in the long term, having serious impact upon the child's basic sense of security and attachment. Physical abuse or physical punishment decreases the child's confidence in the parent and diminishes the possibilities for secure attachment (Posada & Pratt, 2008). Victims of physical abuse display much higher levels of behavioural and emotional disturbance. They evidence significantly higher rates of internalized and externalized behaviour problems (Shonk & Cicchetti, 2001; Stirling, Amaya-Jackson, & Amaya-Jackson, 2008), discipline violations in school (Kendall-Tackett & Eckenrode, 1996), and signs of depression and anxiety (Harkness, Lumley, & Truss, 2008; Webb et al., 2007). Furthermore they are more violent against their peers or show higher level of social isolation (Prino & Peyrot, 1994; Reading, 2008; Shields, Ryan, & Cicchetti, 2001), and have poorer social skills (Levendosky, Okun, & Parker, 1995). They are rejected by their peers or become victims of peer-to-peer aggression much more frequently, and it is harder for them to control or regulate their emotions (Shields, Ryan, & Cicchetti, 2001). Previous child abuse research in Latvia has shown that children who have suffered from emotional and physical abuse report higher rates of depression, anger, anxiety, dissociation and somatic problems (Sebre, et al., 2004; Sebre, Lebedeva, & Trapenciere, 2004).

*Children's attachment narratives.* One of the methods to study attachment relationships of children and adolescents is to analyze children's attachment narratives or stories (Holmberg, Robinson, Corbitt-Prise, & Wiener, 2007; Robinson, 2007). There are several narrative assessment methods which involve analysis of attachment based stories as told

by the child. These include the MacArthur Story Stem Battery (Bretherton, Ridgeway, & Cassidy, 1990), Manchester Child Attachment Story Task (Green, Stanley, Smith, & Goldwyn, 2000), the Doll Play Interview (Murray, Woolgar, Briers, & Hipwell, 1999) and Rochester Parenting Stories (Shields, Ryan, & Cicchetti, 2001). All of these techniques employ a common basic principle of story stem completion, whereby the stories begin with emotionally complex, equivocal situation to provoke an impulsive response from the child revealing his/her mental representations of attachment relationships. There are various approaches to the analysis of the child's narrative, but it typically involves an evaluation of the empathic, prosocial and antisocial representations within the response. The narrative is typically analyzed in regard to internal coherence, structure, disorganization, and avoidance. Sometimes the analysis of the narrative focuses on specific content themes or particular details displayed within the narrative (Robinson, 2007).

The story stem completion method is considered a reliable and valid technique by which to assess the child's thoughts and feelings regarding important relationships (Robinson, 2007). The story stem approach has made significant contribution to the study of attachment (Bretherton, Ridgeway, & Cassidy, 1990; Green, Stanley, Smith, & Goldwyn, 2000; Oppenheim & Waters, 1995; Steele et al., 2003; Verschueren, Marcoen, & Schoefs, 1996), early internalizations (Buchsbaum & Emde, 1990; Emde, 1994; Oppenheim, Emde, Hasson, & Warren, 1997), and processes associated with child behaviour and emotion regulation in the family (Grych, Wachsmuth-Schlaefler, & Klockow, 2002; Oppenheim, Emde, & Warren, 1997; Zahn-Waxler, et. al., 1994).

Children's responses to story stems have been associated with emotional or behavioural difficulties and psychopathologic symptoms (Greenberg, DeKlyen, Speltz, & Endriga, 1997; Macfie, Cicchetti, & Toth, 2001; Warren, Oppenheim, & Emde, 1996; Warren, Emde, & Sroufe, 2000; Toth, Cicchetti, Macfie, Rogosch, & Maughan, 2000). Children's attachment stories have been used to study how behaviour problems are associated with atypical family experiences, disorganized attachment patterns, interpretations of others' intentions (Green, Stanley, & Peters, 2007; Hill, Fonagy, Lancaster, & Broyden, 2007), depression and mood disorders (Belden, Sullivan, & Luby, 2007; Beresford, Robinson, Holmberg, & Ross, 2007). It has been shown that attachment narratives differ in relation to experience of abuse or maltreatment (Page & Bretherton, 2001; Toth, Cicchetti, Macfie, & Emde, 1997), and violence between parents (Schechter et al., 2007). The results of these studies show that internalized representations of feelings of security within a secure attachment relationship are critical aspects of positive emotional and behavioural responses.

Information obtained from attachment narratives can be used for both psychological research and intervention/treatment planning (Hodges, Steele, Hillman, & Henderson, 2003; Olds et al., 2004; Robinson, Herot, Haynes, & Mantz-Simmons, 1999; Toth, Maughan, Manly, Spagnola & Cicchetti, 2002). Both child psychologists, child psychiatrists are engaged in an ongoing discussion about the role of narrative analysis in working with an individual child (Robinson, 2007).

An important aspect of the narrative analysis is the consideration of possible defensive mechanisms. Children with insecure attachment tend either to control and regulate their emotions excessively, suppressing or denying them, or to regulate them

insufficiently, so their emotions become excessively intense, overwhelming and inappropriate. Children with insecure attachment more often construct narratives depicting idealized parent-child relationships (Clyman, 2003). This phenomenon has been conceptualized in relation to defense mechanisms, particularly denial, which most often manifests itself as avoidance of narration, or the construction of poor and limited stories (Bowlby, 1988; Burge, et al., 1997; Dozier & Kobak, 1992; Dozier & Lee, 1995; Main, Kaplan, & Cassidy, 1985; Pianta, et al., 1996; Sroufe, 2003). Denial can be related to the child's desire to avoid distress aroused by conflict within the story stem, and is markedly expressed in children with disorganized attachment (Macfie, Cicchetti, & Toth, 2001), as well as in children from families where there is violence between the adults (Schechter et al., 2007), and in children with mood disorders (Beresford et al., 2007).

Researchers emphasize the necessity to continue investigation of children's attachment stories to promote their use in psychological assessment of the individual child, to expand the study of narrative content in order to identify the typical and atypical story stem responses, to improve scoring systems so as to reflect both narrative content and performance, to conduct studies employing story stem narratives approach with diverse groups of children, taking cultural diversity into account (Robinson, 2007).

Several researchers have noted that use of currently existing methods of story stem narrative analysis can result in loss of unique details in the child's response. Therefore, it proposed that narrative scoring systems be developed that could identify all of the details in the narrative performance and content as precisely as possible, and that the principles of assessment and analysis should be adapted to the particular cultural environment (Green, Stanley, & Peters, 2007; Robinson, 2007).

In view of the abovementioned considerations, this study was designed in order to develop a new narrative scoring system for the Rochester Parenting Stories, emphasizing particular details of narratives developed by children in Latvia. The following research questions were proposed: Are there differences in the specific behavioural categories mentioned within the attachment narratives of children in Latvia with self-reported experience of emotional and/or physical abuse in the family as opposed to children do not report abuse? Are there differences in the themes mentioned within the attachment narratives of children in Latvia with self-reported experience of emotional and/or physical abuse in the family as opposed to children do not report abuse?

## Methods

### Participants

Participants were 76 fifth grade children (49% girls and 51% boys), age ranging from 11-13 years (mean age 11.25 years, SD 0.69), attending general educational public schools in Riga and several district centers in other regions of Latvia. 32% of participants were living with their mother and father, but 68 % of participants were living with their mother only, but mostly had regular contact with their biological father. The educational status of the mothers was as follows: 48% with university degrees, 35% with high school diplomas and 16% with vocational education diplomas.

## Measures

*Child abuse.* Data concerning child's abuse experience in family were obtained using the Childhood Trauma Questionnaire (Bernstein et al., 1994). This questionnaire is 37-item inventory developed to screen different aspects of the child-parent relationship: supporting relationships, manifestations of emotional, physical, and sexual abuse (in family or outside family). The examinee responds to each question on a 5-point Likert scale (ranging from 1 = 'Never True' to 5 = 'Very Often True'). This study used the items related to emotional abuse (eight items, e.g. 'taunted or humiliated') and physical abuse (10 items, e.g. 'hit', 'beat'). The children were divided into two groups, "Abused" and "Nonabused" according to their reported experience of emotional or physical abuse. The classification was made according to principles developed in collaboration with child abuse research experts from the United States, and used in previous studies performed in Latvia (Sebre et al, 2004). If the child rated emotional abuse items as 'often true' or 'very often true', or particular statements related to more severe aspects of abuse as 'sometimes true', we considered child as self-reported victim of emotional abuse and was classified as "Abused". If child rated physical abuse items as 'sometimes true', 'often true' or 'very often true', or particular statements related to more severe aspects of physical abuse as 'rarely true', we considered child as self-reported victim of physical abuse and classified him or her as "Abused".

*Classification of "Abused" vs. "Nonabused".* According to the principles mentioned above, based upon the self-reported evaluations of the Childhood Trauma Questionnaire, the participants of the study were divided into two groups, "Abused" and "Nonabused". The first group was formed by children who did not report history of abuse ( $n = 51$ , 26 boys and 25 girls). Children who reported emotional abuse and/or physical abuse in the family were included in the second group ( $n = 25$ , 13 boys and 12 girls). Of the abused children, 10 reported only emotional abuse and 15 reported physical abuse, with or without emotional abuse. The groups did not differ in relation to the family situation, regarding whether or not the father was living with the family.

*Children's attachment story stems.* The Rochester Parenting Stories (Shields, Ryan, & Cicchetti, 2001) were used in this study in order to elicit narratives of parent-child interaction. These narratives were originally developed in order to elicit attachment-related narratives from school-aged children, in contrast to earlier developed story stems designed for younger children. The Rochester Parenting Stories set includes eight story stems – five provide opportunity to examine narrative representations of the child-mother relationship, and three story stems allow analysis of the child-father relationship. The story stems address emotionally intense issues focused on the parent-child relationships, depicting an equivocal situation, which can result in empathy and care from the parent or can result in conflict. For example: "One day, when the child was helping to wash the dishes, two plates fell to the floor and broke. When the child tried to pick up chippings, the child's hand was cut, and it started to bleed. The child's mother heard the noise and quickly went to the kitchen. What happened next?" Some of the other story stems provide opportunities for the child to discuss issues of discipline and autonomy. In this study the Rochester Parenting Stories were used in Latvia for the first time.

In the present study seven story stems were used – four of them intended to study the child-mother relationship, and three stems regarding the child-father relationship. All of the story stems were translated to Latvian and back-translated to English. An initial pilot study was performed, and as a result it was decided to reject one of the story stems because it was not suitable for use in Latvia, since it concerned parent-child discussions about financial matters, which would be very rare for families in Latvia.

*Narrative analysis.* To perform qualitative analysis of the children's narratives a content analysis approach was used. Analysis of the narratives included three initial stages: identification of meaning units within each story; categorization of the meaning units into categories of behavioural actions; and the grouping of behaviour categories into themes. During the first stage each narrative was reread several times in order to identify meaning units. For example, within the child's narrative response to the story stem involving the mother's wish for the child to clean his room (story stem entitled "Room Cleaning"), the following meaning units were identified: (1) "Mom asked: 'Why did you act this way?';" (2) "Mom set up house arrest for the child, and forbade him to visit his friends for some time". The same approach was used to identify the meaning units in each of the 532 story stem completion narratives (7 story stem completions each by 76 research participants).

In the second stage of the narrative analysis the meaning units that had been identified in the narratives were grouped according to categories of behavioural action. Across the 532 story stem completion narratives, 93 different behaviour categories were identified, 12-16 behaviour categories for each story stem. For example, it was possible to identify 12 behaviour categories for the first story stem "Babysitting". Five categories were related to the child (e.g. "Child does not tell mother his/her objections"), five categories were regarding the conduct of the mother (e.g. "Mother again tells child to look after the baby"), and two categories included narrations which included neither child nor parent. In the third stage of the narrative analysis the behaviour categories were grouped according to themes. For example, the behaviour category "Child does not tell mother his/her objections" was grouped within the theme "Child does not communicate his/her needs".

The stories were coded by two researchers, who were blind to additional information regarding abuse status or trauma symptoms of the child. Both researchers independently coded 25 of the stories. Inter-rater agreement between the two coders was found to be 93.4% (Kappa 0.77).

*Data analysis.* The data was analyzed using the SPSS 15.0 for Windows statistical program. Initial analysis of the narrative texts involved rating each of the respondents' seven story stem completion narratives according to the 93 identified behaviour categories with a dichotomous rating of "0" or "1" ("1" if the narrative included a statement belonging to the category; "0" if the narrative did not include such a statement). Identification was made of all categories for which either the "Abused" or "Nonabused" group narratives include percentage wise at least one and a half times greater frequency of occurrence. Then the frequency of ratings from each category was submitted to statistical Pearson chi-square comparison according to the dichotomous grouping "Abused" vs. "Nonabused". The chi-square calculation was used to identify those behaviour categories

which are more frequently mentioned in the narratives of either the “Abused” or “Non-abused” group. The identified categories were then grouped according to themes. At the last stage of the analysis the Mann-Whitney U criterion was used in order to examine if there is difference in the mean frequencies (according to rank order) of the themes included in the narratives of the “Abused” and “Nonabused” group.

## Procedure

Children and their parents were informed in advance about the nature of the study and the principles of voluntary participation and confidentiality, and during the course of the study the participating children were assured that strict anonymity would be maintained regarding their responses. Children were allowed to participate in the study only after consent of their parent was obtained. The Childhood Trauma Questionnaire was completed by the children in the classroom during a specially allotted time during the school day. It was administered by the researcher, without the presence of the teacher. Subsequently, each child was interviewed individually using the Rochester Parenting Stories. Each story stem was read aloud and followed by open-ended questions (e.g., ‘And what happened next?’, ‘And afterwards what happened?’) to encourage the child to develop a story completion. Additional questions focused on the behaviour of the parent within the story (e.g. “What did the mother/father do?”, “What else did the mother/father do?”, “What did she/he say?”, “Was there anything else?”) and on the emotional responses of the child (e.g., “How did the child feel?”, “Why?”). Children were encouraged to resolve the problem introduced in the story stem, but there was no pressure to accomplish a resolution. Children were interviewed in a separate room in the school, and their narratives were audiorecorded. Afterwards the narratives were transcribed, coded and analyzed.

## Results

In order to address the research question of whether or not there are differences in the behaviour categories contained in the narratives of the children in the “Abused” vs. “Nonabused” groups, an initial step was to quantitatively analyze all behaviour categories according to the following principle. For all identified behaviour categories, calculations were made regarding the frequency of occurrence, i.e. the percentage of children’s stories containing the specified behaviour category within the groups “Abused” and “Nonabused”. Chi-squares were calculated and those behaviour categories were identified which were significantly different in degree of occurrence in the “Abused” vs. “Nonabused” groups. In addition, those behaviour categories were identified for which the percentage of occurrence is at least twice as great in one group as compared to the percentage of occurrence in the other group (see Table 1 and Table 2).

Significant differences in rate of occurrence between the “Abused” vs. “Nonabused” groups narratives were found for seven behaviour categories. Children who displayed emotional and/or physical abuse history had significantly higher rate of the following behaviour categories in their narrative representations: “Mother cleans up the room” ( $\chi^2=6.37$ ;  $p<.05$ ) in the story stem “Room cleaning”; “Child cleans up broken dishes” ( $\chi^2=8.61$ ;  $p<.01$ ), “Child justifies his accident” ( $\chi^2=5.27$ ;  $p<.05$ ) and “Child provides first-aid help for him/herself” ( $\chi^2=5.38$ ;  $p<.05$ ) in the story stem “Bleeding hand”; and

“Father insists upon his idea” ( $\chi^2=6.37$ ;  $p<.05$ ) in the story stem “Time together”. Children who did not report emotional and/or physical abuse history significantly more often included the following categories in their narratives: “Mother provides first-aid help” ( $\chi^2=5.27$ ;  $p<.05$ ) in the story stem “Bleeding hand”; “Father provides first-aid help” ( $\chi^2=3.59$ ;  $p<.05$ ) in the story stem “Bruises”.

