University of Tartu Institute of Psychology

Seminar Paper

Psychological Properties of Situations: The Applicability of the Riverside Situational Q-Sort in the Estonian Context

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Running head: Psychological properties of situations

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Abstract

The current study uses the Riverside Situational Q-Sort (RSQ v 3.15; Wagerman & Funder, 2009) in the Estonian student sample (n = 317), to investigate the applicability of the measurement tool in Estonia; the overall situational variability among the sample; and how the situational evaluations differ across the categories of situations. The results indicate that the tool can be used to measure subjective situational construals in a meaningful way on the Estonian student sample and that the situational evaluations can be meaningfully reflected on the basis of both subjective and objective situational categorizations.

Kokkuvõte

Situatsioonide psühholoogilised omadused: "Riverside Situational Q-Sort" küsimustiku rakendatavus Eesti kontekstis

Käesolev uurimus kasutab situatsioonimõõdikut *The Riverside Situational Q-Sort (RSQ* v 3.15; Wagerman & Funder, 2009) Eesti tudengivalimil (n = 317), uurimaks a) mõõteriista kasutatavust Eesti kontekstis; b) situatsioonide üleüldist varieeruvust valimi lõikes ning seda, c) kuidas situatsioonidele antud hinnangud erinevad situatsioonikategooriate lõikes. Antud uurimuse tulemused viitavad sellele, et *RSQ* kui instrument on Eesti kontekstis adekvaatne tööriist subjektiivsete situatsioonitõlgenduste mõõtmiseks. Samuti on tulemuste põhjal võimalik väita, et situatsioonitõlgendusi saab mõttekalt analüüsida kasutades nii subjektiivseid kui ka objektiivseid situatsioonikategoriseerimise tööriistu.

Introduction

Situations in psychological research

Situations are one of the three elements in the personality triad along with behaviours and personality properties (Furr & Funder, 2004; Funder; 2007; Wagerman & Funder, 2009; Nave et al, 2013). Personality triad is based on the famous equation proposed by Kurt Lewin (1951) more than 60 years ago: B = f(P,S). This equation basically means that "the best way to understand a behaviour is in terms of who performs it, and the circumstances under which they do so" (Funder, 2009, p. 123). This puts situations in a powerful position in personality psychology.

Many researchers see situations as a crucially important aspect of human behaviour (e.g., Mischel & Shoda, 1995; Murtha, Kanfer & Ackerman, 1996; Ten Berge & De Raad, 1999; Ten Berge & De Raad, 2001, Funder, 2007; Funder, 2009; Wagerman & Funder, 2009; Sherman, Nave & Funder, 2010; Nave et al, 2013; etc.). Revelle (1995), for instance, argued that since stable individual differences produce predictably different patterns of results in different situations, then failure to change one's actions across situations is a sign of pathology, not adaptive behaviour. This example vividly shows that situations do have a remarkable impact on the way we should interpret people's behaviour.

In the psychological science landscape there have been heated disputes over the effect sizes of personality and situations in the triad (Mischel, 2004; Funder, 2006; Fast & Funder, 2010). So far, there have been no winners in this war. In fact, Richard, Bond and Stokes-Zoota (2003) demonstrated that the effect sizes of both elements, personality and situations, average out to be about equal. These effect sizes are not ubiquitously strong (maximally .40) but they are nevertheless important (Ten Berge & De Raad, 1999; Funder, 2006).

In spite of their importance, situations have deserved unfairly little attention compared to the most thoroughly investigated research object in personality research – personality traits (Funder, Colvin & Furr; 2000; Funder, 2006; Wagerman & Funder, 2009; Fast & Funder, 2010; Sherman, Nave & Funder, 2010). There is a notable lack of situational taxonomies in psychological research (Bem & Funder, 1978; Murtha, Kanfer & Ackerman, 1996; Funder et al; 2012; Nave et al, 2013). According to Ten Berge and De Raad (1999) there have been many attempts to create situational taxonomies, but mostly these classifications reflect only a narrow set of situations (Sherman, Nave & Funder, 2010). Situations are hard to both define and investigate (Ten Berge & De Raad, 1999; Wagerman & Funder; 2009; Fast & Funder,

2010; Sherman, Nave & Funder, 2010). If one attempts it, many complex questions arise, such as: What elements do situations consist of? How can one know where a situation begins or ends? Are there objective situations at all or are situations subjective, because they are mediated by human perception system? Even if all the questions have not been answered by today, there are scientists who have proposed answers to some of the questions posed above (Funder, 2009; Wagerman & Funder, 2009). The current study focuses on the applicability of the Riverside Situational Q-Sort (RSQ v 3.15; Wagerman & Funder, 2009) in the Estonian context which is one the few and most recent attempts to meaningfully categorize situations.

The Riverside Situational Q-Sort (RSQ)

Development of the RSQ. The item content for the RSQ (Wagerman & Funder, 2009) was originally inspired by the California Adult Q-Sort (CAQ), a tool for describing personality traits (Block, 1961; Block & Kremen, 1996; Letzring, Block & Funder, 2005; Funder, 2009). RSQ was developed by writing situational characteristics in accordance with each of the personality characteristics included in the CAQ. For example, for the CAQ item referring to the personality characteristic "talkativeness", a RSQ item "Talking is permitted" was developed (Funder, 2007; Sherman, Nave & Funder, 2010; Fast & Funder, 2010).

Sherman and colleagues (2010) explain the guiding principles in the development of the RSQ as follows: "(a) the instrument should be applicable to as wide a range of situations as possible, (b) the instrument should be able to quantify the degree of similarity or dissimilarity between any two situations across a wide range of psychological properties, and (c) the instrument should be related to important outcomes relevant to personality (e.g., behaviours, emotions)" (p. 332). Furthermore, according to Sherman, Nave and Funder (2013), the "participant's self-reported RSQ of a single situation comprises two components: (a) the objective psychological properties of that situation and (b) the participant's subjective view, or distinct construal, of those properties" (p. 4). With taking the test, the subjective impressions of an objective situation are transformed into an empirically usable format with a common vocabulary (Funder, 2009).

