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Personality and psychological capital as indicators of future job success?

A multicultural comparison between three European countries

ABSTRACT

The main goal of this research was to study psychological capital and its relationship with personality across cultures. This was achieved by comparing the main variables across three distinct cultural settings: Eastern Europe (Bulgaria), Nordic Europe (Finland), and South Europe (Portugal). Altogether 231 people answered the questionnaires.

Results indicated that personality and psychological capital were connected. In particular, Extraverted ($p < 0.01$), iNtuitive ($p < 0.01$) and Thinking people ($p < 0.01$) revealed higher scores in all psychological capital dimensions than their counterparts: Introverted, Sensing and Feeling people. There were also significant differences concerning the level of psychological capital in different countries.

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The Portuguese sample scored highest in all the dimensions of psychological capital, whereas Finnish indicated the lowest scores of the three countries. When all variables are taken together, results show that the highest psychological capital scores are observed in the "Portuguese perceiving" group; the lowest psychological capital scores are found in the "Finnish introverted" group. Bulgarians did not differ significantly in their scores.

These results illustrate important and previously unidentified relationships between psychological capital and personality in distinct cultures. All together, and from a theoretical standpoint, the findings point to the need to explore the effect of culture on psychological capital; the relationships between personality and psychological capital also need further exploration. There are also practical implications, which are discussed at the end of the text. The fact that the questionnaires were collected from students in distinct scientific areas in the three countries may represent a drawback. Studies of psychological capital are very recent. After a first phase of instrument development, the next step is to build knowledge regarding the relationships between psychological capital and other well-established individual, social and organizational constructs. The current research aimed at contributing to this stream of works.

Keywords: *Personality, psychological capital, culture*

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INTRODUCTION

Positive psychology has recently entered the psychological and social sciences, and it has brought a refreshing and original view over human nature and other human characteristics which have somehow been neglected (Bright, Cameron & Caza 2006; Luthans, 2002a). The concept of psychological capital is central in positive psychology. Luthans, Youssef and Avolio (2007) define psychological capital as an individual's set of four positive states: self-efficacy, optimism, hope, and resiliency. Studies suggest that psychological capital has an impact on several individual and organizational outputs and performance in work environments. Examples of such positive impacts include increased satisfaction, performance and commitment (Goldsmith, Veum & Darity, 1997; Luthans, Norman, Avolio & Avey, 2008).

The link between psychological capital and personality is somehow implicit in academic writing. Personality has been a key variable to explain job satisfaction (Judge, Heller & Mount, 2002; Nikolaou & Robertson, 2001), leadership (Gallén, 1999; Hautala, 2005), and stress (Routamaa & Honkonen, 1998). Some of the previously mentioned authors and studies suggest that psychological capital is less stable than personality, and hence it is more open to be developed and managed. On the other hand, it is more stable than emotions, so it does not fluctuate in the short terms (e.g. Luthans et al., 2008a). Although they are distinct concepts, one can expect

that psychological capital has connections with personality, and that certain personality types are naturally more optimistic, resilient, hopeful and efficient in their cultural contexts.

The link between personality and culture has been addressed in previous studies. Research suggests that personality differs in cultures (Allik & McCrae, 2004; Judge, 2001; Oakland, Pretorius & Hun Lee, 2008) and that collision of individual's personality and culture may even become a risk factor for the individual's mental health (Caldwell-Harris & Ayçiçegi, 2006). In a study with expatriates, for example, it was found that some personality types smooth the adaptation process to new cultures; in the same vein, resemblance concerning values may affect such process (Routamaa & Rautiainen, 2002).

Research on differences between psychological capital across countries is still in its initial phase; investigations are more concerned with exploring and characterizing social and psychological capital in local settings, than on contrasting and comparing how different populations behave in this respect. And yet psychological capital may be different in distinct cultures. For example, in a recent doctoral thesis, it was found that Portuguese are typically a pessimist people in the long run, but rather optimism in the short run (Lopes, 2008). The lack of information regarding how other cultures score in such psychological capital dimensions do not allow to draw definitive conclusions, however we can hypothesise that if differences exist, they may be due to distinct personality patterns operating across people from different countries.

The current research explores this gap, by investigating the relationship between personality and psychological capital in distinct cultural contexts. The main research problem can be stated as follows: "What are the differences between personality and psychological capital in distinct cultural contexts?"

As stated, psychological capital is a rather new and untested formula, and thus it is important to take into account as many sides as possible to find out new areas where this concept may have important insights. Our study is based on data from three European countries. On top of the theoretical contributions to the area of psychological capital and personality, our study is of practical relevance for many reasons. For example, in an increasingly multicultural society, the results of this study help understand differences in individual integration, and also develop more individualized training; results may be also useful to comprehend management of expatriates and their orientation towards the new country; how organizations in these countries manage their personal may be also interested in knowing to what extend the general population is more oriented towards which dimensions of psychological capital. The countries were chosen on the basis of previous cooperation between the researchers, as well on the basis of critical differences between three European cultures and regions: Latin (Southern), Nordic (Northern), and Slavic (Eastern).