*Table 1. Frequency (and Percentages) of Abused vs. Nonabused Children's Stories Containing Negative Behaviour Categories*

Theme	Story stem	Behaviour category	Abused children (n=25)		Non-abused children (n=51)	
			n	(%)	n	(%)
Child takes on too much responsibility	Bleeding hand	Child cleans up broken dishes	4*	(16)	0*	(0)
		Child provides first-aid for him/herself	4*	(16)	1*	(2)
		Child tries to justify the accident	6*	(24)	3*	(5.9)
	Time together	Child tries to organize time with father	4	(16)	3	(5.9)
Child does not communicate needs	Bruises	Child apologizes to father	2	(8)	0	(0)
	Babysitting	Child does not express his/her opinion	3	(12)	2	(3.9)
Parent underreacts/overreacts	Room cleaning	Child leaves without explanation	4	(16)	2	(3.9)
	Room cleaning	Child's disobedience goes without consequence	3	(12)	1	(2)
		Mother cleans up the room	3*	(12)	0*	(0)
	Time together	Father and child spend time separately	11	(44)	15	(29.4)
		Father refuses to compromise	3*	(12)	0*	(0)
Forgotten milk	Father punishes child	6	(24)	5	(9.8)	

\*  $p < .05$  (chi square = 8.61, 5.27, 5.27, 6.37 and 6.37, respectively). The chi-square analysis must be considered cautiously because of small expected cell size.

In addition to identifying those behaviour categories which were apparent more often in either the “Abused” or “Nonabused” groups, these behaviour categories were also grouped by themes, which were then subsequently grouped into higher order themes, in order to address the second research question -- Are there differences in the themes mentioned within the attachment narratives of children in Latvia with self-reported experience of abuse as opposed to children who do not report abuse? As a result of this hierarchical grouping, seven main themes were identified (see Tables 1 and 2). Three themes indicate negative conduct of parents or child in the narratives, but four themes indicate positive conduct of parents or child in the narratives. For example, the negatively oriented theme of “Child takes on too much responsibility” includes five categories, derived from four story stems, which were more frequently used by abused children. Two of these categories are from the story stem “Bleeding hand”. The story stem describes a situation whereby the child is helping to wash dishes, and then drops two dishes and cuts his/her hand while trying to pick up the pieces. The behaviours which denote taking on too much responsibility include “Child provides first-aid for him/herself” and “Child cleans up broken dishes”. This theme indicates that the child is assuming a higher

degree of self-responsibility than would be appropriate for the situation, and passivity or purposeful negligence on the part of the mother.

**Table 2. Frequency (and Percentages) of Abused vs Nonabused Children's Stories Containing Positive Behaviour Categories**

Theme	Story stem	Behaviour category	Abused children (n=25)		Non-abused children (n=51)		
			n	(%)	n	(%)	
Parent provides first-aid care	Bleeding hand	Mother provides first-aid care	19*	(76)	48*	(94.1)	
	Bruises	Father provides first-aid care	4*	(16)	19*	(37.3)	
Mother communicates/acts appropriately	Babysitting	Mother understands/ compromises	2	(8)	11	(21.6)	
		Room cleaning	Mother asks child for explanation	1	(4)	8	(15.7)
		Mother goes to look for child	1	(4)	7	(13.7)	
		Mother states child's behaviour was wrong	6	(24)	20	(39.2)	
		Bleeding hand	Mother washes the dishes	0	(0)	5	(9.8)
		Bad marks	Mother disciplines child	1	(4)	8	(15.7)
Father communicates/acts appropriately	Forgotten milk	Father asks for explanation	7	(28)	20	(39.2)	
		Father explains what should have happened	6	(24)	18	(35.3)	
	Bruises	Father asks for explanation	3	(12)	14	(27.5)	
		Father goes to find out what happened	6	(24)	21	(41.2)	
Child accepts limits set by parents	Babysitting	Child agrees to babysit	5	(20)	15	(29.4)	
	Bad marks	Child thinks of ways to improve	5	(20)	15	(29.4)	
	Time together	Father and child find common activity	3	(12)	10	(19.6)	
	Forgotten milk	Child goes out again and gets the milk	3	(12)	15	(29.4)	

\* $p < .05$  (chi square = 5.27 and 3.59, respectively). The chi-square analysis must be considered cautiously because of small expected cell size.

The theme "Child does not communicate needs" includes two categories from two story stems more frequently used by abused children. This feature includes categories indicating that the child has acquired a pattern of non-communicative child-parent interaction, whereby the child leaves on his own, without communication.

The theme "Parent underreacts/overreacts" includes five categories from three story stems more frequently used by abused children. In response to the story stem "Room cleaning" one category of behaviour is that mother cleans the child's room herself, although she has requested child to clean the room and the child has disobeyed. This demonstrates inconsistent behaviour on the part of the mother and creates difficulties for child to understand, which requests of parents he/she has to comply with. This theme also includes several categories from the story stem 'Time together', whereby the father insists upon his idea, therefore not allowing opportunity for mutual communication, or that father and child end up spending the day separately. Another narrative category provided more often by abused children is from the story stem 'Forgotten milk',



describing father punishing the child, which seems to be an overreaction to the child's behaviour.

Analysis of the positively oriented themes (see Table 2) reveals that they include categories which are more often mentioned in the narratives of the nonabused children. The theme 'Parent provides first-aid care' includes behaviour categories whereby in the narrative story completion the mother or father provide elementary medical assistance. Although in 76% of the narrative completions from children in the abused group the mother provided such care in the "Bleeding hand" story, within the nonabused group narratives 94% of the stories included such maternal caring behaviour. The theme 'Mother communicates/acts appropriately' includes four categories from four stories more frequently used by nonabused children. In response to the story stem 'Babysitting', the nonabused children more often provide narrations whereby the mother will be empathic and will agree to accept a compromise. Categories from the story stem 'Room cleaning' depict situations, whereby the mother asks the child to explain his/her conduct. In completion of the story stem 'Bad marks', children from the nonabused group more often provide narrations whereby the mother reacts to the bad grade by disciplining him/her, which is an expected and likely response from a mother in this situation.

**Table 3. Comparison (by Mann – Whitney) of Frequency of Positive and Negative Themes Mentioned in Abused vs. Nonabused Children's Story Stem Completions**

Themes	Abused children (n = 25)			Nonabused children (n = 51)			U
	Mean	(SD)	Med	Mean	(SD)	Med	
<i>Negative parent or child behaviour</i>							
Child takes on too much responsibility	.16	(.18)	.20	.02	(.08)	0	349.0***
Child does not communicate needs	.14	(.30)	0	.03	(.13)	0	556.0
Parents underreacts/ overreacts	.20	(.20)	.20	.08	(.10)	0	416.0**
<i>Positive parent or child behaviour</i>							
Parent provides first-aid care	.07	(.12)	0	.19	(.15)	.16	356.5***
Mother communicates/acts appropriately	.46	(.28)	.50	.65	(.27)	.50	428.5**
Father communicates/acts appropriately	.16	(.18)	0	.26	(.19)	.25	445.5*
Child accepts limits set by parents	.22	(.20)	.25	.35	(.23)	.25	430.5*

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

The theme 'Father communicates/acts appropriately' includes four categories from two stories chosen by non-abused children. In response to the story stem 'Forgotten milk' and 'Bruises' within the narrations of the nonabused group, more often the father asks the child to explain what and how the situation happened. In response to the story stem 'Bruises', within the narratives of the nonabused group the father more often actively intervenes and searches to find out the truth. The theme 'Child accepts limits set by parents' includes four categories from four story stems more frequently used by nonabused children. In response to the story stem 'Babysitting', within the narrative of the nonabused children more often the child agrees to look after younger children, but in the story 'Forgotten milk' the child agrees one more time to go out and buy milk upon request of the parents. In the story 'Bad marks' child assumes responsibility for the bad

grade, and develops a plan to achieve success in studies. In response to the story stem 'Time together' within the narratives of the nonabused groups, the child more often accepts a compromise situation and joins in an activity together with father.

To identify if any narrative themes were associated with emotional and/or physical abuse, the Mann-Whitney calculation was used (see Table 3). Statistically significant differences of abused vs. nonabused groups were found for six of the seven identified themes. In regard to negatively oriented themes, in all cases the abused group had significantly higher degree of occurrence of these themes within their narrative story stem completions: 'Child takes on too much responsibility' ( $U = 349.0; p < .001$ ), 'Child does not communicate needs' ( $U = 556.0; n.s.$ ), and 'Parents underreacts/overreacts' ( $U = 416.0; p < .01$ ). In regard to the themes indicating positive conduct of parents or child, in all cases the nonabused group had significantly higher rate of occurrence of these positive themes in their narratives: 'Parent provides first-aid care' ( $U = 356.5; p < .001$ ), 'Mother communicates/acts appropriately' ( $U = 428.5; p < .01$ ), 'Father communicates/acts appropriately' ( $U = 445.5; p < .05$ ), and 'Child accepts limits set by parents' ( $U = 430.5; p < .05$ ). Therefore we may conclude that there are statistically significant differences for identified main themes in narrative story stem completion responses by abused children in comparison to non-abused children in Latvia.

## Discussion

We identified statistically significant differences for seven separate behaviour categories mentioned in the story stem completion narratives of abused vs. nonabused children. Children who reported emotional and/or physical abuse history included significantly higher rate of the following behaviour categories in their narrations: 'Child cleans up broken dishes', 'Child justifies his/her accident', and 'Child provides first-aid for him/herself', 'Mother cleans up the room' and 'Father insists upon his idea'.

Emotional maltreatment is frequently expressed in the family as a result of an inability of parents to manage the child's behaviour, because of a lack of effective disciplining approaches. The narratives of the children from the abused group more often indicate that their mental representations, as indicated by the narrative representations, include expectations for parent figures to be inconsistent and inappropriate. For example, in response to the story stem 'Room cleaning', the narrative completion provided more often by the abused children is that the mother will clean the room instead of the child, indicating inconsistent demands and inappropriate conduct of the parent, which can result in repeated situations when the child disobeys and parent reproaches, thereby creating the ground for emotional abuse. In response to the story stem 'Bleeding hand' the narratives of the abused group more often include that the child will clean up the chippings him-/herself and will justify him-/herself in front of mother. This indicates that that expectation of children from the abused group is that the child's need for comforting will not be satisfied.

In response to the story stem 'Bad marks' the nonabused children more often provided narrative completions in which the mother will discipline the child. Within the abused children group, the lack of narrative completions with such a disciplining ap-

proach on the part of a mother looking at the child's bad marks may be the result of psychological defense mechanisms such as idealization or denial. Other researchers have noted that children with insecure attachment, resulting from inadequate parent-child relationships, more often construct narratives depicting idealized parent-child relationships (Clyman, 2003). This defensive phenomenon of denial most often manifests as an avoidance to narrate a more complete story, or the construction of poor and constricted narratives (Kaplan & Cassidy, 1985; Dozier & Kobak, 1992; Burge, et al., 1997; Sroufe, 2003). Denial can be related to examinee's desire to avoid distress aroused by conflict in the story stem, and is markedly expressed in children with disorganized attachment (Macfie, Cicchetti, & Toth, 2001), as well as in children from families where there is violence between the adults (Schechter et al., 2007), and in children with mood disorders (Beresford et al., 2007).

Children who did not display emotional abuse history significantly more often depicted parents as providing care and comforting. In accordance with attachment theory, to form secure attachment the mother's response is extremely important in situations when the child is hurt or he/she needs help. Secure attachment is promoted by comforting, suggestive and cooperative relationships (Bowlby, 1988; Posada, Kaloustian, Richmond, & Moreno, 2007). Children from the nonabused group indicated by their narrative story stem completions that their mental representations include expectations of the parent to be available, comforting and providing the appropriate assistance.

Rochester Parenting Stories is a meaningful technique which provides opportunity to obtain children's narratives about issues related to child-parent relationships, and to identify possible mental representations related to these narrative constructions. Analysis of the Rochester Parenting Stories demonstrates that there are sets of narrative categories which are characteristic for children who report emotional and physical abuse in family, including inappropriate behaviours on the part of the parent and child. Antisocial representations by abused children have been identified also in other studies (Robinson, 2007). The abused children also more often constructed narratives in which the child assumed a greater share of responsibility than would be appropriate for his/her age, implicating indications of role reversal, which is also an aspect of insecure attachment (Posada, Kaloustian, Richmond, & Moreno, 2008).

Nonabused children more often in their narrative constructions indicated that their expectations of the parent-child relationship are that the parent intervenes, and communicates appropriately, and is understanding and empathic. Other researchers also have identified empathic and prosocial representations in the narratives of children with a history of positive parent-child relationship experience (Robinson, 2007). The main themes of the narrative of the nonabused children reflect caring and comforting behaviour of parents, empathy and consistent conduct. The main theme 'Child accepts limits set by parents' demonstrates the child's capability to obey and accept rules and restrictions set by parents, describing healthy relationships where authority is shared between parents and child, as well as child's inner feelings of security and confidence in parents providing a secure base.

The limitations of the present study include the relatively small groups of research participants. This means that future studies should include larger groups of subjects,

which also allow for separate analysis of children who report only emotional abuse, and those subjects who report physical abuse. A larger group of respondents might also allow for additional analyses of children who report experience of sexual abuse. In addition it would be very useful to compare analysis of the story stem completion narratives to other quantitative and qualitative psychological assessment measures.

Improvement of the coding schema and the data analysis system described in this paper could lead to a new psychological assessment tool, applicable in both scientific research and clinical practice. There is a necessity and an advantage of using several techniques of investigation for the child's psychological assessment, since every method provides additional perspectives and information, allowing one to understand more completely the problems, needs and resources of the child, and to develop intervention/treatment planning more precisely (Teglasi, Simcox, & Kim, 2007). Human personality is multidimensional, therefore various techniques and approaches are employed to understand these aspects of multidimensionality more fully (Kagan, 2005; Teglasi, 2007). Multiple methods are also very necessary in situations of suspected child abuse, whereby the child is often frightened and reluctant to speak about the traumatic experience directly. This study has shown that a meaningful method of gaining insight into the child-parent attachment relationship and the child's expectations of attachment relationships in the future is to analyze attachment representations manifest in children's attachment story narrations (Holmberg, Robinson, Corbitt-Prise, & Wiener, 2007; Robinson, 2007).

## References

- Allen, J.P., Hauser, S.T., & Borman-Spurrell, E. (1996). Attachment theory as a framework for understanding sequelae of severe adolescent psychopathology: An 11-year follow-up study. *Journal of Consulting and Clinical Psychology, 64*, 254–263.
- Allen, J.P., Porter, M., McFarland, K., McElhaney, K.B., & Marsh, P. (2007). The Relation of Attachment Security to Adolescents' Paternal and Peer Relationships, Depression, and Externalizing Behavior. *Child Development, 78*(4), 1222–1239.
- Belden, A.C., Sullivan, J.P., & Luby, J.L. (2007). Depressed and healthy preschoolers' internal representations of their mothers' caregiving: Associations with observed caregiving behaviors one year later. *Attachment and Human Development, 9*(3), 239–254.
- Belsky, J., & Cassidy, J. (1994). Attachment and close relationships: An individual difference perspective. *Psychological Inquiry, 5*, 27–30.
- Beresford, C., Robinson, J.L., Holmberg, J., & Ross, R.G. (2007). Story stem responses of preschoolers with mood disturbances. *Attachment and Human Development, 9*(3), 255–270.
- Bowlby, J. (1969). *Attachment and Loss: Vol.1, Attachment*. Basic Books, New York.
- Bowlby, J. (1973). *Attachment and Loss: Vol.2, Separation, Anxiety and Anger*. Basic Books, New York.
- Bowlby, J. (1988). *A Secure Base: Parent-Child attachment and healthy Human development*. New York. Basic Books.
- Bretherton, I., Ridgeway, D., & Cassidy, J. (1990). Assessing internal working models of the attachment relationship: An attachment story completion task for 3-year-olds. The role of internal working models in the attachment relationship. In M. Greenberg, D. Cicchetti, & E. M.