The RSQ is a tool that uses the mid-level of analysis (Funder, Colvin & Furr; 2000; Funder, 2009). The micro level of situational analysis describes the psychological demandproperties of the situation as it registers on the individual (e.g. bodily gestures, vocal characteristics etc.) and the macro level is the broadest sensory information available about the situation (e.g. temperature; number of people present; ecological, historical, sociopolitical factors, etc.). The mid-level of description refers to properties of the situation that are consensual in a social, cultural and sociological way (e.g. a research seminar, a funeral, a party). Situations at this level are described objectively. Although situational conceptions vary among people, it provides possibly the most useful level at which to conceptualize situations meaningfully (Wagerman & Funder, 2009).

The RSQ tool is built in a Q-sort form. There are advantages in using this measuring construct, because it reduces the difficulty of response biases (participants, being forced to categorize items according to a quasi-normal distribution, are not free to overuse any particular point on the scale) and also reduces the possible effect of acquiescence, extremity and social desirability biases. Because the Q-sort encourages the sorter to consider whether one item is more descriptive of a situation than another item, resulting in a more thorough response. (Funder, Colvin & Furr, 2000; Furr, Wagerman & Funder, 2010).

Earlier studies using the RSQ. Since its development in 2009, the RSQ has been used only in a handful of studies (e.g. Sherman, Nave & Funder, 2010; Funder et al, 2012; Sherman, Nave & Funder, 2013; Serfass & Sherman, 2013). Sherman, Nave & Funder (2010), for instance, examined the associations between situational similarity, personality and behavioural consistency. The participants reported their situations on four occasions across four weeks and evaluated them using the RSQ and RBQ items. Independent judges also evaluated the written situational descriptions of the participants. The results indicated among other things that the four situations experienced by one participants. The researchers also found that situational similarity strongly predicted behavioural consistency and that personality characteristics predicted behavioural consistency in daily life emerges from various sources, including, among other things, situational selection.

Sherman and colleagues (2010) also conducted a factor analysis to identify meaningful types of situations using situations as "variables" and the items of the RSQ items as "participants" in their analyses. They found a seven-cluster solution accounting for 77% of the variance. The factors of situations were: 1. social situations (e.g., "eating lunch with 2 friends on campus"), 2. school work in class with others (e.g., "I was in class"), 3. school work at home or alone (e.g., "studying in my dormroom by myself"), 4. recreating (e.g., "I was playing tennis at UCR rec center with three of my friends"), 5. getting ready for something (e.g., "I went to the bathroom and took a shower and brushed my teeth"), 6. work (e.g., "I was at work") and 7. unpleasant situations (e.g., "I was looking for my cell phone, thinking I had lost it").

Funder and colleagues (2012) further aimed to show that the RSQ is a useful tool for conceptualizing and measuring behaviourally important attributes of situations not only in the United States but also in Japan. Their analyses showed that the behavioural correlates of two elements of the situation (the presence of a member of the opposite sex and the experience of being criticized by others) have largely similar behavioural correlates between genders and across cultures.

In a recent study by Freberg, Saling and Freberg (2013), the RSQ was used to evaluate three different imaginary food crisis situations communicated via one of three message sources (i.e., social media, organizational website and traditional media). The results showed that there was a high level of overall agreement in situational perceptions for three different media scenarios.

Aims of the Current Study

The main purpose of the current study is to find out whether the RSQ instrument – that was developed in the Northern America – is also applicable in the Estonian context. To this aim, I examined:

- 1. What was the content of the situations that participants reported they had been in the previous day at 7 pm across the three main (prescribed) aspects of the situational description the action that was performed, the location of the situation and the people who were involved in the situation? It would be fascinating to find out what Estonian students of different universities typically do at 7 pm. Are they studying or engaged in different recreational, sportive or cultural activities? Is 7 pm the time to be on one's own or do Estonian students spend time with their families, friends or romantic partners? Are students at 7 pm mainly at home or visiting other places? These data alone are interesting, because there have been no such broad overviews presented thus far about the situations Estonian students find themselves in at a certain time a day.
- 2. Is it possible to meaningfully group or cluster the situations on the basis of the evaluations made with situational (RSQ) descriptors? In other words, this study aims to find out if it is possible to find logically interpretable situational types on the basis of the RSQ descriptors and if so, then what these types contain? Are the types or factors of situations similar to Sherman and colleagues' (2010) study or do different factors emerge on the basis of the Estonian sample?
- 3. What is the structure of the RSQ items across described situations? That is, is it possible to represent the 89 items of the RSQ in terms of a smaller number of relatively

homogeneous factors? If so, how do the underlying factors of situational evaluation differ across the three main above mentioned categories of the situational description?

This seminar paper is based on an ongoing research collaboration with professor David C. Funder (University of California, Riverside) and his team which aim is to examine the association between situational similarity, personality, and behavioural consistency across 18 different cultures. In the current paper, however, only Estonian data will be used.

Method

Participants

Altogether, 337 students from Estonian higher education institutions¹ participated in the study. The majority of the participants were born in Estonia, only 6 persons were born in other countries. From the native Estonians only one was brought up in another country (Finland) and one person had a childhood home both in Estonia and in Ukraine. Twenty three participants claimed to have a home language other than Estonian: in 19 cases it was Russian, in two cases Latvian, in one Lithuanian and one case was left unspecified; 2 persons claimed to have a second home language (Finnish and Russian).