- Cummings (Eds.), *Attachment during the preschool years* (pp. 273–308). Chicago: University of Chicago Press.
- Buchsbaum, H.K., & Emde, R.N. (1990). Play narratives in thirty-six-month-old children: Early moral development and family relationships. *The Psychoanalytic Study of the Child*, 40, 129–155.
- Burge, D., Hammen, C., Davila, J., Daley, S.E., Paley, B., Lindberg, N., Herzberg, D., & Rudolph, K.D. (1997). The Relationship between attachment cognition and psychological adjustment in late adolescent women. *Development and Psychopathology*, 9, 151–167.
- Cassidy, J., Kirsh, S.J., Scolton, K.L., & Parke, R.D. (1996). Attachment and representations of peer relationships. *Developmental Psychology*, 32, 892–904.
- Cicchetti, D., Cummings, E.M., Greenberg, M.T., & Marvin, R.S. (1990). An organizational perspective on attachment beyond infancy: Implications for theory, measurement, and research. In M.T. Greenberg, D.Cicchetti, & E.M.Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention*, pp.3–49. Chicago: University of Chicago Press.
- Clyman, R.B. (2003). Portrayals in maltreated children's play narratives: Representations or emotion regulation? In R.N. Emde, D.P. Wolf, and D. Oppenheim (Eds.), *Revealing the Inner Worlds of Young Children: The Macarthur Story Stem Battery and Parent-Child Narratives*. New York: Oxford University Press.
- Dozier, M., & Kobak, R.R. (1992). Psychophysiology in adolescent attachment interviews: Converging evidence for dismissing strategies. *Child Development*, 63, 1473–1480.
- Dozier, M., & Lee, S.W. (1995). Discrepancies between self- and other-report of psychiatric symptomatology: Effects of dismissing attachment strategies. *Development and Psychopathology*, 7, 217–226.
- Emde, R.N. (1994). Individuality, context, and the search for meaning. *Child Development*, 65, 719–737.
- Fury, G., Carlson, E.A., & Sroufe, L.A. (1997). Children's representations of attachment relationships in family drawing. *Child Development*, 68, 1154–1164.
- Gagné, M.H., Tourigny, M., Joly, J., & Pouliot-Lapointe, J. (2007). Predictors of adult attitudes toward corporal punishment of children. *Journal Of Interpersonal Violence*, 22(10), 1285–304.
- Green, J., Stanley, C., & Peters, S. (2007). Disorganized attachment and atypical parenting in young school age children with externalizing disorder. *Attachment and Human Development*, 9(3), 207–222.
- Green, J., Stanley, C., Smith, V., & Goldwyn, R. (2000). A new method of evaluating attachment representations in young school-age children: The Manchester child attachment story task. *Attachment and Human Development*, 2, 48–70.
- Greenberg, M.T., DeKlyen, M., Speltz, M.L., & Endriga, M.C. (1997). The role of attachment processes in externalizing psychopathology in young children. In L. Atkinson, & K. J. Zucker (Eds.), *Attachment and Psychopathology* (pp. 196–222). New York: Guilford.
- Grych, J.H., Wachsmuth-Schlaefler, T., & Klockow, L.L. (2002). Interparental aggression and young children's representations of family relationships. *Journal of Family Psychology*, 16, 259–272.
- Harkness, K.L., Lumley, M.N., & Truss, A.E. (2008). Stress generation in adolescent depression: the moderating role of child abuse and neglect. *Journal of Abnormal Child Psychology*, 36(3):421–432.

- Hill, J., Fonagy, P., Lancaster, G., & Broyden, N. (2007). Aggression and intentionality in narrative responses to conflict and distress story stems: An investigation of boys with disruptive behaviour problems. *Attachment and Human Development*, 9(3), 223–237.
- Hodges, J., Steele, M., Hillman, S., & Henderson, K. (2003). Mental representations and defenses in severely maltreated children: A story stem battery and rating system for clinical assessment and research applications. In R. N. Emde, D. P. Wolf, & D. Oppenheim (Eds.), *Revealing the inner worlds of young children: The MacArthur Story Stem Battery and parent-child narratives* (pp. 240–267). New York: Oxford University Press.
- Holmberg, J., Robinson, J., Corbitt-Prise, J., & Wiener, P. (2007). Using narratives to assess competencies and risks in young children: experiences with high risk and normal population. *Infant Mental Health Journal*, 28 (6). 647–666.
- Kagan, J. (2005). A time for specificity. *Journal of Personality Assessment*. 85, 125–127.
- Kendall-Tackett, K.A., & Eckenrode, J. (1996) The effects of neglect on academic achievement and disciplinary problems: a developmental perspective, *Child Abuse and Neglect*, 20(3), 161–169.
- Kerns, K.A., Klepac, L., & Cole, A.K. (1996). Peer relationships and preadolescents' perceptions of security in the child-mother relationship. *Developmental Psychology*, 32, 457–466.
- Levendosky, A.A., Okun, A., & Parker, J.G. (1995). Depression and maltreatment as predictors of social competence and social problem-solving skills in school-age children. *Child Abuse and Neglect*, 19, 1183–1195.
- Lieberman, M., Doyle, A., & Markiewicz, D. (1999). Developmental patterns in security of attachment to mother and father in late childhood and early adolescence: Associations with peer relations. *Child Development*, 70, 202–213.
- Macfie, J., Cicchetti, D., & Toth, S.L. (2001). Dissociation in maltreated versus nonmaltreated preschool-aged children. *Child Abuse and Neglect*, 25, 1263–1267.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood and adulthood: a move the level of representation. In: M. Greenberg, D. Cichetti, and M. Cummings (Eds.) *Attachment in the preschool years*. Chicago: University of Chicago press.
- Murray, L., Woolgar, M., Briers, S., & Hipwell, A. (1999). Children's social representations in dolls' house play and theory of mind tasks, and their relation to family adversity and child disturbance. *Social Development*, 8, 179–200.
- Olds, D.L., Kitzman, H., Cole, R., Robinson, J., Sidora, K., Luckey, D. W., Henderson, C.J., Hanks, C., Bondy, J., & Holmberg, J. (2004). Effects of nurse home visiting on maternal life course and child development: Age 6 follow-up results of a randomized trial. *Pediatrics*, 114, 1550–1559.
- Oppenheim, D., Emde, R. N., Hasson, M., & Warren, S. (1997). Preschoolers face moral dilemmas: A longitudinal study of acknowledging and resolving internal conflict. *International Journal of Psychoanalysis*, 78, 943–956.
- Oppenheim, D., Emde, R. N., & Warren, S. L. (1997). Children's narrative representations of mothers: Their development and associations with child and mother adaptation. *Child Development*, 68, 127–138.
- Oppenheim, D., & Waters, H. S. (1995). Narrative processes and attachment representations: Issues of development and assessment. *Monographs of the Society for Research in Child Development*, 60(2–3), 197–215.
- Page, T., & Bretherton, I. (2001). Mother-and father-child attachment themes in the story completions of preschoolers from post-divorce families: Do they predict relationships with peers and teachers? *Attachment and Human Development*, 3, 1–29.

- Pianta, R.C., Egeland, B., & Adam, E.K. (1996). Adult attachment classification and self-reported psychiatric symptomatology as assessed by the Minnesota Multiphasic Personality Inventory-2. *Journal of Consulting and Clinical Psychology*, 64, 273–281.
- Posada, G., Kaloustian, G., Richmond, M.K., & Moreno, A.J. (2007). Maternal secure base support and preschoolers' secure base behavior in natural environments. *Attachment and Human Development*, 9(4), 393–411.
- Posada, G., & Pratt, D.M. (2008). Physical aggression in the family and preschoolers' use of the mother as a secure base. *Journal of Marital and Family Therapy*, 34(1), 14–27.
- Prino, C. & Peyrot, M. (1994). The Effect of Child Physical Abuse and Neglect on Aggressive, Withdrawn, and Prosocial Behavior." *Child Abuse and Neglect*, 18 (10): 869–882.
- Reading, R. (2008). Importance of early neglect for childhood aggression. *Child Care and Health Development*, 34(5), 699–700.
- Robinson, J.L. (2007). Story stem narratives with young children: Moving to clinical research and practice. *Attachment and Human Development*, 9(3), 179–185.
- Robinson, J., Herot, C., Haynes, P., & Mantz-Simmons, L. (1999). Children's story stem responses: A measure of program impact on developmental risks associated with dysfunctional parenting. *Child Abuse and Neglect*, 24, 99–110.
- Schechter, D.S., Zygmont, A., Coates, S. W., Davies, M., Trabka, K.A., McCaw, J., Kolodji, A., & Robinson, J.L. (2007). Caregiver traumatization adversely impacts young children's mental representations on the MacArthur Story Stem Battery. *Attachment and Human Development*, 9(3), 187–205.
- Sebre, S., Lebedeva, L. & Trapenciere, I. (2004) *Laulība, dzimstība un pozitīvu bērnu-vecāku veicinošu faktoru izpēte*. ("Attitudes and Behaviors Regarding Marriage, Childbirth and Positive Parent-Child Relationships"). Rīga: Projekts ABD, 1–48 .
- Sebre, S., Sprugevica, I., Novotni, A., Bonevski, D., Pakalniskiene, V., Popescu, D., Turchina, T., Friedrich, W., & Lewis, O. (2004). Cross-cultural comparison of child reported emotional and physical abuse: Rates, risk factors and psychosocial symptoms. *International Journal of Child Abuse and Neglect*, 28, 113–127.
- Shields, A., Ryan, R.M., & Cicchetti, D. (2001). Narrative representations of caregivers and emotion dysregulation as predictors of maltreated children's rejection by peers. *Developmental psychology*, 37(3), 321–337.
- Shonk, S.M., & Cicchetti, D. (2001). Maltreatment, competency deficits, and risk for academic and behavioral maladjustment. *Developmental Psychology*. 37(1), 3–17.
- Sroufe, J. (2003). Commentary: comprehending the incomprehensible. *Attachment and Human Development*, 5(4), 409–14.
- Steele, M., Steele, H., Woolgar, M., Yabsley, S., Fonagy, P., Johnson, D., & Croft, C. (2003). An attachment perspective on children's emotion narratives: Links across generations. In R. N. Emde, D. P. Wolf, & D. Oppenheim (Eds.), *Revealing the inner worlds of young children: The MacArthur Story Stem Battery and parent-child narratives* (pp. 163–181). New York: Oxford University Press.
- Stirling, J.J., Amaya-Jackson, L., & Amaya-Jackson, L. (2008). Understanding the behavioral and emotional consequences of child abuse. *Pediatrics*, 122 (3), 667–73.
- Teglasi, H., Simcox, A.G., & Kim, N. (2007). Personality constructs and measures. *Psychology in the Schools*, 44(3), 215–229.

- Toth, S. L., Cicchetti, D., Macfie, J., & Emde, R. N. (1997). Representations of self and other in the narratives of neglected, physically abused, and sexually abused preschoolers. *Development and Psychopathology*, 9, 781–796.
- Toth, S.L., Cicchetti, D., Macfie, J., Rogosch, F.A., & Maughan, A. (2000). Narrative representations of moralaffiliative and conflictual themes and behavioral problems in maltreated preschoolers. *Journal of Clinical Child Psychology*, 29, 307–317.
- Toth, S.L., Maughan, A., Manly, J. T., Spagnola, M., & Cicchetti, D. (2002). The relative efficacy of two interventions in altering maltreated preschool children's representational models: Implications for attachment theory. *Development and Psychopathology*, 14, 877–908.
- Verschueren, K., Marcoen, A., & Schoefs, V. (1996). The internal working model of the self, attachment and competence in five-year-olds. *Child Development*, 67, 2493–2511.
- Warren, S.L., Emde, R.N., & Sroufe, L.A. (2000). Internal representations: Predicting anxiety from children's play narratives. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39, 100–107.
- Warren, S. L., Oppenheim, D., & Emde, R.N. (1996). Can emotions and themes in children's play predict behavior problems? *Journal of the American Academy of Child and Adolescent Psychiatry*, 34, 1331–1337.
- Waters, E., & Cummings, E.M. (2000). A secure base from which to explore close relationships. *Child Development*, 71, 164–172.
- Webb, M., Heisler, D., Call, S., Chickering, S.A., & Colburn, T.A. (2007). Shame, guilt, symptoms of depression, and reported history of psychological maltreatment. *Child Abuse and Neglect*, 31(11–12), 1143–53.
- Zahn-Waxler, C., Cole, P.M., Richardson, D.T., Friedman, R.J., Michel, M.K., & Belouad, F. (1994). *Merrill Palmer Quarterly*, 40, 98–119.



# Psychometric Properties of Classmates' Friendship Relationships Questionnaire

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The purpose of this research was to determine the psychometric properties of the Classmates' Friendship Questionnaire (CFQ). The sample consisted of 264 participants from Latvian schools aged from 13 to 15 years (boys – 40 %, girls – 60 %). The Peer-Relations subscale (PRs) of the Self-Esteem Questionnaire (Hunter, Boyle, & Warden, 2006) was used in order to verify the concurrent and convergent validities of the CFQ. The factorial validity of the CFQ was established using principal components analysis with varimax rotation; this yielded four factors: Trust, Support and Collaboration, Social Contacts out of School, and Lack of Hostility. All CFQ scales had high internal consistency and test-retest reliability, and correlated significantly with the PRs.

**Key words:** friendship, concurrent validity, convergent validity, reliability, test-retest reliability.

## Introduction

Researchers pay great attention to teenagers' relationships within the group of their age peers, because young people enter the world of adults by developing the values that are common to their generation. Friendly relationships play a special role in this. In the Latvian cultural environment teenagers spend most of their time at school, and exactly there friendly relationships are formed. Research that deals with relationships within a group of teenagers within a specific cultural environment can help to understand the particular internal processes in such a group better than using only information from other similar cultures. At the governmental level, the development of such an instrument offers the prospect of obtaining more reliable data that can be used in the future for projects oriented to teenagers' development. However, a review of research on friendship in terms of cooperation and trust did not reveal the existence of any questionnaire suitable for use in research on adolescents in the classroom environment (Mendelson & Aboud, 1999; Aldridge, Fraser, & Huang, 1999; Hunter, Boyle, & Warden, 2006).

Various methods are used in order to investigate relationships among pupils in a class. For example, one method is to ask pupils to indicate whether they have friends or not, and to name them, or to observe respondents (especially children); the method of sociometry is often used (Kutnick & Kington, 2005; Hamm & Faircloth, 2005). Such methods are informative, but it is difficult to interpret them, because this takes a great deal of time. Friendly relationships are often investigated in the context of other broader research projects, for example in a questionnaire investigating a school study environment or in self-concept questionnaires (Fraser, McRobbie, & Fisher, 1996, as mentioned by Aldridge, Fraser, & Huang, 1999; Hunter, Boyle, & Warden, 2006). It is possible that a method suitable for adaptation for Latvia could be found in this group of questionnaires,

but the domain of friendly relationships is a psychological one that is firmly connected to the cultural environment (Hinde, 1997 as mentioned in Kutnick & Kington, 2005). Consequently, it was decided that it is necessary to create a new questionnaire.

The term “friendly relationships” means social relations among individuals that can be described by mutual appeal and collaboration (Corsini, 1999). Friendly relationships can vary; they can be more or less intensive and close. This is a multidimensional concept with a strong experiential and cultural basis. Friendship quality can be symmetrical or asymmetrical, mutual or not (Hinde, 1997 as mentioned in Kutnick & Kington, 2005). Discussions of friendly relationships in teenagers must distinguish between relationships at school among classmates and relationships out of school, although these can intersect.

Friendly relations can be described in terms of correlations (Clegg & Standen, 1991; Wright, 1984, as mentioned in Heiman, 2000), they can be described as connections between people, that perform their needs (Weiss, 1974, as mentioned in Heiman, 2000). Friendly relationships among children are based on affection, readiness to share private thoughts and secrets; on loyalty, sociability and intimacy (Guralnick, 1992; Parker & Asher, 1993; Wenz-Gross & Siperstein, 1997, as mentioned in Heiman, 2000). They also include mutual help and confidence (Parker & Asher, 1993; Sharabany, Gershoni, & Hofman, 1981, as mentioned in Heiman, 2000).

Teenagers’ relationships with age peers have special meaning. Together with teenagers’ relationships in the family, relationships with people of the same age have a major role in socialization; this period’s development is based on them. High quality friendship is marked by affection, unity, intimacy, affirmation, and a low level of conflict; it offers a reliable foundation for relationships, from which it is possible to investigate new environments, encouraging better competence and a higher level of safety (Ladd, 1989; Ladd & Kochenderfer, 1996; Ladd, Kochenderfer, & Coleman, 1996, as mentioned by Aikins, Bierman, & Parker, 2005).

Social relationships with age peers make the inner world richer, because they stimulate emotional support, offer ways of relaxing, and make it possible to verbalize different situations of frustration. There is one more important aspect – friends spend a lot of time together and they gain new experience (Heiman, 2000). Children’s friendship appears mainly in the sphere of common activities, whereas among teenagers it appears to involve better understanding of other people’s needs and increased attention to society (Selman, 1991, as mentioned in Heiman, 2000). It is possible to conclude that friendship stimulates teenagers’ adaptive behavior (Collins & Lauren, 1999; Erdley et.al., 2001, as mentioned in Hamm & Faircloth, 2005) and helps them adapt to social circumstances, as a result of which teenagers are ready to help other people and to receive help from them (Ladd et.al., 1996, as mentioned in Hamm & Faircloth, 2005).

Some research shows that mocking and teasing by friends or classmates influence teenagers’ emotional reactions in various ways. Mocking and teasing by friends is accepted more positively than by classmates. However, girls take mocking and teasing to heart. Both boys and girls take mocking their excess weight to heart (Jones & Newman, 2005).

It must be said here there is research which show that friendly relations with classmates who display deviant behavior can stimulate antisocial behavior, because such relations offer models of deviant behavior, and do not stimulate development of social skills (Capaldi et al., 2001; Petterson, Reid, & Dishion, 1992 as mentioned in Landsford et al., 2003).

Analyzing and describing characteristic of friends such as their progress in studies, alcohol consumption, emotional distress, or participation in out-of-school activities, Crosnoe and Needham (2004) concluded that these characteristics of friends play a major role in the prediction of teenagers' behavior problems. For example, they pointed out that teenagers who participate in out-of-school activities are more integrated in their school and class life, avoid problematic behavior, and prefer friendship with classmates with similar involvement in school and class life and with a similar activities profile.

Adolescents' friendships depend in many areas on the school culture, where they are developed (Hamm et al., 2005; Way & Pahl, 2001 as mentioned in Hamm & Faircloth, 2005). Hamm and Faircloth (2005) investigated teenagers' friendships in the context of sense of belonging to a school. Belonging to a school is manifested in the experience of interpersonal relationships among schoolmates. It is connected with pupils' sense of how much other people respect them, love them and appreciate them. A strong correlation exists between friendship among teenagers and sense of belonging to a school – pupils who have friends at school also express a stronger sense of belonging at school.

Some researchers use the methods of sociometry to obtain more reliable data on friendship relationships in class. Usually such studies are interested in those pupils who have leading positions and are aggressive, as well as those who are outcasts, but the research of Sachkova (2006) showed that so-called "middle status" pupils provide stability in a class (Sachkova, 2006). This shows again and again that a class is a united system and there can not be participants of greater or lesser importance; all classmates are closely linked.

As a result, it is necessary to emphasize one more time that for teenagers friendly relationships among pupils of their own age are very important and friendly relationships among classmates can be especially strong. Basically, friendly relations are a multidimensional concept with a strong experiential and cultural foundation, which can be described in terms of mutual collaboration, trust, sociability, provision of help and support.

#### *Establishing content validity of the CFQ*

In a newly-developed questionnaire, friendly relationships were regarded as involving social relationships characterized by collaboration, support and trust. This approach corresponds to the point of view of friendly relationship researchers (Parker & Asher, 1993; Sharabany, Gershoni, & Hofman, 1981, as mentioned in Heiman, 2000; Heiman, 2000; Ladd et al., 1996, as mentioned in Hamm & Faircloth, 2005; Hamm & Faircloth, 2005; etc.).

Friendly relationships among teenagers in a group of their age can be examined without regard to a concrete environmental context – for example, in a class. First of all, in our country pupils spend a lot of their time in class. A class is a social group, and it has group values which are stable in time and space – in the interactions of the group's members. This fact allows us to observe friendly relationships in a collaborative context.

Secondly, in Latvia there is a historical tradition that it is the school institution that organizes pupils' free time after lessons. This helps pupils to stick together or vice versa – some pupils can be isolated if they do not participate in school activities after lessons.

Analyzing theoretical information about friendly relationships among teenagers and taking into consideration the specific environment in Latvian schools, it was decided to include in the questionnaire items with three kinds of content.

1. *Support and collaboration* – can a student receive help from his or her classmates or not, can he or she render help, can he or she collaborate, for example, in the organization of common events, study together at school or out of school, can he or she set a goal and reach it together with others (Crosnoe & Needham, 2004; Hamm & Faircloth, 2005; Heiman, 2000);

2. *Trust* – is there a person in a class to whom a student can disclose all secrets and to whose opinion he or she listens (Guralnick, 1992; Parker & Asher, 1993; Wenz-Gross & Siperstein, 1997; Sharabany et al., 1981, as mentioned Heiman, 2000);

3. *Hostility* (as the opposite of friendly relations) – can a student feel hostility or not, can he or she be aggressive to other people – call them bad names, humiliate them, fight with them (Aikins et al., 2005; Jones & Newman, 2005; Landsford et al., 2003; Cillesen, Jiang, West, & Laszkowski, 2005).

This scale is necessary for two reasons. On the one hand, it will help to reveal the quality of friendly relationships of adolescents. Research has shown that friendship in adolescence can often be shown not only in support and collaboration but in hostile behavior too. Friends' qualities are important here (Landsford et al., 2003; Crosnoe & Needham, 2004). For example, it has been noticed that there is a tendency for aggressive boys to choose aggressive peers (Pullin & Boivin, 2000).

On the other hand, it is possible that there are both friendly and hostile relationships in Latvian schools. The presence of friendship does not preclude the possibility of hostile behavior. Thus, the hostility scale is important for estimating relationships in a class. Sections with such content contribute to psychological understanding of friendly relationships.

Based on this content 48 items were developed. De Vellis and other researchers' recommendations for items were used (De Vellis, 1991, as mentioned by Raščevska, 2005; Standards for Educational and Psychological Testing, 1985). Item analysis and exploratory component analysis were carried out (Cronbach, 1984; Crocker & Algina, 1986; Kline, 2000).

The question asked in this research was – Do psychometric properties of the Classmates' Friendship Questionnaire satisfy reliability and validity criteria of psychometrics?

## Method

### Participants

The first sample consisted of 264 participants aged between 13 and 15 years (boys – 40 %, girls – 60 %); 30 % of the children attended Riga schools, 70 % schools in other Latvian regions. All participants were studying in the 7th-9th grades in Latvian language

schools. Data were collected during the period: 19<sup>th</sup> of March to 28<sup>th</sup> of March, 2007. The second sample consisted of 35 participants aged between 13 and 15 years (boys – 60 %, girls – 40 %) who took part in follow-up testing on the 11th of April 2007.

For convergent validity 123 participants' data were used (boys – 43 %, girls - 57 %).

### **Instrument**

The newly development Classmates' Friendship Questionnaire (CFQ) was used in the study. The CFQ consists of 26 items (see Appendix 1). Responses were made on a 5-point Likert scale (1 - never, 2 - rarely, 3 – moderately often, 4 – often, 5 – always). The first version of the CFQ consisted of 48 items. After initial analyses of the 48 items (evaluation of item content validity, item discrimination, reaction indexes and factor analysis), 22 items were omitted. Of these, 2 items were dropped because of their unclear formulation and 20 items during the factor analysis. The 26- item questionnaire was established in this way.

The second instrument was the Peer-Relations subscale of the Self-Esteem Questionnaire (PRs) (Hunter, Boyle, & Warden, 2006). The PRs subscale of the Self-Esteem Questionnaire can also be used separately. In the original questionnaire internal consistency ranged from .76 to .84. In adapting the scale the authors followed the International Test Commission Guidelines on Adapting Tests (2000). Two independent translators translated the PRs from English into Latvian. The two Latvian versions of the PRs items were compared and the best items chosen (in discussion between one translator and an independent expert). A 4-point Likert scale was used (1 – completely disagree, 2 – do not agree, 3 – do agree, 4 – completely agree). The internal consistency of the Latvian version of the PRs was .72 (Turilova-Miščenko, 2007).

### **Procedure**

Testing was carried out in groups, without any time limit. Both questionnaires took from 15 to 20 minutes to fill out.

## **Results**

### *Factorial validity*

Exploratory factor analysis (principal component method with varimax rotation) was carried out. Four factors with eigenvalues above 1 were obtained (see Table 1) and these explained 50.23 % of total item variance (26-item matrix). The assumption of normality, linear relationships between pairs of variables and the variables being correlated at a moderate level were checked. The determinant is more than .0001, KMO measure is .85. The Bartlett test is significant  $\chi^2(325) = 2185.848$  ( $p < .001$ ). This means that the variables correlated highly enough to provide a reasonable basis for factor analysis.

The names of the factors were: Social Contacts out of School; Trust; Support and Cooperation; Lack of Hostility. These components correspond quite well with the theoretical content of the scale except that the components split the theoretical CFQ construct - *Support and collaboration* - into two factors: Support and Cooperation and Social Contacts out of School.

Social Contacts out of School, Trust, Support and Cooperation and Lack of Hostility scales were constructed including items with highest factor loadings for each scale (e.g. items 14, 8, 2, 25, 26, 18 and 11 were summed and the score for Social Contacts out of School was obtained). The Lack of Hostility scale was positively re-directed not to be opposite to other scales.

Table 1. Results of Principal Component Analyses with Varimax Rotation for CFRQ

Number of Item	Item	Component			
		1	2	3	4
<i>Social contacts out of school</i>					
14	I have invited my classmates to my birthday	<b>.76</b>	.23	.05	-.11
8	I have visited my classmates	<b>.75</b>	.22	-.01	-.05
2	My classmates have visited me	<b>.71</b>	.18	.07	-.07
25	I meet my classmates during summer vocation	<b>.68</b>	.07	.26	-.10
26	My classmates have invited me to their birthdays	<b>.67</b>	.08	.38	-.13
18	I have gone to the cinema with my classmates	<b>.61</b>	.16	.28	-.09
11	I have specially organised meeting with my friends during summer vacations	<b>.54</b>	.15	.37	-.02
<i>Trust</i>					
20	I have shared my problems with my classmates	.15	<b>.78</b>	.21	.00
6	I have discussed my personal problems with my classmates (family events, my failures etc.)	.14	<b>.76</b>	.20	-.01
12	I have discussed my love affairs with my classmates.	.25	<b>.73</b>	-.03	.03
24	I have confided my thoughts about life to my classmates	.19	<b>.67</b>	.28	.08
3	I have confided my secretes to my classmates	.24	<b>.62</b>	.26	-.13
<i>Support and cooperation</i>					
17	Classmates have chosen me besides studies' task's performance	.15	.13	<b>.66</b>	-.05
9	I have banked up on my classmates in studies or in other difficult situations	.10	.23	<b>.61</b>	.09
15	I have defended my classmates from others (for example, teachers, pupils, etc.)	.27	.14	<b>.58</b>	-.02
1	I have asked my classmates for help	-.01	.39	<b>.56</b>	.05
5	I discuss school affairs with my classmates	.03	.26	<b>.51</b>	-.03
22	I have done some task with bigger part of classmates	.34	-.04	<b>.50</b>	-.02
21	I have taken part in class parties	.28	.00	<b>.47</b>	-.10
<i>Lack of Hostility</i>					
19	I had conflicts with my classmates	-.04	-.13	.15	<b>.73</b>
10	My classmates have called me bad names	-.15	-.02	-.07	<b>.73</b>
4	I have called my classmates bad names	.02	-.24	.04	<b>.71</b>
7	Classmates have touched my by saying something about my appearance	-.05	.12	-.14	<b>.68</b>
13	I have mocked my classmate	.04	.00	.27	<b>.63</b>
16	I spend recreations alone	-.17	.14	-.17	<b>.49</b>
23	Some classmates ignore me	-.23	.19	-.22	<b>.44</b>
<i>Component's eigenvalues</i>		3.81	3.21	3.07	2.97
<i>% of variance</i>		14.67	12.34	11.79	11.42

Three scales of the CFQ (Trust, Support and Cooperation, Social Contacts out of School) were significantly and positively correlated with each other. Lack of Hostility scale did not correlate significantly or correlated weakly with the other scales (see Table 2).

Table 2. CFRQ scales intercorrelations and correlation with Peer-relation subscale

	CFRQ scales			
	<i>Social contacts out of school</i>	<i>Trust</i>	<i>Hostility</i>	<i>Support and cooperation</i>
CFRQ scales				
<i>Social contacts out of school</i>	-	.48**	-.14**	.56**
<i>Trust</i>		-	.05	.50**
<i>Lack of Hostility</i>			-	-.01
Peer-relation subscale (PRs) <sup>#</sup>	.38**	.25**	-.31**	.47**

\*\* $p < .01$ <sup>#</sup> the subscale of Self-esteem Questionnaire (Hunter, Boyle, & Warden, 2006)*Concurrent and convergent validity*

To define concurrent and convergent validity the PRs was used (Hunter, Boyle, & Warden, 2006). There were significant and positive correlations between all scales of the PRs and the CFQ,  $p < .01$  (see Table 2). These significant correlation coefficients confirm the *concurrent and convergent validity* of the CFQ, especially for three of its scales. Additional study is necessary for the Trust scale.

*Descriptive statistics and reliability*

Cronbach's alpha coefficients for all scales are acceptably high (see Table 3), above .73. Test-retest reliability for all scales, except the Lack of Hostility scale ( $r = .51$ ,  $p < .01$ ), was above .78 (see Table 3). All items of the CFQ showed good reaction and discrimination indices from the standpoint of psychometric theory (see Table 4). The average reaction index for scales was 2.94, and average discrimination index for all scales was .69.

Table 3. Descriptive statistics and reliability indices for CFRQ

<i>Scale of CFRQ</i>	<i>Number of items</i>	<i>Cronbach's alpha</i>	<i>Test-retest reliability</i>	<i>Mean</i>	<i>SD</i>
Social contacts out of school	7	.85	.79**	19.55	5.66
Trust	5	.84	.83**	10.46	3.98
Support and cooperation	7	.73	.78**	21.37	4.51
Lack of Hostility	7	.77	.51**	15.06	6.12

\*\* $p < .01$ 

In this stage of the research the psychometric properties of the CFQ confirm that it is a reliable and valid instrument (from the point of convergent validity).