At the beginning of the test, participants were guided to choose Estonian language for taking the test. Six participants did not fill in the test in Estonian (3 participants did it in Russian and 3 in English) and were therefore dropped from further analyses. The first assignment in the test was to describe a situation a participant had encountered the previous evening at 7 pm. When the description of the situation showed that the level of the participants' language skill could not allow the person to complete the test successfully in Estonian, but the respondent still did it, the participants' data was also not used in further analysis. Consequently, the answers of two participants were not used in the analyses. Finally, the data of 12 participants was dropped altogether because of some type of mistake in the situational description.²

¹ The participants came from 16 different Estonian higher education institutions such as Estonian Academy of Arts, University of Tartu (including the colleges in Pärnu and Narva and the Viljandi Culture Academy), Tartu Health Care College, Tallinn University (including Baltic Film and Media School and Haapsalu College), Estonian Aviation Academy, Estonian Academy of Music and Theatre, Estonian Entrepreneurship University of Applied Sciences, Estonian Academy of Security Sciences, Institute of Theology of the Estonian Evangelical Lutheran Church, University of Applied Sciences, Estonian University of Life Sciences, Tallinn University of Technology (including the colleges in Tallinn, Tartu, Virumaa and Kuressaare), Lääne-Viru College, Polytechnic University of Tallinn, Estonian Information Technology College and Tartu Art College.

² Some of the mistakes could have occurred due to the participants not reading the test introduction thoroughly. It was clearly stated at the beginning of the study that if the person was sleeping at the time in question, he or she should pick either a situation that occurred before or after the act of sleeping. Two cases were dropped due

Due to abovementioned problems, the final sample of the study included 317 individuals (59 male, 258 female) with a mean age of 26.1 years (SD = 7.32), ranging from 18–55 years.³

Procedure

Data collection was administered in two parts. The whole procedure of data collection began in fall 2012 and concluded in winter 2013. A second data gathering was administered in 2013 due to the poor attendance in the first wave. The students were participating voluntarily in the project and did not receive any payments.

A request was sent via electronic mail to all Estonian higher education institutions to forward the information letter to their students about the possibility to take part in the International Situations Project that was initiated and coordinated by David Funder and Esther Guillaume from the University of California at Riverside (<u>www.internationalsituationsproject.com/about</u>). Most of the institutions did forward the e-mail in question but some declined due to stricter policy issues concerning their pupils participating in research.

Next, the advertisement that was sent to the institutions asked students, who were interested in participating, to send an empty e-mail to the data collector with the word "Situatsioonitest" written in the subject box. An e-mail was sent back to them providing the URL of the online testing environment and codes for entering. Each responder had a unique code for filling in the test. The e-mail also instructed participants to choose Estonian language for taking the test. It was mentioned, that there were no "right" or "wrong" answers in the test and one should fill in the test from his or her own point of view on the described situation. If the responders had some trouble with filling in the test, they had an opportunity to get help if they wrote back to the previously mentioned e-mail address.

The evaluated test duration time was about 45 minutes to 1.5 hours. The participants could fill in the online test at any time about the situation that occurred at 7 pm the evening before. Where the responders were physically located while filling in the test was not observed. The participants were notified, of course, that for completing the test, they need quite much of their time and attention. There was no certain deadline for completing the test

to the participants stating that they were sleeping or waking up at the time in question. Four cases were excluded due to the situational descriptions that contained two or more different activities after one another and it was unclear, which of the actions the participant had analysed with the RSQ and RBQ items. Finally, six situations were excluded due to lack of required facts in the situation description.

³ Due to the small number of men in the sample, the gender differences in situational evaluations were not researched in this paper (for the analysis of gender differences, see Sherman, Nave & Funder, 2010).

(although the e-mail the participants received, stated that it would be nice if they completed it within next two weeks).

Measures

As a first task, the participants were asked to provide a description of the situation they had encountered the previous evening at 7 pm. Three main categories were asked to cover with the situational description – the action that was performed, the location of the situation and the people who were involved in the situation. Next, participants were asked to evaluate the situation by using the Riverside Situational Q-sort (RSQ v 3.15; Wagerman & Funder, 2009) and the Riverside Behavioral Q-sort (RBQ v 3.11; Funder, Colvin & Furr; 2000; Furr, Wagerman & Funder; 2010). In the current seminar paper, only the RSQ data will be used.

The Riverside Situational Q-sort (RSQ). The RSQ is a 89-item assessment tool designed to describe the characteristics of situations (Wagerman & Funder, 2009). The items are, for example: "Talking is permitted, invited, or conventionally expected"; "Context is potentially anxiety-inducing". The responders first divided the items into three boxes by dragging the items with their mouse cursors, using the "Characteristic" box for items that accurately described what was going on, the "Uncharacteristic" box for items that did not, and the "Neutral" box for items that did not apply to the situation, or they were uncertain about. The items appeared one at a time. There were no limitations in placing the items into the boxes for this series. From the three boxes that emerged, the participants were asked to place the items into nine boxes from which the highest category implied that the item was "Extremely Characteristic" and the lowest showed that the item was "Extremely Uncharacteristic" of the situation. Putting an item in the middle meant that the item was either irrelevant, or that the participant was unsure of where the item belonged. A fixed number of items went into all of these boxes: 3, 6, 10, 14, 15, 14, 10, 6, and 3 for categories 1–9, respectively. If the responder left too many items in any category, the category heading turn red.

The RSQ as well as all other study materials were translated into Estonian by the author of this study and Anu Realo. The Estonian version of the survey was then re-translated into English by a person who had no previous knowledge of the materials. David Funder and Esther Guillaume then checked the accuracy of the translation and necessary adjustments were made to the Estonian version of the survey.