Table 4. Item Reaction and Discrimination Indices of CFRQ

<i>Number of item</i>	<i>Discrimination index</i>	<i>Mean*</i>	<i>SD</i>
<i>Social contacts out of school</i>			
2	.70	2.77	0.98
8	.71	3.22	1.03
11	.71	2.41	1.21
14	.78	2.65	1.29
18	.70	2.59	1.11
25	.77	3.13	1.14
26	.76	2.77	0.99
Scale mean	.73	2.79	1.11
<i>Trust</i>			
3	.74	2.29	1.07
6	.80	2.11	1.01
12	.78	2.02	1.12
20	.80	1.98	0.91
24	.76	2.04	1.01
Scale mean	.77	2.09	1.02
<i>Support and Cooperation</i>			
1	.60	2.87	0.91
5	.58	3.38	1.05
9	.62	2.86	1.02
15	.67	3.01	1.09
17	.66	2.85	1.04
21	.58	3.63	1.19
22	.58	2.76	0.94
Scale mean	.61	3.05	1.03
<i>Lack of Hostility</i>			
4	.69	2.59	0.97
7	.65	1.89	0.85
10	.69	2.36	0.90
13	.61	2.64	1.03
16	.54	1.54	0.86
19	.68	2.50	0.88
23	.51	1.73	0.84
Scale mean	.62	2.18	0.91

\* Reaction index

## Discussion

A reliable and valid questionnaire on the construct of friendly relationships in a class was constructed. The study showed that the content, factorial and convergent validity and internal consistency and test-retest reliability of the CFQ were satisfactory. All psychometric indices satisfied high-level psychometric criteria: item-difficulty and item-discrimination indices lay within the accepted range. The component analysis of the CFQ's 26 items yielded four dimensions characterizing friendly relationships in a class. This differs from the CFQ's three factor structure theoretically predicted: Support and collaboration, Trust, and Hostility. The item pool of the Support and collaboration factor split into two independent factors: Support and Cooperation and Social Contact out of School. In the literature there is no a questionnaire on *friendly relationships in a class*



with the same structure as this. The last version of the CFQ consists of such factors – Social Contacts out of School, Trust, Support and Cooperation, and Lack of Hostility.

Social Contacts out of School, Trust, Support and Cooperation, and Lack of Hostility involve friendly relations. The Lack of Hostility scale was positively directed not to be opposite to other scales. Social Contacts out of School, Trust, and Support and Cooperation correlate significantly and positively, but Lack of Hostility has no or low correlation. The Lack of Hostility scale shows a lack of friendships in class. This scale can indirectly be a sign of unfriendly relations and conflict in a class: low hostility or conflict level is typical for friendships with high quality (Ladd, 1989; Ladd & Kochenderfer, 1996; Ladd, Kochenderfer, & Coleman, 1996, as mentioned by Aikins, Bierman, & Parker, 2005). Hostility among classmates need not by itself be evidence of unfriendly relations, because, for example, it is possible that it shows the way of forming relationships accepted in the class. Some researchers have demonstrated this for, for example, research on mockery among classmates and other researches (Jones & Newman, 2005; Capaldi et al., 2001; Petterson, Reid, & Dishion, 1992, as mentioned in Landsford et al., 2003). On the other hand, this scale can give important information about the psychological spirit in a class. The significant correlation between Lack of Hostility and Social Contact out of School shows that high friendly relations in class do not relate to low hostility or the conflict climate in the class. It is also important to notice that the Lack of Hostility scale's item reaction index mean was 3.81, which indicates that respondents, in reporting to the Lack of Hostility scale's items on the average marked "rarely" or "moderately often", but not "never" when thinking about hostility in their class life. And this, in turn, shows the importance of this scale in this Questionnaire.

The Peer-Relations subscale of the Self-Esteem Questionnaire was used for determining concurrent and convergent validity. There were statistically significant, but not especially high correlations between the scales of PRs and CFQ. These show that the two questionnaires are not very similar; however the psychological situation they investigate is basically similar. What are these questionnaires' most important differences and similarities? First of all, these are related to item format and scaling: in the CFQ items are formulated as affirmations, which are to be evaluated according to their frequency, whereas PRs items ask participants to evaluate whether they are satisfied with an aspect or not. Secondly, there is the area of content: the two questionnaires are not identical. Most content of PRs that measures pupils' cooperation correspond to the CFQ items of the Support and Cooperation scale, and only some aspects involve other scales of the CFQ. Trust scale content is less similar to PRs. On the PRs and other scales created for measuring friendly relations in class there is no separation to friendly relations in school and out of school with their classmates.

The internal consistency of all CFQ scales can be said to be satisfactory from the point of view of psychometric theory. The test-retest reliability index for all scales and for the entire questionnaire can also be regarded as good and very good, except for the Lack of Hostility scale, where scores from the first administration correlated only moderately with scores from the second ( $r = .51, p < .01$ ). This can partly be explained by scale content, because hostility in this age group may depend on context, and the two week period between the two administrations may have been too long. On the other hand, the sample

could also have affected test-retest reliability, because it is small ( $n = 32$ ) and consists of only two classes in different schools.

Further work with the newly created CFQ is possible in several areas. It would be helpful to carry out confirmatory factor analyses based on data from a larger and more representative sample than in this study. Additionally, in this research the item analysis and factor analysis did not take gender into account. But it is very important to examine possible gender differences in order to make the Questionnaire equally useful for working with both boys and girls. In further research it would be preferable to examine divergent validity and predictive validity too, and to test convergent validity using special scales, for example, the Hostility and Trust scales. It would be preferable to attempt to verify test-retest reliability in a more representative sample.

The main aim of this work – to create a reliable and valid CFQ, whose psychometric parameters satisfy psychometric theory's general criteria – has been met. This questionnaire can be used for investigation of friendly relationships in a class at the adolescent age (from 11 till 16 years as after 16 years display of friendly relations varies). The CFQ is simple to use – it is not time-consuming (it takes no more than 10 minutes to fill out), it can be administered in a group, and the results are easy to score. The CFQ scores of all classmates could provide useful information about the climate in class for school psychologists and teachers and could help them to make decisions about streamlining pedagogical work with classes, whether there are problems or not.

## References

- Aikins, J. W., Bierman, K. L., & Parker, J. G. (2005). Navigating the transition to junior high school: the influence of pre-transition friendship and self-system characteristics. *Social Development, 14*(1), 42–60.
- Aldridge, J. M., Fraser, B. J., & Huang, T-Ch. I. (1999). Investigating classroom environment in Taiwan and Australia with multiple research methods. *Journal of Educational Research, 93*(1), 48–61.
- Cillessen, A. N. H., Jiang, X. L., West, T. V., & Laszkowski, D. K. (2005). Predictors of dyadic friendship quality in adolescence. *International Journal of Behavioral Development, 29*(2), 165–172.
- Corsini, R. J. (Ed.). (1999). *The dictionary of psychology*, Philadelphia: Brunner/Mazel.
- Cronbach, L. J. (1984). *Essentials of psychological testing* (4th ed.). New York: Harper & Row.
- Crocker, L., & Algina, J. (1986). *Introduction to classical and modern test theory*. Belmont, CA: Wadsworth.
- Crosnoe, R., & Needham, B. (2004). Holism, contextual variability, and study of friendships in adolescent development. *Child Development, 75*(1), 264–279.
- Hamm, J. V., & Faircloth, B. S. (2005). The role of friendship in adolescents' sense of school belonging. *New Directions for Child and Adolescent Development, No.107*, 61–78.
- Heiman, T. (2000). Friendship quality among children in three educational settings. *Journal of Intellectual & Developmental Disability, 25*(1), 1–12.

- Hunter, S. C., Boyle, J. M. E., & Warden, D. (2006). Long-term stability and reliability of scores on the peer-relations subscale of the Self-esteem Questionnaire. *Educational and Psychological Measurement*, 66(2), 331–341.
- International Test Commission Guidelines on Adapting Tests (2000). International Test Commission. <http://www.intestcom.org/Guidelines/test+adaptation.php>. Extracted on 2007.12.05.
- Jones, D. C., & Newman, J. B. (2005). A three-factor model of teasing: the influence of friendship, gender, and topic on expected emotional reactions to teasing during early adolescence. *Social Development*, 14(3), 421–439.
- Kline, P. (2000). *The handbook of psychological testing* (2nd ed.). London: Routledge.
- Kutnick, P., & Kington, A. (2005). Children's friendships and learning in school: Cognitive enhancement through social interaction? *British Journal of Educational Psychology*, 75(4), 521–538.
- Lansford, J. E. Criss, M. M., Pettit, G. S., Dodge, K. A., & Bates, J. E. (2003). Friendship quality, peer group, affiliation, peer antisocial behavior as moderators of the link between negative parenting and adolescent externalizing behavior. *Journal of Research on Adolescence*, 13(2), 161–184.
- Mendelson, M. J., & Aboud, F. E. (1999). Measuring friendship quality in late adolescents and young adults; McGill Friendship Questionnaires. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 31(2), 130–132.
- Pullin, F., & Boivin, M. (2000). The role of proactive and reactive aggression in the formation and development of boys' friendship. *Developmental Psychology*, 36 (2), 233–241.
- Raščevska, M. (2005). *Psiholoģisko testu un aptauju konstruēšana un adaptācija*. (Psychological test construction and adaptation). Riga: RaKa.
- Sachkova, M. E. (2006). Statusnīje otnosenija v podrostkovich uchenicheskūh gruppah (*Status relations in adolescent student's groups*). *Voprosy psihologii*, 4, 58–63.
- Standards for Educational and Psychological Testing (1985). American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. Washington DC: American Psychological Association.
- Turilova-Miščenko, T. (2007). Aptaujas par draudzīgām attiecībām klasē konstruēšana (Classmates' Friendship Questionnaire development). Unpublished material, University of Latvia.

## APPENDIX

Aptauja par draudzīgām attiecībām klasē<sup>1</sup>

Šifrs \_\_\_\_\_ Skola \_\_\_\_\_ Dzimums \_\_\_\_\_  
 Vecums \_\_\_\_\_ (gados) Klase \_\_\_\_\_

**Instrukcija:** Lūdzu, novērtē, cik bieži norādītās situācijas notika tavā klasē pēdēja pusgada laikā, un ieliec krustiņu tajā ailē, kas vislabāk raksturo attiecīgās situācijas biežumu (*nekad, reti, vidēji bieži, bieži, vienmēr*). Esi uzmanīgs un neizlaid nevienu situāciju!

		Nekad	Reti	Vidēji bieži	Bieži	Vienmēr	Situācija nebija
1	Es esmu lūdzis palīdzību no saviem klases biedriem.						
2	Klases biedri ir bijuši pie manis ciemos.						
3	Es esmu uzticējies savus noslēpumus klases biedriem.						
4	Es esmu apsūkājies savus klases biedrus.						
5	Es ar klases biedriem pārrunāju skolas lietas.						
6	Es ar klases biedriem esmu apspriedis savas personīgas problēmas (notikumus ģimenē, savas neveiksmes u.c.).						
7	Klases biedri ir izteikušies aizskaroši par manu izskatu.						
8	Es esmu ciemojies pie klases biedriem.						
9	Es esmu palāvējis uz klases biedru palīdzību mācību vai citu grūtību gadījumos.						
10	Klases biedri mani ir apsūkājuši.						
11	Es esmu speciāli rīkojis tikšanos ar saviem klases biedriem vasaras brīvlaikā.						
12	Es ar klases biedriem esmu apspriedis savas mīlas lietas.						
13	Es esmu ķircinājis savus klases biedrus.						
14	Es esmu aicinājis savus klases biedrus pie sevis uz dzimšanas dienu.						
15	Es esmu aizstāvējis savus klases biedrus no citu apvainojumiem (piem., skolotāju, skolēnu utt.).						
16	Starpbrīžus pavadu vienatnē.						
17	Klases biedri mani ir izvēlējušies darbam pāri mācību uzdevuma izpildei.						
18	Es esmu gājis uz kino ar saviem klases biedriem.						
19	Es esmu konfliktējis ar saviem klases biedriem.						
20	Es esmu uzticējies saviem klases biedriem savas problēmas.						
21	Es esmu piedalījies klases vakaros.						
22	Es esmu veicis kādu uzdevumu pāri ar lielāko daļu klases biedru.						
23	Atsevišķi klasesbiedri ignorē mani.						
24	Es esmu uzticējies savas pārdomas par dzīves jautājumiem klases biedriem.						
25	Es tiekos ar klases biedriem vasaras brīvdienās.						
26	Mani ir aicinājuši klases biedri uz savām dzimšanas dienām.						

**Note:** If you like to use CFRQ for your researches, please write to Tatjana Turilova-Miscenko, e-mail: tatjana.turilova@inbox.lv

## REPORTS WITH IMPLICATIONS FOR PRACTICE

### Counselling migrants: An “internal” approach

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With substantial movement of people into and out of the Baltic states now occurring, migration is becoming an issue of major importance. Aspects of this phenomenon that need to be looked at by practising psychologists include the process of making the decision to emigrate, adjusting in the new country and, for some, coping with returning home as a “failure” after having failed to settle in the new home. This report looks at psychological aspects of migration, arguing that an *internal* understanding of the process is needed, whereas the typical focus is on classical economic, demographic or sociological push-pull factors. Knowledge of these internal factors makes it possible to counsel potential and actual migrants more effectively.

**Keywords:** migrants, adjustment, personality, counselling

#### Case studies

A German woman arrives in Australia and quickly discovers that employment in her profession is difficult to obtain in the city to which she has migrated. She moves to a rural area, rents a small house near the beach, keeps chickens, grows her own vegetables, and lives a bucolic life-style. After two years she loves it in Australia, and sees herself as living a dream life of independence and self-reliance. She has already developed a circle of friends, and anticipates improving her gardening and marketing skills until she can sell enough produce to sustain her life-style without dipping any further into her savings.

At about the same time, a printer arrives in Australia from Germany. The next day he starts work at a substantial salary by Australian standards, because specialists with his qualifications are hard to find. He rents a pleasant house in the suburbs, and the children start school. After a few weeks he leaves Australia and returns to Germany, facing the prospect of financial loss and the humiliation of admitting that he failed. When asked about his dissatisfaction with Australia he explains that the printing machinery in the firm that hired him would be found only in a museum in Germany and that it is an insult to expect a German master craftsman to work under such conditions.

The apparent perverseness of happiness or unhappiness in a foreign land is brought out in a particularly compelling way in a third anecdote taken from comments recorded by a young woman in her diary after emigrating to Australia:

I looked out of my kitchen window into the back yard. The sky was blue, without a cloud, the sun was shining, as it does every day, and the weather was warm. I thought of Hamburg. There the sky would be grey, it would be cold and it would

be raining, as on most days. The people there will be hurrying to get out of the cold, while I stand here in the sun. I howled for hours, and longed to be back in the rain!

What makes immigrants happy, then, if it not a nice house, a well-paid job, and pleasant weather?

### **How do people conceptualise their own migration?**

The case studies of the market gardener and the printer (see above) demonstrate a sharp contrast: One person was unemployed and lived in relatively primitive circumstances, yet was happy. The other had a well paid job and a desirable place to live, but was unhappy. This situation is difficult to explain in conventional analyses of migration. Since Ravenstein (1885) first formulated the “laws of migration” it has been assumed that people emigrate *from* one country because they are experiencing unfavourable circumstances there (such as poverty, hunger, war, pestilence, lack of political freedom, religious intolerance, etc), and go *to* another because they anticipate being able to live a better life there. “Better” is understood in material terms such as freedom, employment, housing, education for the children, even better weather. It is assumed that the migrants will be happy if their expectations are met; if they are not, the people are thought to be justifiably unhappy.