Results

Situation Content

What was the content of the situations that participants reported they had been in the previous day at 7 pm? In order to answer this question, I analysed the content of the 317 situations across the three main (prescribed) aspects of the situational description – the location of the situation, the action that was performed, and the people who were involved in the situation. To analyse the descriptions of the situations, a grounded theory analysis was used (Glaser, 1978; Strauss, 1987). I started the analysis with an initial *open coding* by scrutinizing the situation descriptions very closely with an aim to produce categories that seemed to fit the data. When the preliminary categories were found (separately for location, activity, and people), a *selective coding* approach was used: the responses were analysed by considering if they were linked to any one of the established categories. If not, necessary modifications to the categories were made. In the final stage of the analysis, I compared the 317 situations carefully against each category by analysing whether they were linked to it or not.

In order to test the reliability of the coding process, a graduate student of the Department of Psychology (who was not familiar with the project) was asked to code the same situations independently using the established categories. The percentage agreement scores between the two coders were very high, namely 91% for location, 94% for activities, and 90% for people involved in situations, respectively. For divergent codings, final arbitration by an independent coder (i.e., the supervisor of the current thesis) was made.

The Location. The location was the easiest to code because a person is normally situated in one place at a time. The locations mentioned by the participants were coded using 8 categories (see Table 1). Nearly 48% (n = 151) of the participants were at home and further 17% (n = 54) in some sort of work or organisational rooms on the previous day at 7 pm.

Location	n	%
Home	151	47.63
Organizational Space ⁴	54	17.03
Public Consumption/Trade-Centred Facilities ⁵	23	7.26
Someone Else's Home	22	6.94
Outdoors Public Space	19	5.99
Vehicle	19	5.99
Sporting Facilities ⁶	16	5.05
Dormitory ⁷	13	4.10

 Table 1: Categories of Locations

The People. The people accompanying the participants in the situations were categorized into 12 categories. Ninety six participants were together with people from at least 2 different categories, 12 participants were together with people from at least 3 categories and 2 participants were together with people from 4 categories (see Table 2). The most prevalent category (17.1%) was being together with one's romantic partner (n = 73). Romantic partners are considered here to be one's boyfriend or girlfriend and spouse. The second biggest category (16.2%) was being alone (n = 69). Even when the participant mentioned communicating with someone via electronic means, the physical isolation from others was noted and such cases were coded as being alone.

^{4 &}quot;Organisational space" stands for non-public or half public indoor spaces that serve a formal organisational cause. For the current study, mainly university edifices, libraries, office buildings and quarters of all kinds of official organisations belong in this category.

^{5 &}quot;Public Consumption/Trade-Centred Facilities" are all facilities that offer the exchange of money for (both material and immaterial) goods – for example, all kinds of shops, food- and drink serving facilities (e.g. restaurants, bars, diners etc) and cultural performance spaces (e.g. theatre houses, concert halls, cinema theatres etc).

^{6 &}quot;Sporting Facilities" include all kinds of fitness studios, gyms, swimming-pools, facilities for ball games etc.

^{7 &}quot;Dormitories" are separated from "Homes" because of their more temporary and less intimate characteristics.

People	n	%
Romantic Partner ⁸	73	17.10
Alone	69	16.16
Acquaintances	57	13.35
Strangers	45	10.54
Children	42	9.84
Members of Family ⁹	33	7.73
Friends	30	7.03
Individuals of Unknown Status	27	6.32
Instructor ¹⁰	24	5.62
Extended Family ¹¹	12	2.81
Pets	10	2.34
Relatives ¹²	5	1.17

Table 2: Categories of People in the Situations

The Activities. Activities were divided into 14 categories. There are maximally 3 different categories of activities per case for the current division. Thirty three participants performed activities from at least 2 categories and the activities of 2 people belonged to 3 different clusters. For further information, see Table 3. Here the most prevalent category (21.3%) contained situations in which people were engaged with recreational activities (n = 75). Mostly people in this category watched TV or series from their computers, surfed the Internet, played games and walked. The other more popular activities were related either doing household jobs (13.6%) or school-work (12.5%).

^{8 &}quot;Romantic Partner" applies for the participants' boyfriends-girlfriends, spouses and partners.

^{9 &}quot;Members of Family" apply for the participants' parents and brothers-sisters.

^{10&}quot;Instructor" applies for the people who have a leading, educative, instructive and/or controlling role concerning academic, work or hobby-related activities (e.g. professors, teachers, bosses, trainers, choir masters etc.).

^{11 &}quot;Extended Family" contains the partners and spouses of one's brothers, sisters and children, also the direct families of one's partners or spouses and grandchildren.

^{12 &}quot;Relatives" are the participants' grandparents, aunts-uncles and their direct families.

Activities	n	%
Recreational Activities ¹³	75	21.31
Household Jobs ¹⁴	48	13.64
School-work	44	12.50
Going Somewhere ¹⁵	32	9.09
Eating	25	7.10
Working	25	7.10
Organized (Group) Hobby Activities ¹⁶	18	5.11
Communicating ¹⁷	18	5.11
Communicating to Children	15	4.26
Visiting Someone	14	3.98
Organizing One's Appearance ¹⁸	11	3.13
Taking Part in an Educative Event ¹⁹	9	2.56
Participating in a Cultural Event ²⁰	9	2.56
Shopping	8	2.27

Table 3: Categories of Activities in the Situations

Taken together, on the basis of the content analysis of the situations it can be concluded that there is no uniform "student evening," but different people are engaged in different activities in different locations and with different people. Despite this, there are some general trends that can be brought out on the basis of the collected data. The most prevalent category was the "Locations" cluster, where almost half of the students were at their homes during the described situations. The "People" and the "Actions" categories revealed that most often the participants were accompanied by their romantic partners and spent time doing recreational activities.

^{13 &}quot;Recreational Activities" include TV-watching, listening to music, surfing in the Internet, reading, playing games, walking, doing handiwork etc. In this cluster, the most popular activity was watching TV or following television series via computers.

^{14 &}quot;Household Jobs" are cleaning, cooking, washing (something else than oneself), ironing, heating the house etc., with cooking as the most often mentioned activity.

^{15 &}quot;Going Somewhere"

^{16 &}quot;Organized (Group) Hobby Activities" differ from the "Recreational Activities" due to their more organized structure and the prevalence of group-form structure. All kinds of organized sports trainings with instructors, dance courses, choir practices and team sports without an instructor (e. g. Bowling etc.) belong in this category.

^{17 &}quot;Communicating"

^{18 &}quot;Organizing One's Appearance" implies to either washing oneself, taking a sauna, putting on make-up, getting dressed etc.

^{19 &}quot;Taking Part in an Educative Event" means participating in an organized, informative and mostly educationoriented event that is not a direct part of a curriculum (e.g. a university lecture). All kinds of non-curricular lectures, seminars, work-practices, conferences and fraternity or student council meetings fit in this category.

^{20 &}quot;Participating in a Cultural Event" is visiting a concert, performance, a film screening etc.

Categories of Situations Based on the Situational (RSQ) Evaluations

The second question I aimed to answer was the following: Are the 317 different situations described by the participants meaningfully grouped on the basis of the evaluations made with the situational (RSQ) descriptors? To this aim, principal component factor analyses of the 317 situations with varimax rotations were conducted for the RSQ. The 317 situations (or participants) served as "variables" and the items of the RSQ (N = 89) served as "participants" (see also Sherman, Nave & Funder, 2010). Six factors had an eigenvalue above 1 but the scree-plot clearly suggested a four-factor solution that explained 45.15% of the total variance of the RSQ items. Next, the content of the types (or factors) of situations will be described in greater details.

The 1st factor, labelled as **"Social leisure activities with loved-ones (mostly romantic partners)"** contains leisure-related social situations in which the participants were mostly together with their romantic partners such as husbands, wives, boyfriends, girlfriends, and partners ²¹. Even situations in which the respondent was physically alone, but talked to his/her romantic partner via technological means, load high in this factor. This factor also contains, but less so, situations in which the participants were together with their closer family (children, mothers, fathers, sisters, brothers) and friends. It is clear, that this factor reveals a warm, close and somewhat secure relationship with others and most often, romantic relationships.

The situations in the 1st factor took place in various locations. The most often mentioned place is the participants' home (this is also the most often mentioned location throughout the whole study), also visiting someone, walking in a park or on a street and being in restaurants, diners, bars, shopping centres and theatre, cinema or concert houses.

Some examples of the situations that load high to the 1st factor are: "I was walking towards a restaurant with my girlfriend in downtown where we were going to celebrate our anniversary" (factor loading .78), "I was watching TV with my boyfriend" (.77) and "We were laying on our bed with my partner, snogging and talking about our day" (.75).

The 2nd factor, "**Mental effort demanding social situations**," contains mostly social situations, as does the 1st factor. Only here the participants were engaged in activities that demand brainpower, self-discipline, self-organization, attention, concentration and somewhat responsibility. The most often mentioned activities in question are, for example studying

²¹ Elukaaslane in Estonian, which stands for unmarried people in the romantic relationship living together.

(anywhere; alone or with others), participating in a lecture/course, attending an organisational meeting, working and teaching someone.

The participants whose situations load high in this factor had good chances to be socially active in their situations. They were together with either a group of acquaintances (their co-workers, course mates, professors, members of the same fraternity or voluntary organisation etc.) or with their family members (mothers, fathers, brothers, sisters, children). Being together with acquaintances was mostly about either studying or working together or having a meeting of some sort. In most occasions being with a family member meant either learning from them or teaching the other.

Some of the situations that correlate the highest with the factor in question are: "1. I was in a Russian language course. 2. In Tartu University. 3. Together with ten students" (factor loading .70), "I was having a work-practice at a radio studio with two of my course-mates" (.68) and "I was at my fraternity meeting in Roosikrantsi street with other members of the same organisation" (.67).

The 3^{rd} factor, which I labelled "Home alone," differs greatly from both the 1^{st} and the 2^{nd} factors firstly because the participants spent time alone and the social interaction in these situations was very low or non-existent. Secondly, this factor is mostly about the participants spending time in their comfortable, familiar, intimate and protective surroundings – at their homes.

The characteristics of the actions performed in the situations that loaded highly to this factor are very hard to categorize. The action that had the highest correlations to the factor was watching TV. At the same time it was not the only action in the factor – TV watching was closely followed by dressing up, eating, cooking and studying. It would be reasonable to presume that the characteristics of the activities here in the 3^{rd} factor are not the core of this factor.

The situations that have the highest loadings on the 3rd factor are: "I was watching documentaries via Internet. I was at home, in my room, in bed. I spent time alone" (.75), "I was about to go to my friends' place from my house. I got dressed, checked the weather, searched for my headphones" (.69) and "1. I was watching a TV-show. 2. At my place. 3. I was alone" (.68).

Similarly to the 3rd factor, the 4th factor, **"Home-based social household-jobs,"** contains mostly situations in which the respondents spent time at their homes. Like the 1st and the 2nd factor, this factor too contains situations that support social interaction between the participants and others around them. In the situations that load highly on the 4th factor the

responders were mostly engaged in some sort of household-related activities. The most frequently occurred activities are cooking and cleaning, which can be read as everyday routine activities that normally demand less brainpower and more physical action than studying and assume somewhat more organization and dedication than many leisure-related activities. These activities also allow people to spend time together, cooperate and communicate. In this factor the responders were mostly together with their family members – children, parents, sisters, brothers and closer relatives (aunts, uncles, grandparents). Boyfriends and girlfriends were mentioned rarely, but spouses or domestic partners were mentioned often together with the rest of the families.