Even social science research on migration has been dominated by economic, demographic, sociological and anthropological approaches. Classical studies such as Thomas and Znaniecki (1922) and Wirth (1928) reflect this tendency and, 70 years after Ravenstein, Heberle (1955) was forced to conclude that ways of looking at migration had not advanced beyond the 1890s. Jacobs and Koepfel (1974) and Pryor (1981) continued the same complaint, arguing that the personality of the migrant is hardly considered in social science research on the phenomenon. Even reports that at least considered the role of the individual psyche in migration (e.g., De Jong, Abad, Arnold, Carino, Fawcett and Gardner, 1983; Hechter and Friedman, 1984) concluded that migration is mainly triggered by external deprivations, and that the subjective aspects are limited to a desire to do better in life, “better” being understood in objective terms (job prospects, accommodation, weather, education, etc). Migration is thus regarded as based on concrete profit and loss, the role of the individual being seen as largely confined to determining what is a profit and what a loss, and assessing whether the balance is positive or negative.

Such an approach fails to take adequate account of the crucial factor in migration—*the personality of the individual migrant*. Lütke (1989) pleaded for an *internal* approach to understanding the behaviour of migrants (i.e., one focused on what happens in their minds) instead of an *external* approach (focused on conditions in the external environment), and drew attention to its potential usefulness in assisting migrants to cope with the massive uncertainties involved in making the decision to leave the homeland and the dramatic changes involved in establishing themselves in a new one. In the present study such an internal approach was adopted in order to examine the question asked above: What makes migrants happy?

## A string of paradoxes

In interviews in the Australian Immigration Centre, at that time in Cologne (see Lütke, 1989), would-be migrants who were asked why they wanted to emigrate from Germany to Australia initially focused on the “hit parade of reasons” receiving publicity in the German press at the time: fear of nuclear war, poor employment prospects, lack of housing, high interest rates, inflation, excessive bureaucracy, unsatisfactory education system, unpleasant weather, and the like, in Germany. How unrealistic these “reasons” were was shown by the fact that at the time unemployment was higher in Australia than in Germany, interest and inflation rates were higher, and Australian houses often seemed colder inside than outside to people accustomed to central heating. Many of the participants had never been unemployed in their lives, and lived in comfortable or even almost luxurious circumstances, but yet tried to understand their own situation in terms of issues like overcrowding, fear of unemployment, or inadequacy of housing.

In fact, since the Second World War, emigration from Germany to Australia has regularly been *lower* in times of economic hardship and *higher* when things were going well: The *Wirtschaftswunder* (economic miracle) of the 1960s, for instance, was accompanied by high rates of emigration. Such statistics (see Cropley, Becker and Lütke, 1986, for a summary)—accompanied by cases such as a self-employed millionaire who complained of fear of unemployment—led us to question our participants more deeply in a series of *in-depth interviews*, and what we discovered can be summarized in the words of a wealthy bakery owner from Bavaria: “You’ve got to have something sensible to tell the neighbours!” He pointed out that if he gave a feeling of *Fernweh* (a longing for somewhere else or “the image of elsewhere”) as his reason for wanting to emigrate, people would think that he was crazy, as would his wife, but if he said that he wanted to emigrate in order to escape from the stifling German bureaucracy, the tyranny of the trade unions, or the possibility of nuclear war, they would regard him as a clever, prudent and decisive analyst of world affairs. Thus, instead of saying what really drove him, he repeated the “rational” and “logical” reasons everyone was reading in *Spiegel*, *Hörzu*, *Bild der Frau*, and so on.

Cropley, Becker and Lütke (1986) concluded that reports on emigration in the popular press are an important factor that steers emigration. However, a comparison of the ebb and flow of visa applications to the US, Canadian, New Zealand, Australian and South African consulates in Germany with the volume of reports on migration in the German press showed an inverse relationship: Shortly *after* the volume of applications rose, the number of press reports rose, and vice versa. The increase in the number of press reports followed fluctuations in applications for visas: Thus, the press did not cause increased interest in emigration, but simply publicised, rationalised and legitimised trends that already existed (Cropley, Becker and Lütke, 1986). It did this by

- (a) precipitating *Torschlusspanik* (fear of being too late) among people already contemplating emigrating,
- (b) legitimising emigration as something all sensible people are doing for people who were already trying to make sense of their own interest in emigrating, or
- (c) providing a ready-made list of apparently sensible, even pressing reasons for emigrating that could be produced for the neighbours without embarrassment.

Analysis of in-depth interviews with visa applicants in the Australian Immigration Centre, at that time in Cologne, led us to conclude (Cropley and Lütthke, 1990) that the people tried to make sense of their own interest in emigrating in terms of four kinds of issue:

- *concrete factors* based on compelling real-life conditions, of which the most obvious would perhaps be genuine inability to find well-paid work;
- *social-desirability* (factors that make emigration seem sensible *to other people*);
- *dissonance-reduction* (factors that make emigration seem sensible *to the would-be migrants themselves*);
- *dynamic issues* (psychological states located deep in the personality, that in many cases are the real reason why people want to emigrate, although they are unable to articulate them).

The first kind of factor is by far the most commonly discussed in the media. The second and third kinds are widely talked about in initial conversations with migrants, although my argument here is that they are largely taken over from public discussions, especially in the media. However, in many cases, as the case studies above show, they play only a minor role in whether people feel happy or not. For many people, the fourth class of issues are decisive. However, they are unconscious, and are almost never discussed publicly. They only became visible when migrants are interviewed in depth, for instance by thematising with a multimillionaire the absurdity of him saying that he was afraid of unemployment or homelessness.

As their name implies, dynamic motives:

- are the result of a developmental process,
- can change with the passage of time,
- interact with other factors, and
- play a causal role in behaviour.

Examples of dynamic factors are the re-working and solving of conflicts experienced in power relationships (for instance with parents), achieving psychological reconciliation with the experience of loss or separation (experienced through, for instance, uprooting or death), coping with doubts about one's own competence, overcoming fear of the unknown, and so on. Many migrants I have worked with revealed in in-depth interviews that migration was, in fact, an attempt to deal with such issues, although they had hidden this behind a veneer of social-desirability and dissonance-reduction, even from themselves. The woman who cried when she thought of the cold wet weather in Hamburg, for instance, telephoned her mother in Germany almost every day, and returned to Germany twice, each time re-emigrating to Australia. Her marriage broke up and she was separated from her children, who refused to leave Australia the second time. She could not make sense of her own behaviour, as she had a job, a house, a comfortable life, and so, on, but felt lonely and empty. She needed help to see that her problem was connected with the process of detachment and individuation, and that she had initially been attracted to emigration as a way of working out her conflict between the desire to cling to her mother and the feeling that she should be mature enough to live her own life.



At the risk of over-simplifying or resorting to stereotypes, in-depth interviews revealed the existence of a personality continuum related to migration behaviour. At one pole are individuals who are eager to “let go” of people and places, seek independence, are interested in acquiring new skills and knowledge, and are self-reliant—I refer to such people as “emigration-prone”. At the other extreme are those who cling to people and places, are dependent on others, are unwilling to change what has always worked well until now, and are likely to seek or even expect help from others—such people are “stay-at-homes”. The extremes can also be defined negatively as involving a “wild west mentality” at one end, a “clinging vine” at the other. Most people, of course, lie somewhere in between the two extremes.

The psychiatrist Michael Balint (1959) had already identified a similar bi-polar personality dimension that is readily observable in situations involving exposure to uncertainty, risk, and the like (in which I include migration). He referred to it as involving the *philobatic* personality, on the one hand, the *oknophilic* personality on the other. Taking a clinical view, he saw both extremes of this dimension as forms of psychopathology: On the one hand, the illusion of being able to conquer anything on one’s own (philobatism), on the other, helpless clinging in stress situations (oknophilia). My research has led me to identify two similar poles between which the people I have studied (including people uninterested in migration) could be placed on a continuum: To take four prototypical situations as examples:

- in relationships with others, some people cling tightly and cannot bear separation, whereas those at the other extreme can let go at any time, and feel certain that they will find replacements;
- in anxiety-invoking situations, some people experience fear and try to escape, whereas others are pleasantly excited and deliberately seek such situations;
- when confronted with new problems, some people try to master them with old knowledge and skills, expecting to get by by re-applying what they already know and can do, whereas others seek to acquire new knowledge and skills;
- when there are discrepancies between what things are like and how people would like them to be, some people trust that someone else will fix things up, whereas others feel a challenge to master the situation on their own, and expect to do so.

### **Practical implications**

Some migrants are unsuccessful. (“Unsuccessful” is used here mainly in a psychological sense—a person who intended to settle there does not feel content in the new country. My intention is not to express an opinion about the personal worth of unhappy migrants.) According to data from the Australian Government department responsible for immigration, in that country perhaps 20% are so unsuccessful that they return to the homeland in the first two years. Karnīte (2006) reports estimates that about one-third of Latvian emigrants will eventually return. In the case of about 200 German migrants whom I followed up in a longitudinal study, the return rate appears to have been around the 20% already cited. Unsuccessful migration entails high costs for the receiving society: The most obvious are the cost of false positives (people who are selected but do not settle

down), such as the “wasted” costs of the selection process (large staffs in places such as Berlin), costs of helping people settle in the receiving society, costs of schooling children who do not remain, costs of treatment of personal problems, and so on. However, there are also costs associated with false negatives (people who would have been successful, but were rejected and thus never given a chance). Especially in times of growing labour shortages, selecting people who return to the homeland and rejecting people who would have made highly successful immigrants presents a problem.

However, the costs to the people involved are of greater interest. These may be both financial (loss of pension entitlements, selling off of a family home or business that cannot be replaced, sacrifice of career prospects, consumption of savings in the attempt to get established in the receiving society), and also personal (e.g., loneliness, bitterness, shame, self-doubt, a feeling of having betrayed the homeland, clashes with a spouse who feels happy in the new country, fear of alienation from one’s own children). Problems in the receiving society often manifest themselves in antisocial behaviour (e.g., excessive drinking, aggressiveness, marital strife), in psychological disturbances (e.g., apathy, anxiety attacks, depression, paranoid delusions), or in psychosomatic disturbances (e.g., headache, stomach ulcers).

A practical task for psychologists is to help people avoid such problems through counselling. Attempts to provide counselling already exist. To take Germany as an example, *Das diakonische Werk* (Lutheran Church), *Das Rafaelswerk* (Catholic Church) and *Das deutsche rote Kreuz* (German Red Cross) all maintain counselling centres for would-be migrants. The German Federal Government supports the work of about 40 such centres, some of them operating within the framework of the EU project EURES (European Employment Service) by means of financial support, provision of in-service training for counsellors, publication of information booklets, etc. However, the work of such centres is largely confined to providing information about the weather, employment prospects, housing quality, interest rates, consumer prices, and the like, i.e., *external* aspects.

Psychologically-oriented counselling based on emigration-proneness would not be a matter of selecting “suitable” people and rejecting the “unsuitable”, but of

- (a) giving people working through the decision to emigrate concepts with which to break through the faced of hit-parade factors so that they can examine their own dynamic motivation such as re-working old separations, breaking away from stifling circumstances, testing themselves, starting anew, or living out phantasies of freedom, or indicating to particular individuals specific areas in which they are likely to experience special difficulties;
- (b) during residence in the receiving society helping migrants cope with dissatisfaction and unhappiness, for instance by identifying the dynamics of a diffuse feeling of loneliness and despair, or of not being valued in the receiving society, and helping them understand behaviour such as phoning home several times a week or constantly wanting to move to a new city or state, and
- (c) after an “unsuccessful” return, helping disappointed, even ashamed “failed” migrants gain insight into their situation.

Cropley and Lüthke (1990) concluded that counselling along these lines makes sense to most migrants and is readily accepted by them, because upon reflection it seems to fit

their situation. It is necessary, however, to probe beneath the rationalizations of the hit-parade statements. My experience is that this can be done effectively in group counselling, because migrants and returnees feel that they are among like-minded people who have been through the same experiences and are trying to cope with similar problems.

Just how long unresolved problems of, for instance, detachment from people and places can continue to exert their effects is demonstrated by a case reported in the obituary section of the Australian newspaper, the *Adelaide Advertiser*, on October 22, 2005 (p. 82): In the 1930s a Finnish sailor on a ship that had rounded Cape Horn under sail jumped ship in Port Lincoln, married and had five children. In 1980, in his 70s and after close to 50 years in South Australia, he was drawn back to Finland by the urge to “go home to die.” He abandoned his wife, children and grandchildren, and returned to Finland, but unfortunately (or fortunately, depending on the way you look at it), did not immediately get his wish to die in the homeland, instead surviving for a further 25 years and becoming a minor celebrity in Finland as a representative of the vanishing generation of old seadogs. He never resolved his problems of detachment and re-attachment, despite nearly 50 years in Australia.

## References

- Balint, M. (1959). *Thrills and regression*. New York: International Universities Press.
- Cropley, A. J. (1986). Migrants and environment: Some psychological considerations. *Environment*, 18, 6–20.
- Cropley, A. J., Becker, K., & Lütke, F. (1986). Forming the decision to emigrate to Australia: Some recent German experiences. *Australian Journal of Politics and History*, 32, 52–62.
- Cropley, A. J. & Lütke, F. (1989). Motive zur Auswanderung aus psychologischer Sicht: Empirische Befunde und theoretische Überlegungen [Motives for emigrating from a psychological standpoint: Empirical findings and theoretical considerations]. *Zeitschrift für Kulturaustausch* [Journal for Cultural Exchange], 39, 363–368.
- Cropley, A. J. & Lütke, F. (1994). Psychologische Aspekte der Adaptation von Zuwanderern [Psychological aspects of the adaptation of immigrants]. In A. J. Cropley, Ruddat, H., Dehn, D., & Lucassen, S. (Eds.), *Probleme der Zuwanderung* [Problems of immigration], vol 1, (pp. 19–32). Göttingen: Verlag für Angewandte Psychologie.
- Cropley, A. J. & Luthke, M. F. (1990). Decision making and adjustment difficulties: A counselling strategy for working with migrants. *Australian Psychologist*, 25, 147–164.
- De Jong, G. F., Abad, R. G., Arnold, F., Carino, B. V., Fawcett, J. T., & Gardner, R. W. (1983). International and internal migration decision making: A value-expectancy based analytical framework of intentions to move from a rural Philippine province. *International Migration Review*, 17, 470–484.
- Heberle, R. (1955). Theorie der Wanderung [A theory of migration]. *Schmollers Jahrbuch* [Schmoller's Yearbook], 75, 1–23.
- Hechter, M., & Freedman, D. (1984). Does rational choice theory suffice? Response to Adam. *International Migration Review*, 18, 381–388.
- Jacobs, K. W., & Koeppe, J. C. (1974). Psychological correlates of the mobility decision. *Bulletin of the Psychonomic Society*, 3(5A), 330–332.

- Karnīte, R. (2005). Emigration of Latvian workers continues to increase. <http://www.eurofound.europa.eu/eiro/2005/12/feature/lv0512104f.htm> (Retrieved on December 17, 2008.)
- Lüthke, F. (1989). *Psychologie der Auswanderung* [Psychology of emigration], Weinheim: Deutscher Studien Verlag.
- Pryor, R. J. (1981). Integrating international and internal migration theories. In M. M. Kritz, C. B. Keely, and S. M. Tomasi (Eds.), *Global trends in migration* (pp.110–129). New York: Center for Migration Studies.
- Ravenstein, E. G. (1885). The laws of migration. *Journal of the Royal Statistical Society*, 48, 167–235.
- Söderköping Organization (2007). 80,000 persons may emigrate from Latvia. <http://soderkoping.org.ua/page12994.html> (Retrieved on December 17, 2008).
- Thomas, W. I. and Znaniecki, F. (1922). *The Polish peasant in Europe and America*, New York: Knopf.
- Pryor, R. J. (1981). Integrating international and internal migration theories. In M. M. Kritz, C. B. Keely, and S. M. Tomasi (Eds.), *Global trends in migration* (pp.110–129). New York: Center for Migration Studies.
- Ravenstein, E. G. (1885). The laws of migration. *Journal of the Royal Statistical Society*, 48, 167–235.
- Thomas, W. I. & Znaniecki, F. (1922). *The Polish peasant in Europe and America*, New York: Knopf.
- Wirth, L. (1997). *The ghetto*. Chicago: University of Chicago Press.