The situations that load the highest on the 4th factor are: "I was at home cooking and afterwards cleaning the kitchen. My husband and my son were with me" (.66), "I was in my kitchen cooking with my one-year-old" (.66) and "I was piling up timber in my country house with my mum" (.63).

In sum, it can be concluded that the 317 different situations our participants had encountered the previous evening at 7 pm were indeed meaningfully grouped on the basis of the evaluations made with the situational (RSQ) descriptors. In other words, it can be said that different people tend to describe similar situations (e.g., social leisure activities with loved-ones) with similar situational and behavioural variables.

The Structure of the RSQ Items

My next task was to find out what is the underlying structure of the RSQ items across the described situations. On that purpose, a principal component factor analysis was conducted, followed by varimax rotation for the 89 RSQ items. 8 factors had an eigenvalue above 1 but the examination of scree-plot suggested a six-factor solution accounting for 30.61% of the total variance of the RSQ items. In the following sections I will describe the factors of the RSQ in a more detailed way.

The 1st factor of the RSQ that could be labelled as "**Suppressing, hostile situations**" (F1) comprises of items that are used to describe an uncertain, hostile and threatening situation that makes one feel blamed, criticized and dominated over. The items that have the highest loadings on this factor include: rsq023 - P^{22} is being blamed for something (.57), rsq021 - Someone (present or discussed) is unhappy or suffering (.51), rsq016 - P is being criticized, directly or indirectly (.49), and rsq017 - Someone is attempting to dominate or boss P (.48).

²² In the RSQ, P refers to a person who is completing the questionnaire.

The 2^{nd} factor, provisionally labelled as "Goal-oriented realistic situations that demand leader-qualities" (F2) holds items that characterize situations that require cooperation, raise issues of power, demand assertiveness and quick judgement these situations do not seem to be simple, enjoyable and don't allow fantasizing or introspection. The RSQ items that have high loadings on this factor include rsq087 - *Success requires cooperation* (.57), rsq054 - *Assertiveness is required to accomplish a goal* (.50), rsq079 - *Situation raises issues of power (for P or others present)* (.50), and rsq049 - *Affords an opportunity to ruminate, daydream or fantasize* (-.61).

The 3^{rd} factor of the RSQ was labelled "Anxious situations demanding no responsibility" (F3) containing items that refer to anxiety-inducing, emotionally threatening situations, where there are no goal-oriented expectations for the person. The RSQ items loading highly on this factor are rsq066 - *Situation is potentially anxiety-inducing* (.48), rsq043 - *Situation contains emotional threats* (.41), rsq006. *P is counted on to do something* (.50), and rsq009 – *P is being asked for something* (-.63).

The 4th factor labelled as "**Situations that allow demonstration of intellect**" (F4) comprises of items that characterize situations that are intellectually and cognitively stimulating and allow demonstrating intelligence. These situations seem to be the opposite to the circumstances that contain physically important cues. The RSQ items with high loadings on the 4th factor are rsq084 - *Affords an opportunity for demonstrating verbal fluency. (e.g., a debate, a monologue, an active conversation)* (.61), rsq053 - *Situation includes intellectual or cognitive stimuli (e.g., books, lectures, intellectual conversation)* (.58), rsq041 - *Affords an opportunity to express unusual ideas or points of view* (.49), and rsq042 - *Situation contains physical threats* (-.60).

The 5th factor was labelled as "**Goal-oriented situations that demand rationality**" (F5) because it contains the RSQ items that refer to situations that demand rationality and decision-making and are the opposites of situations that allow the development of close and romantic interpersonal relationships. The RSQ items with the highest loadings on this factor are: rsq025 - *Rational thinking is called for* (.59), rsq003 - *A job needs to be done* (.51), rsq024 - *A decision needs to be made* (.46), rsq051 - *Close personal relationships are present or have the potential to develop* (-.55).

Finally, the 6th factor entitled as "**Situations with few behavioural limitations**" (F6) includes the RSQ items that refer to stressless, pressureless situations that are focused on the person, allowing a free range of emotional expression and behaviours. The RSQ items with the highest loadings on the factor are rsq058 - *P is the focus of attention* (.49), rsq046 -

Situation allows a free range of emotional expression (.46), rsq064 - Situation includes behavioural limits. (e.g., rules or social norms that might or might not be challenged) (-.40), and rsq086 - P is being pressured to conform to the actions of others (-.46).

Situational evaluation of different types of situations using the RSQ factors

Finally, I was interested in examining if and to what extent people's evaluations of situations – by using the RSQ factors – differ across different types of situations? On that purpose, I used the previously coded categories of the situations across the three aspects of situations: location, activities, and people. More specifically, I chose one of the categories with the highest number of participants for each of the abovementioned aspects: home (location), romantic partner (people), and recreational activities (activities) (see Tables 1, 2, and 3, respectively). Each of the three situational variables were recoded so that 1 indicated that the respondent was at home, was with his or her romantic partner or was participating in recreational activities, whereas 0 indicated that the respondent was not at home, that he/she was not with his or her romantic partner or was not engaged in recreational activities.

Next, a series of multivariate analyses of variance (MANOVA) were conducted using the categories of situations as independent and the RSQ factor scores as dependent variables.

Location. First, MANOVA revealed significant differences between 'being at home' and 'not being at home' for all six RSQ factor scores, F(6, 310) = 9.61 (p < .000), Wilks $\lambda = .84$, $\eta^2 = 0.17$. Since the location effect was significant, we continued with univariate analyses in order to identify the specific factors that contributed to the significant overall effect. A series of one-way ANOVAs revealed statistically significant differences between people who had been at home at 7 pm last night versus people who had been elsewhere on all factors except for F4: "Intellectually expressive and physically inanimate behaviours" and F5: "Goaloriented situations that demand rationality" (see Table 4). When people had been at home the previous evening at 7 pm, the situations they encountered there, were described as being more uncertain (F1), anxiety-inducing and containing emotional threats (F3) but at the same time more simple, enjoyable and affording introspection or fantasizing (F2). The participants in the home-based situations evaluated their situations as less raising issues of power, needing assertiveness, cooperation and quick decision-making to succeed (F2). These situations made the participants feel that they were more in the focus of attention (F6) but at the same time criticized and dominated over (F1). These situations were also described more as allowing the demonstration of emotions and not holding many behavioural limits (F6).

	'Being at		'Being				
	home'		elsewhere'				
	М	SD	М	SD	F	р	η^2
F1: Suppressing, hostile situations F2: Goal-oriented realistic	0.19 -0.19	0.92 0.97	-0.18 0.17	1.04 1.00	11.11 10.63	.001 .001	0.03 0.03
situations that demand leader-							
qualities F3: Anxious situations demanding	0.15	1.05	-0.14	0.94	6.53	.011	0.02
no responsibility F4: Situations that allow	0.02	0.98	-0.02	1.02	0.15	.701	0.00
demonstration of intellect F5: Goal-oriented situations that	0.07	1.12	-0.06	0.88	1.33	.248	0.00
demand rationality F6: Situations with few behavioural	0.27	0.92	-0.24	1.04	21.92	.000	0.07
limitations							

Table 4. The mean scores of the RSQ factors across the "location category:" 'Being at home'vs 'Being elsewhere'

The people. I also found significant differences between 'being with one's romantic partner ' and 'not being with one's romantic partner ' for all of the six RSQ factor scores, F(6,310) = 4.82 (p < .000), Wilks $\lambda = .92$, $\eta^2 = 0.09$. A series of one-way ANOVAs revealed statistically significant differences between people who had been with their romantic partners at 7 pm last night versus people who had not been with their romantic partners only one factor, F5 "Goal-oriented situations that demand rationality" (see Table 5). When participants had mentioned being together with their romantic partners the previous evening at 7 pm, the situations they encountered were described more as evoking warmth or compassion, allowing the development of personal relationships and permitting others to present a wide range of interpersonal cues. These situations were rated more as including potential romantic partners and members of opposite sex. The situations were evaluated as demanding less rational thinking and decision-making.

	'Being with		'Not being with				
	one's romantic		one's romantic				
	partner'		partner'		-		
	М	SD	М	SD	F	р	η^2
F1: Suppressing, hostile	-0.13	0.77	0.02	1.03	0.75	.388	0.00
situations F2: Goal-oriented realistic	-0.22	0.93	0.03	1.01	2.19	.140	0.01
situations that demand leader-							
qualities F3: Anxious situations	-0.01	0.78	0.00	1.03	0.01	.941	0.00
demanding no responsibility F4: Situations that allow	-0.15	1.00	0.02	1.00	1.07	.302	0.00
demonstration of intellect F5: Goal-oriented situations that	-0.66	1.01	0.1	0.96	21.10	.000	0.06
demand rationality F6: Situations with few	0.26	1.13	-0.04	0.98	3.14	.077	0.01
behavioural limitations						F	÷

Table 5. The mean scores of the RSQ factors across the "people category:" 'Being with one's romantic partner 'vs 'Not being with one's romantic partner'

Activity. Finally, there were also significant differences between 'participating in recreational activities' and 'doing something else' for all of the six RSQ factor scores, $F(6,310) = 15,98 \ (p < .000)$, Wilks $\lambda = .76$, $\eta^2 = 0.24$. A series of one-way ANOVAs revealed statistically significant differences between the samples on all the factors, except one, F6: "Situations with few behavioural limitations" (see Table 6). The participants who mentioned participating in recreational activities the previous evening at 7 pm, saw their situations more as uncertain, hostile (F1), anxiety-inducing, emotionally threatening (F3) but at the same time intellectually and cognitively stimulating (F4), simple and enjoyable (F2). In the eyes of the participants these situations demanded less rationality and decision-making (F5), allowing more fantasizing, introspection (F2), the emergence of romance (F5) and the demonstration of intellect (F4).

	'Participated in recreational		'Did				
			something				
	activity'	activity'		else'			
	М	SD	М	SD	F	р	η^2
F1: Suppressing, hostile	0.30	0.95	-0.09	1.00	8.28	.004	0.03
situations F2: Goal-oriented realistic	-0.53	1.00	0.15	0.95	26.79	.000	0.08
situations that demand leader-							
qualities F3: Anxious situations	0.58	0.93	-0.16	0.96	33.34	.000	0.10
demanding no responsibility F4: Situations that allow	0.26	0.82	-0.07	1.04	6.07	.014	0.02
demonstration of intellect F5: Goal-oriented situations	-0.23	0.97	0.06	1.00	4.79	.029	0.01
that demand rationality F6: Situations with few	0.10	1.06	-0.03	0.99	0.82	.365	0.00
behavioural limitations							

Table 6. The mean scores of the RSQ factors across the "activity category": 'Participated in recreational activities' vs 'Did something else'

Discussion

Although the long and complex "person-situation debate" in personality research is claimed to be over (Funder, 2001), many personality researchers agree that in order to understand and describe individual differences, it is necessary to examine both personality traits, behaviors, as well as situational context. In comparison to personality traits and behaviors, however, little has been done to examine the situations, or more precisely, the psychologic-ally important properties of situations (Funder et al., 2012). To this aim, a new instrument – the Riverside Situational Q-Sort (RSQ) – was developed (Wagerman & Funder, 2009) that has been successfully used in several studies involving North American participants.