# Challenges and Advances in the Treatment and Prevention of Eating Disorders in Adolescence

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This article aims to highlight both advances and challenges in the treatment and prevention of eating disorders in adolescents. It starts with a discussion of diagnostic issues, continues with a delineation of treatment challenges, and ends with a description of prevention work with adolescents.

**Keywords:** eating disorders, treatment, prevention.

## Introduction

Community based epidemiological studies of disordered eating patterns reveal a continuum of disruptions in women's eating patterns and body dissatisfaction (Fairburn & Beglin, 1990; Neumark-Sztainer, 2005; Shisslak, Crago, & Estes, 1995). This continuum ranges from negative body image and body weight concerns, through disordered eating patterns, to clinical eating disorders. In North America, about 70% of high school girls in North America report dieting to lose weight despite being within the normal weight range (Pike & Striegel-Moore, 1997). In a large scale study in the US, more than half of adolescent girls were found to use unhealthy weight control behaviors during the previous year (Neumark-Sztainer, Story, Hannan, Perry, & Irving, 2002). A community study in Britain found bingeing to occur in a third of all women, with weekly bingeing in about 15% of them (Fairburn & Belgin, 1990). Purging behaviors, such as vomiting for the sake of weight loss or laxatives use, are found in about 8-15% of adolescent and young women (Fairburn & Belgin, 1990; Phelps, Andrea, Rizzo, Honston, & Main, 1993). Bingeing and purging two times or more a week are found in about 2-3% of young women (Fairburn & Belgin, 1990). At all levels of difficulty, adolescent girls experience far more weight concerns and related eating problems than do boys (Hoek & van Hoeken, 2003; Rolls, Federoff, & Guthrie, 1991).

Morbidity is associated with all levels of disruption on the continuum. Body dissatisfaction and disordered eating patterns have been found to be correlated with self esteem difficulties and to predict the development of depression and eating disorders (Stice, Hayward, Cameron, Killen, & Taylor, 2000). The more severe end of the spectrum of disordered eating behaviors found in 15% of adolescent girls has been found to be associated with significant physical, psychological and social problems (Shisslak et al., 1995). In a study of adverse consequences of disordered eating patterns compared to those of substance abuse, women reported higher or comparable adverse consequences to eating disordered behaviors (Piran, Robinson, & Cormier, 2007). Clinical level eating disorders have serious medical, social, and psychological consequences with the

mortality rate for anorexia nervosa being 12 times the rate for young women in the general population (Becker, Grinspoon, Klibanski, & Herzog, 1999).

It is well established that prompt intervention with eating disorders relates to better prognosis and to reduced morbidity (Katzman, 1999; Keel, Mitchell, Miller, Davis, & Crow, 1999). However, establishing diagnosis in adolescence is challenging. The North American classification system of psychiatric disorders, the DSM-IV, identifies two syndromes, and a third category (American Psychiatric Association, 1994). Anorexia Nervosa (AN) has two subtypes, restricting and binge-eating/purging type and occurs in about .5-1% of girls and women in the age range of 16-25 (Hsu, 1996). Key features of this diagnosis involve the pursuit of thinness, failure to maintain minimum weight, fear of weight gain, body image disturbance, and amenorrhea. Bulimia Nervosa (BN) involves recurrent episodes of binge eating (at least twice weekly), purging behaviors, and an emphasis on and dissatisfaction with body weight and shape. The DSM-IV describes two variants of BN: a purging and a nonpurging subtype. Bulimia nervosa occurs in about 2%-5% of girls and women in the age range of 16-25 (Crowther, Wolf, & Sherwood, 1992; Hsu, 1996).

Utilizing this diagnostic scheme to assess adolescents is challenging. First, it may be impossible to create validated dichotomous diagnostic categories within the phenomenological continuum found repeatedly in community-based studies (Piran, 2001a; Striegel-Moore & Marcus, 1995). Some of the 'subclinical' syndromes may overlap with, and be as persistent and associated with a similar degree of morbidity, as AN or BN (Bunnell, Shenker, Nussbaum, Jacobson, & Cooper, 1990; Clinton & Glant, 1992). Second, the adult clinical criteria may not apply to, especially early, adolescents (Lask & Bryant-Waugh, 2000). For example, the amenorrhea criterion may not be relevant to this group, as menses are absent or irregular in this age group. Another example relates to the criterion of weight. Adolescents may not present with weight loss but, rather, with a failure to gain weight, and the criteria of weighing over 85% of expected weight may be challenging to assess in early adolescence. Further, adolescents may not engage in bingeing and purging in the same frequency as adults. For this reason, most adolescents in North America are assigned with the DSM-IV category of Eating Disorder Not Otherwise Specified (EDNOS), which represents diverse syndromes and ranges of severity. Moreover, there are no standardized instruments for collecting data on the adolescent's behaviors from significant others, such as family members (Pike, 2005). This information is vital in adolescents who deny their illness. Considering the severe health consequences for young adolescents with eating disorders (Katzman, 2005), in particular, cardiologic complications, alterations in linear growth, osteoporosis, and structural brain alterations, it is crucial to conduct a comprehensive assessment and intervene with adolescents who engage with disordered eating patterns and extreme weight control strategies promptly and even when they do not fulfill all criteria for AN or BN.

### **Treatment of Adolescents with Eating Disorders**

Treatment of adolescents with eating disorders requires an interdisciplinary team approach which includes health and mental health professionals that have expertise in dealing with adolescents who have eating disorders (Katzman, 2005; Lask & Bryant-Waugh, 2000). Medical management includes a thorough medical assessment and

follow-up appointments, and a plan for nutritional rehabilitation. Nutritional management involves support in the process of re-feeding and adolescent re-education about nutritional needs and healthy eating patterns. In addition, both family and individual therapy are needed to support the adolescent in the process of healing from an eating disorder. Group therapy may be helpful as well. Individual outpatient therapy without the support and follow up of a multidisciplinary team may not result in positive outcome (Robin, Siegel, Koepke, Moye & Tice, 1994).

Adolescents with eating disorders may be assessed as requiring different levels of intensity in their treatment program. Residential treatment provides a fully structured and contained environment for a process of re-feeding and weight gain in cases of severe starvation, severe patterns of bingeing and purging, severe medical complications, comorbid substance abuse or self harm behavior (Piran & Kaplan, 1991; Zipfel et al., 2002). In addition, residential treatment may be required in situations where there is a lack of safety at home or a familial crisis (Zipfel et al., 2002). Inpatient settings typically offer, in addition to re-feeding, engagement in different treatment modalities.

Day hospitalization treatment settings involve attendance in the program most days of the week and the provision of at least two meals per day at the treatment settings (for a review of adult treatment settings see Zipfel et al., 2002). Most of the treatment in Day Hospital treatment settings occurs in groups. Advantages in day hospital treatment relate to the lower cost compared with inpatient settings, the opportunity to practice strategies learned in treatment, and the maintenance of at least some social roles and of family contact. The day hospital model, developed initially for adults (Piran & Kaplan, 1990) has been adapted to adolescents (Katzman & Pinhas, 2005). Like the adult programs, day hospitalization programs for adolescents use a multidisciplinary approach involving medical, nutritional, group therapy, and family therapy, including multi-family group therapy (Dare & Eisler, 2000; Faith, Pinhas, Schmelefske, & Bryden, 2003). However, the adolescent day hospital programs focus on work with parents, helping them manage their child's eating behavior at home.

An outpatient treatment of adolescents with eating disorders should be multidisciplinary. It is widely accepted that family therapy is an essential component of the treatment of adolescents with eating disorders. Studies have suggested a therapeutic advantage of family therapy over individual therapy in the treatment of adolescents (Russell, Szmukler, & Dare, & Eisler, 1987), with gains maintained at a five year follow up (Eisler et al., 1997). Family therapy may be conducted with a single family. An example of this approach is the Maudsley model in which the parents are encouraged to take responsibility for the refeeding process (Lock & Le Grange, 2005). The treatment includes an observation of a family meal and devising strategies by the family to enhance eating by the adolescent. Later on, adolescents resume control over their eating. This approach has been found effective in several outcome studies (Lock & Le Grange, 2005).

The multi-family therapy is a newer model of family treatment of adolescents with eating disorders which is most often practiced as part of an intensive outpatient program, such as a day hospital program. In this treatment, up to six families are involved together in activities for one whole week, followed by intensive sessions during the following year (Dare & Eisler, 2000; Scholz & Asen, 2001). The therapy is provided through

varied formats, including multi-family meals, parent and adolescent groups. By including a number of families, parents feel less marginalized and have the opportunity to both observe and support other parents. In addition to supporting parents in managing family meals, the different sessions address emotional and relational challenges in families. This therapy approach has been studied and found effective (Dare & Eisler, 2000; Scholz & Asen, 2001).

In situations of severe familial dysfunction, when separation between the parents and adolescent in the process of therapy is advocated, parents may be seen without the adolescent. In these situations, the parents will still be supported in addressing the eating behavior of the adolescent. The adolescent then is involved in own therapy. This method of work with families is comparable in outcome to family therapy (Le Grange, Eisler, Dare, & Russell, 1992; Robin et al., 1994).

There is little research data about the effective of individual therapy with adolescents (Robin, Gilroy, & Dennis, 1998). Robin et al. (1994) found the dynamic approach which addresses issues of autonomy, relational and developmental challenges, as well as emotional experiences, to be an effective method of treatment. Cognitive behavioral treatment has been effective in treating mixed samples of adults and older adolescents with bulimia nervosa (Fairburn & Harrison, 2003). Interpersonal psychotherapy has been similarly found to be an effective treatment method of bulimia nervosa in mixed samples of adults and older adolescents (Fairburn et al., 1995).

### **Prevention Approaches to Eating Disorders in Adolescence**

Treatment for eating disorders is difficult and expensive, and recovery in many centers is reported to be achieved in about half of patients (Johnson, Tsoh, & Varnado, 1996). Further, access to services, especially in large teaching and research hospitals, is often limited to more privileged, for example White or higher social class, members of the community (Striegel-Moore & Smolak, 1996). Indeed, studies have shown that only a very small minority of women in the community who would be clinically diagnosed with either anorexia or bulimia ever seeks professional help (Welch & Fairburn, 1994). This underscores the importance of prevention interventions.

Primary prevention involves lowering the incidence of new cases through minimizing risk and enhancing protective factors. Primary prevention interventions can target large populations (universal prevention) or address the needs of a smaller population at risk for the development of the target problems due to varied bio/psycho/social factors (selective prevention) (Piran, 2005).

In examining trends in the accumulating body of research in the area of primary prevention, it is important to examine programs geared to early adolescence and later adolescence, as programs may utilize different components related to the psychological and cognitive shifts that occur during adolescence. Programs developed for early adolescents that aimed to inform early adolescents about healthy nutrition and the natural diversity of weights (e.g., Smolak & Levine, 2001), healthy development at puberty and cultural shifts in norms of appearance (e.g., Steiner-Adair et al., 2002), and media literacy skills (e.g., Neumark-Sztainer, Sherwood, Collier, & Hannan, 2000), invariably find a change in participants' level of knowledge. However, these changes in knowledge do



not necessarily lead to changes in attitudes or behaviors which are essential for the goal of primary prevention (Piran, 2005). Attitudinal changes are often found in the internalization of thinness, while body dissatisfaction is relatively resistant to change. Media literacy programs, for example, can lead to changes in the internalization of thinness (e.g., Neumark-Sztainer et al., 2000).

Sustained changes in behavior are harder to achieve in primary prevention with early adolescents. Trends in research findings to date suggest that more effective primary prevention programs are comprehensive programs that enhance not only children's resistance skills, but also address the social environment of children. In particular, programs that aim to establish healthier and more supportive peer norms, such as reduce weight teasing, seem to lead to positive behavioral change (McVey, Lieberman, Voorberg, Wardrop, Blackmore, 2003; Piran, 2000, 2001b; Steiner-Adair et al., 2002). Intervening with teachers and parents, for example, educating teachers regarding weight prejudice, can further enhance the effect of prevention programs (McVey et al., 2003; Piran, 2000, 2001, 2004). Another component that seems associated with a greater efficacy of primary prevention programs relates to the process of intervention. Specifically, an interactive, rather than a didactic, format of the prevention program is associated with more positive behavioral changes (Piran, 2005; Stice & Shaw, 2004). To date, there is no research evidence that may suggest that a specific theoretical perspective to prevention is associated with greater prevention gains (Levine & Piran, 2005; Piran, 2005). One theoretical approach that has informed prevention program is Bandura's social cognitive theory (e.g., programs developed by Killen et al., 1993 and Stewart, Carter, Drinkwater, Hainsworth, & Fairburn, 2001). Another approach emphasizes non-specific vulnerability-stressor model without an emphasis on body weight and shape issues. (e.g., the program developed by O'Dea & Abraham, 2000 that focuses on enhancement of self esteem and coping strategies). A third approach is informed by critical social theory and aims at equipping youth with a critical stance towards culture through an examination of the way social structures shape individuals' daily experiences. These programs have emphasized media literacy (Neumark-Sztainer et al., 2000) or a more general critical examination of culture (Piran, 2001b). Prevention programs may be enriched by the integration of elements from these three perspectives.

Primary prevention work with high school students has been relatively limited. Nonetheless, the few studies conducted to date suggest that students at this phase are keen to discuss maturational challenges (Buddedberg-Fischer, Klaghofer, Gnam, & Buddeberg, 1998; Santonastaso et al., 1999). It is likely that peer group interventions will be powerful at this phase; however, there is only one study that utilized a peer group format in high school to date (Piran, 2000, 2001). Interestingly, a study that delivered psychoeducational information to high school students about the futility of dieting and the usefulness of a healthy life style was able to reduce unhealthy dieting while not affecting an attitudinal change in the level of body dissatisfaction (Neumark-Sztainer, Butler, & Palti, 1995). One reason is that, by high school, many adolescent girls are likely to be affected by body weight and shape preoccupation and, a smaller percent may already engage in unhealthy disordered eating patterns. Hence, secondary prevention work may be more relevant at this phase of development.

Secondary or targeted prevention refers to interventions with individuals who are at risk to developing a disorder due to the presence of clear precursors. Secondary prevention involves early identification and intervention to prevent the occurrence of full-blown problems (Piran, 2005). To date, there is limited research about secondary prevention work with high school students, while there is considerable information about secondary prevention interventions in universities. Research with university students suggests that intervening with students preoccupied with body weight and shape has a higher rate of success than primary preventions with adolescents (Piran, 2005). There are a number of reasons for this pattern. Students in distress may be more motivated to work towards the goals of the program. Further, secondary intervention strategies often use well studied approaches that have been utilized in clinical practice. Nonetheless, studies with university students suggest the usefulness of developing a critical perspective towards societal structures that reinforce the thin ideal (Kaminski & McNamara, 1996; Stice, Mazotti, Weibel, & Agras, 2000). It is, similarly, possible to utilize the developed critical skills of students in high school to enhance the resistance skills of high school students. If critical thinking about body weight and shape becomes normative for the high school setting, then a protective systemic factor is likely to lead to a more sustainable effect (Piran, 2001b).