The main aim of the current study was to examine the applicability of the RSQ instrument in the Estonian context. To this aim, I first examined what was the content of the situations that participants reported they had been in the previous day at 7 pm across the three main (prescribed) aspects of the situational description – the action that was performed, the location of the situation and the people who were involved in the situation. The results of the

categorization of situations showed the prevalence of Estonian students being at home, with romantic partners and participating in recreational activities at 7 pm. The large number of participants' mentions of staying in an organizational space (about 17% of the respondents) shows that many people could be engaged in school-related or work-related activities in the evening. The prevalence of spending evenings together with one's romantic partners can mean that a lot of students have time and energy for social life and romance. At the same time being alone was the second most often mentioned state. The large number of students who took part of recreational activities (21% of participants), while studying or school-work occupied only the third place in the list of most often mentioned activities (with nearly 13% of students in the sample), can mean that for many participants evenings serve as relaxation time. Astonishingly little situations were about cultural activities (n = 9) - e.g. going to see a theatre piece, concert or dance show. Since the data was gathered only once from each participant, no generalizations can be made about any one of the participant's habits of spending his or her evenings nor his or her other activities throughout the day. The research is just a cut-out of one situation in one evening in the students' lives and should be therefore interpreted with caution.

Next, I examined whether it is possible to meaningfully group or cluster the situations on the basis of the evaluations made with situational (RSQ) descriptors? The factor analysis of the 317 situations where situations (or participants) served as "variables" and the items of the RSQ (N = 89) as "participants" in the analysis revealed a four-factor solution as compared to Sherman and colleagues' (2010) study where seven factors were found that accounted for 77% of the variance. One of the reasons for this can be that the time frame of the Estonian study made the situational variance narrower. In the current study, participants were asked to describe a situation that occurred 7pm last night whereas in Sherman et al.'s (2010) study, the participants visited the lab four times and each time were asked to describe a situation they had been in the day before at one of four times (i.e., 10 a.m., 2 p.m., 5 p.m., or 9 p.m.).

It is also visible that the experienced situations of the two samples were evaluated on slightly different basis. For example, in the current study, school-work and work dissolved between different factors, but for Sherman and colleagues the factors clearly distinguished school-related and work-related situations. Yet, there were some similarities found between the two studies. For instance, recreational activities and situations that demanded mental effort grouped as separate factors in both studies. In sum, despite the differences between the results of the current study and Sherman and colleagues' (2010) findings, the four situational factors (or types) that emerged in the current study show that the RSQ reflects the situational

evaluations of the Estonian participants in a psychologically meaningful way and therefore can be administered in the research of situational construal.

Next, I was interesting in examining the structure of the 89 RSQ items across 317 different situations. Six factors emerged from the exploratory factor analysis which were labelled as follows: "Suppressing, hostile situations" (F1), "Goal-oriented realistic situations that demand leader-qualities" (F2), "Anxious situations demanding no responsibility" (F3), "Situations that allow demonstration of intellect" (F4), "Goal-oriented situations that demand rationality" (F5) and "Situations with few behavioural limitations" (F6). A closer look at these factors reveal several similarities with the Big Five personality traits (John & Srivastava, 1999): F1 and F3 may refer to Neuroticism, F5 to Conscientiousness whereas F4 could be linked with Openness or Intellect, for instance. The exact relationships between the psychological properties of situations and personality traits is certainly a relevant topic for future studies (see also Sherman et al., 2013).

Results also revealed the differences between situational evaluations in all the selfapplied situational types under study: being at home (location), being with one's romantic partner (people), and recreational activities (activities). For example the situations at home were evaluated, among other things, as more simple, enjoyable and allowing the demonstration of a wide range of emotions than anywhere else, while being together with one's romantic partner influenced the situation to be rated as evoking more warmth or compassion, and allowing the development of personal relationships. These results show that also the "objective" characteristics of the situations have some effects on the ways people perceive situations.

To sum up – the results of the current study show that the RSQ is a valuable measurement tool that is applicable in the Estonian context and can be used to meaningfully measure the situational evaluations of at least the student sample. The current study also revealed the meaningfulness of objective categorization of situations that can be used in the research of subjective situational evaluations.

Study limitations

The first limitation of the overall project is that the samples (although worldwide) consist of undergraduate students only. Although in the Estonian sample the age varied greatly, the overall sample was mostly under 30 years of age. Only one social group (undergraduate students) was included in the study. The second limitation is in using a self-report technique. Namely, people might lack sufficient awareness of the situation (Furr &

Funder; 2004), they might not be willing to reveal the "truth" about the characteristics of the situations or won't care to be thorough enough in their responses. Thirdly, the tests won't consider the participants' physical or psychological state while taking the test (e.g., their tiredness, their mood, health factors etc.). The fourth limitation concerns the situational variety. There are many types of situations that the construct does not measure well enough (e.g. intimate relationships) (Wagerman & Funder; 2009; Fast & Funder, 2010). Fifth, the situational description the participants provided were very different in quality and offered different amount of relevant information. That made the classification of situations on the basis of the three dimensions of situations (the locations, the actions and the surrounding people) very difficult. Along with that, it was harder to measure, if the RSQ construct has some meaning in these domains.

Future Directions

The current study succeeded in gathering a wide range of situational data from students, measuring both the applicability of the RSQ instrument and the people's situational variety and construal in Estonian context. As the RSQ has proven to be used for measuring situational evaluations in Estonia, further studies should relate the psychological attributes of situations (evaluated with the RSQ) to the other two components of the personality triad, that is to behaviors (that can be measured by the means of the Riverside Behavioural Q-Sort; Funder, Colvin & Furr; 2000; Furr, Wagerman & Funder, 2010) as well as to the personality triats (NEO Personality Inventory-3; McCrae, Costa, & Martin, 2005). That will be the topic of my master's thesis.

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