## Conclusion

Eating disorders are associated with significant morbidity, in particular during the developmental phase of adolescence. While prompt identification of eating disorders is crucial for favorable prognosis, the assessment and diagnosis of children and early adolescents is particularly challenging and requires further study and the development of new assessment measures. Regarding treatment, new developments during the past two decades are promising. In particular, newer models of family interventions, such as the Maudsley model and the multi-family therapy, have been associated with positive outcome. Further, the application of the day hospitalization treatment model to adolescents provides an intensive approach to intervention while helping adolescents maintain at least some of their autonomy, social roles and relational connections. Regarding primary prevention, outcome research is starting to provide guidelines about the important components of intervening in multiple levels of the social environment, using interactive processes, and enhancing the critical skills of students.

## References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed., Text revision). Washington, DC: Author.
- Becker, A.E., Grinspoon, S.K., Klibanski, A., & Herzog, D.B.(1999). Eating disorders. *New England Journal of Medicine*, 340, 1092–1098.
- Bunnell, D. W., Shenker, I. R., Nussbaum, M. P., Jacobson, M. S., & Cooper, P. (1990). Subclinical versus formal eating disorders: Differentiating psychological features. *International Journal of Eating Disorders*, 9, 357–362.

- Buddenberg-Fische, B., Klaghofer, R., Gnam, G., & Buddeberg, C. (1998). Prevention of disturbed eating behavior: A prospective intervention study in 14- to 19-year old Swiss students. *Acta Psychiatrica Scandinavica*, 98, 146–155.
- Clinton, D. N., & Glant, R. (1992). The eating-disorders spectrum of DSM-III-R: Clinical features and psychological concomitant of 86 consecutive cases from a Swedish urban catchment area. *The Journal of Nervous and Mental Disease*, 180, 244–250.
- Crowther, J., Wolf, E. M., & Sherwood, N. E. (1992). Epidemiology of bulimia nervosa. In J. Crowther, D. L. Tennenbaum, S.E. Hobfoll, & M. A. P. Stephens (Eds.), *The etiology of bulimia nervosa: The individual and family context* (pp. 1–26). Washington, DC: Hemisphere/Taylor & Francis.
- Dare, C., & Eisler, I. (2000). A multi-family group day treatment programme for adolescent eating disorder. *European Eating Disorders Review*, 8, 4–18.
- Eisler, I., Dare, C., Russell, G.F., Szmulker, G., Le Grange, D., & Dodge, E. (1997). Family and individual therapy in anorexia nervosa: a five-year follow-up. *Archives of General Psychiatry*, 54, 1025.
- Welch, S. L., & Fairburn, C. G. (1994). Sexual abuse and bulimia nervosa: Three integrated case control comparisons. *American Journal of Psychiatry*, 151, 402–407.
- Fairburn, C. G., & Beglin, S. J. (1990). Studies of the epidemiology of bulimia nervosa. *American Journal of Psychiatry*, 147, 401–408.
- Fairburn, C. G., & Harrison, P. (2003). Eating disorders [seminar]. *The Lancet*, 361, 407–416.
- Fairburn, C. G., Norman, P. A., Welch, S. L., O'Connor, M. E., Doll, H., & Peveler, R. C. (1995). A prospective study of outcome in bulimia nervosa and the long-term effects of three psychological treatments. *Archives of General Psychiatry*, 52, 304–312.
- Faith, K., Pinhas, L., Schmelefske, J., & Bryden, P. (2003). Developing a feminist-informed model for decision making in the treatment of adolescent eating disorders. *Eating Disorders: The Journal of Treatment and Prevention*, 11, 305–315.
- Hoek, H. W., & van Hoeken, D. (2003). Review of the prevalence and incidence of eating disorders. *International Journal of Eating Disorders*, 34, 383–396.
- Hsu, L. K. G. (1996). Epidemiology of the eating disorders. In J. Yager (Ed.), *The Psychiatric Clinics of North America*, 19, 681–700.
- Johnson, W.G., Tsoh, J.Y., & Varnado, P.J. (1996). Eating disorders: Efficacy of pharmacological and psychological interventions. *Clinical Psychology Review*, 16, 457–478.
- Kaminski, P.L., & McNamara, K. (1996). A treatment for college women at risk for bulimia: A controlled evaluation. *Journal of Counselor Development*, 74, 288–294.
- Katzman, D. K. (1999). Prevention of medical complications in children and adolescents with eating disorders. In N. Piran, M. P. Levine, & C. Steiner-Adair (Eds.), *Preventing eating disorders: A handbook of interventions and special challenges* (pp. 304–318). Philadelphia, PA: Brunner/Mazel
- Katzman, D.K. (2005). Medical Complications in Adolescents with Anorexia Nervosa: A Review of the Literature. *International Journal of Eating Disorders*, 37, S52–S59.
- Katzman, D.K., & Pinhas, L.(2005). *Help for Eating Disorders: A Parent's Guide to Symptoms, Causes and Treatment*. Toronto: Robert Rose.
- Keel, P. K., Mitchell, J. E., Miller, K. B., Davis, T. L., & Crow, S. J. (1999). Long-term outcome of bulimia nervosa. *Archives of General Psychiatry*, 56, 63–69.

- Killen, J.D., Taylor, C.B., Hammer, L., Litt, I., Wilson, D.M., Rich, T., Simmonds, B., Kraemer, H., & Varady, A. (1993). An attempt to modify unhealthy eating attitudes and weight regulation practices of young adolescent girls. *International Journal of Eating Disorders*, 13, 349–384.
- Lask, B., & Bryant-Waugh, R. (Eds.). (2000). *Anorexia nervosa and related eating disorders in childhood and adolescence*. Hove: Psychology Press.
- Le Grange, D., Eisler, I., Dare, C., & Russell, G. F. M. (1992). Evaluation of family therapy in anorexia nervosa. *International Journal of Eating Disorders*, 12, 347–357.
- Levine, M.P., & Piran, N. (2005). Treatment and prevention of eating disorders in adolescence. *Handbook of Dysfunctional Behavior in Adolescence: Theory, Practice, and Prevention* (235–252). Kluwer/Academic Publishing.
- Lock, J., & le Grange, D. (2005). Family-based treatment of eating disorders. *International Journal of Eating Disorders*, 37, S64–S67.
- McVey, G.L., Lieberman, M., Voorberg, N., Wardrop, D., & Blackmore, E. (2003). School-based peer support groups: A new approach to the prevention of disordered eating. *Eating Disorders: The Journal of Treatment and Prevention*, 11, 169–186.
- Neumark-Sztainer, D. (2005). *“I’m, like, SO fat!”: Helping your teen make healthy choices about eating and exercise in a weight-obsessed world*. New York: The Guilford Press.
- Neumark-Sztainer, D., Story, M., Hannan, P. J., Perry, C. L., & Irving, L. M. (2002). Weight-related concerns and behaviors among overweight and non-overweight adolescents: Implications for preventing weight-related disorders. *Archives of Pediatrics and Adolescent Medicine*, 156, 171–178.
- Neumark-Sztainer, D., Sherwood, N., Collier, T., & Hannan, P.J. (2000). Primary prevention of disordered eating among pre-adolescent girls: Feasibility and short-term impact of a community-based intervention. *Journal of the American Dietetic Association*, 100, 1466–1473.
- Neumark-Sztainer, D., Butler, R., & Palti, H. (1995). Eating disturbances among adolescent girls: Evaluation of a school-based primary prevention program. *Journal of Nutrition Education*, 27, 24–30.
- O’Dea, J., & Abraham, S. (2000). Improving the body image, eating attitudes and behaviors of young and behaviors of young male and female adolescents: A new educational approach which focuses on self esteem. *International Journal of Eating Disorders*, 28, 43–57.
- Phelps, G. C., Andrea, R., Rizzo, F. G., Johnston, L., & Main, C. M. (1993). Prevalence of self-induced vomiting and laxative/medication abuse among female adolescents: A longitudinal study. *International Journal of Eating Disorders*, 14, 375–378.
- Pike, K.M. (2005). Assessment of anorexia nervosa. *International Journal of Eating Disorders*, 37, S22–S25.
- Pike, K. M., & Striegel-Moore, R. H.(1997).Disordered eating and eating disorders. In S. J. Galant, G. P. Keita, & R. Royak-Schaler (Eds.), *Health care for women* (pp. 97–114). Washington, DC: American Psychological Association.
- Piran, N.(1990).Treatment model and program overview. In N. Piran & A. S. Kaplan (Eds.), *A day hospital group treatment program for anorexia nervosa and bulimia nervosa* (pp. 3–19). New York, NY: Brunner/Mazel.
- Piran, N. (2000). Eating disorders: A trial of prevention in a high risk school setting. *Journal of Primary Prevention*, 20, 75–90.
- Piran, N. (2001a). A gendered perspective on eating disorders and disordered eating. In J. Worell (Ed.), *Encyclopedia of gender* (pp. 369–378). San Diego, CA: Academic Press.

- Piran, N. (2001b). Re-inhabiting the body from the inside out: Girls transform their school environment. In D. L. Tolman & M. Brydon-Miller (Eds.), *From subjects to subjectivities: A handbook of interpretative and participatory methods* (pp. 218–238) New York: NYU Press.
- Piran, N. (2004). Teachers: On 'being' prevention. *Eating Disorders: The Journal of Treatment and Prevention*, 12, 1–9.
- Piran, N. (2005). Prevention of eating disorders: A review of research. *Israeli Journal of Psychiatry*, 42 (3), 172–178.
- Piran, N., & Kaplan A.S. (1990). *A Day Hospital Group Treatment Program for Anorexia Nervosa and Bulimia Nervosa*. New York: Brunner/Mazel.
- Piran, N., Robinson, S.R., & Cormier, H.C. (2007). Disordered eating behaviors and substance use in women: A comparison of perceived adverse consequences. *Eating Disorders: The Journal of Treatment and Prevention*, 15 (5), 391–403.
- Robin, A. L., Gilroy, M., & Dennis, A. B. (1998). Treatment of eating disorders in children and adolescents. *Clinical Psychology Review*, 18, 421–446.
- Robin, A. L., Siegel, P. T., Koepke, T., Moye, A.W., & Tice, S. (1994). Family therapy versus individual therapy for adolescent females with anorexia nervosa. *Journal of Developmental and Behavioral Pediatrics*, 15, 111–116.
- Rolls, B. J., Federoff, I. D., & Guthrie, J. F. (1991). Gender differences in eating behaviors and body weight regulation. *Health Psychology*, 10, 133–142.
- Russell, G. F. M., Szmukler, G. I., Dare, C. & Eisler, I. (1987). An evaluation of family therapy in anorexia nervosa and bulimia nervosa. *Archives of General Psychiatry*, 44, 1047–1056.
- Santonastaso, P., Zanetti, T., Ferrara, S., Olivetto, M. C., Magnavita, N., & Favaro, A. (1999). A preventive intervention program in adolescent schoolgirls: A longitudinal study. *Psychotherapy and Psychosomatics*, 68, 46–50.
- Scholz, M., & Asen, K.E. (2001). Multiple family therapy with eating disordered adolescents. *European Eating Disorder Review*, 9, 33– 42.
- Shisslak, C.M., Crago, M., & Estes, L. (1995). The spectrum of eating disturbances. *International Journal of Eating Disorders*, 18, 209-219.
- Smolak, L., & Levine, M.P. (2001). A two-year follow-up of a primary prevention program for negative body image and unhealthy weight regulation. *Eating Disorders: The Journal of Treatment and Prevention*, 9, 313–325
- Steiner-Adair, Sjöstrom, L., Franko, D.L., Pai, S., Tucker, R., Becker, A., & Herzog, D. (2002). Primary prevention of risk factors for eating disorders in adolescent girls: Learning from practice. *International Journal of Eating Disorders*, 32, 401–411.
- Smolak, L., & Murnen, S. K. (2002). A meta-analytic examination of the relationship between child sexual abuse and eating disorders. *International Journal of Eating Disorders*, 31, 136–150.
- Smolak, L., & Murnen, S. K. (2004). A feminist approach to eating disorders. In J. K. Thompson (Ed.), *Handbook of eating disorders and obesity* (pp. 590–605). Hoboken, NJ: Wiley.
- Stewart, D.A., Carter, J.C., Drinkwater, J., Hainsworth, J., & Fairburn, C.G. (2001). Modification of eating attitudes and behavior in adolescent girls: A controlled study. *International Journal of Eating Disorders*, 29, 107–118.
- Stice, E., Hayward, C., Cameron, R., Killen, J.D., & Taylor, C.B. (2000). Body image and eating related factors predict onset of depression in female adolescents: A longitudinal study. *Journal of Abnormal Psychology*, 109, 438–444.

- Stice, E., Mazotti, L., Weibel, D., & Agras, W.S. (2000). Dissonance prevention program decreases thin-ideal internalization, body dissatisfaction, dieting, negative affect, and bulimic symptoms: A preliminary experiment. *International Journal of Eating Disorders, 27*, 206–217.
- Stice, E., & Shaw, H. (2004). Eating disorder prevention programs: A meta-analytic review. *Psychological Bulletin, 130*, 206–227.
- Striegel-Moore, R., & Marcus, M. (1995). Eating disorders in Women: Current Issues and Debates. In A.L. Stanton & S. J. Gallant (Eds.), *The psychology of women's health* (pp. 445–487). Washington, DC: American Psychological Association.
- Striegel-Moore, R., & Smolak, L. (1996). The role of race in the development of eating disorders. In L. Smolak, M. P. Levine, & R. Striegel-Moore (Eds.), *The developmental psychopathology of eating disorders* (pp. 259–284). Mahwah, NJ: Lawrence Erlbaum Associates.
- Welch, S. L., & Fairburn, C. G. (1994). Sexual abuse and bulimia nervosa: Three integrated case control comparisons. *American Journal of Psychiatry, 151*, 402–407.
- Zipfel, S., Reas, D.L., Thornton, C., Olmsted, M.P., Williamson, D.A., Gerlinghoff, M., Herzog, W., & Beumont, P.J. (2002). Day Hospitalization Programs for Eating Disorders: A Systematic Review of the Literature. *International Journal of Eating Disorders, 31*, 105–117.

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### **Arthur Cropley**

Arthur Cropley is emeritus professor of psychology of the University of Hamburg. After working as a schoolteacher, he received his PhD from the University of Alberta in 1965. From 1965-1973 he taught at the University of New England (Australia) and the University of Regina (Canada). He then worked for UNESCO before accepting a position at the University of Hamburg in 1978, where he remained until he retired in 1998. He has conducted in-service seminars for migrant counsellors for the German Red Cross, the *Rafelswerk* and *Caritas*. He has published extensively, including 24 books, and received the International Creativity Prize of the World Council for Gifted and Talented Children in 1997. He was a Visiting Fellow of the British Psychological Society in 2004. Professor Cropley has also translated the Latvian national poem, *Lāčplēšis*, into English epic verse.



He received an honorary doctorate from the University of Latvia in 2005, and in 2008 was made an Officer of the Order of the Three Stars by the President of Latvia.

**Niva Piran**

Niva Piran is a clinical psychologist, a school consultant, and a Professor at the Ontario Institute for Studies in Education of the University of Toronto. She conducts research in the area of women's health, has presented and published widely internationally. She has edited two books in the area of eating disorders, one on prevention, and the other on treatment.

## Notes for authors

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**Contributions**, written in English, should follow the general style described in the Publication Manual of the American Psychological Association (5<sup>th</sup> ed. 2002).

**Manuscripts** should not exceed 8000 words, should be typed on (21 x 29.7cm) white bond paper, double-spaced, with font size 12, and with margins of at least 2.54 cm on all four sides. Acceptable typefaces are Times Roman or Courier. Three copies of each manuscript including electronic version on disk should be submitted. Disks can be of any standard size, IBM compatible, written in Word for Windows. Manuscripts will not be returned to authors.

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