The text is organized as follows: firstly the theoretical background is put forward; secondly methodology, participants and psychometric quality of psychological capital are introduced;

thirdly results are presented; finally, results are examined, and implications for future research are discussed.

LITERATURE REVIEW

This section describes in brief the two conceptual pillars of the current research: Myers-Briggs Type Indicator (MBTI) and psychological capital. However, firstly, cultural differences in accordance to Hofstede from Bulgaria, Finland and Portugal are presented shortly.

Brief description of Bulgaria, Finland and Portugal in Hofstede's framework

While national culture and organizational culture are two different concepts, they do share some common ground, therefore, it is important to start with one of the most important and well-known frameworks in the area, Hofstede's seminal work on national cultures. Hofstede distinguished five dimensions of national culture: power distance, individualism/collectivism, masculinity/femininity, uncertainty avoidance, and long-term versus short-term orientation. Table 1 summarizes some data extracted from an international database (http://www.geert-hofstede.com/), which illustrates how the three participating countries in the current research behave in these dimensions. The long-term versus short-term orientation is a relatively new dimension, added as a result of a Chinese study of students in 23 countries and there is no information on Hofstede's official webpage about Bulgaria, Finland and Portugal.

Power distance refers to the degree of inequality in a society, and how its members have accepted or reconciled themselves to this inequality. When power distance in a given culture is great, status is regarded as important in order to show power. Conversely, in a society with less power distance, people with power try to look less powerful. The data clearly shows that Bulgaria scores highest on power (70), Finland scores 33, and Portugal scores 63.

The individualism/collectivism dimension reflects the degree to which members of a culture are integrated into groups. In individualist cultures, people only look after themselves and their immediate family and the ties between them are loose. Conversely, in collectivist cultures, people are integrated in stable social networks from birth, where members look after them in exchange for loyalty (de Mooij & Hofstede, 2002). According to Hofstede's data (table 1), Bulgaria scores 30, Finland scores 63, and Portugal scores 27 in this dimension, indicating that Finland is the most individualistic of these three countries.

The *masculinity/femininity* dimension expresses the distribution of roles between the genders, i.e. the degree of polarisation (differentiation) between the socialised roles of men and women. In masculine cultures the dominant values are achievement, assertiveness, performance and individual decision-making. The values most often encouraged in feminine cultures are mod-

esty, caring for others and quality of life (de Mooij & Hofstede, 2002). Hofstede's data (table 1) shows the following differences between the three countries: Bulgaria is masculine (40), followed by Portugal (31), and Finland (26).

Uncertainty avoidance is the extent to which people feel threatened by ambiguity and try to avoid it, that is the collective level of tolerance for uncertainty (Hill, Puurula, Sitko-Lutek & Rakowska, 2000). Where uncertainty avoidance is strong in a culture, there is a need for rules and formality to structure life, and competence and the belief in experts are particularly valued. In cultures with weak uncertainty avoidance people tend to be more innovative and entrepreneurial and there is a strong belief in the generalist (de Mooij & Hofstede, 2002). According to Hofstede's website data, Portugal shows the highest score (104) for this aspect, compared to Bulgaria (85), and Finland (59).

TABLE 1. Hofstede's culture differences in the target countries

Hofstede dimensions	Bulgaria	Finland	Portugal
Power distance	**70**	**33**	**63**
Individualism/collectivism	**30**	**63**	**27**
Masculinity/femininity	**40**	**31**	**26**
Uncertainty avoidance	**85**	**59**	**104**

The Myers-Briggs Type indicator (MBTI)

Personality approaches can be divided in three groups: the psychoanalytic, the behaviouristic and the phenomenological (Atkinson, Atkinson, Smith, Bem & Nolen-Hoeksama, 1996). The first two approaches are based on the person's motivational or reinforcement history when predicting behaviour. The phenomenological approach focuses on the individual's subjective experience (Atkinson et al. 1996). Personality psychology describes the individual differences, and the trait approach is the most common approach to this. Myers theory is based on Jung's (1921/1990) work of psychological types, i.e. it is not based on traits, rather it is based on a dynamic theory of personality. Briggs and Myers further continued Jung's work and developed means to turn the theory practical, i.e. through proposing a measurement of the theory. One of their major contributions is the development of the Myers-Briggs Type Indicator. The four-letter shortening "MBTI" is used to refer both to the Myers-Briggs theory, and to the personality measurement system of the inventory.

MBTI measures four key bi-dimensional features in personality (see table 2): a) direction of energy and attention (Extraversion versus Introversion); b) the way information is perceived by individuals (Sensing versus iNtuition); c) the way decisions are made (Thinking versus Feeling);

TABLE 2. Preferences in Myers-Briggs theory

Extraversion (E) – Introversion (I)
Extraverted (E) **people direct energy mainly toward the outer world of people and objects. They are energized by interaction and activity. They are willing to engage and involve others and they seek and give feedback.** ***Introverted (I)*** **people direct energy mainly toward the inner world of experiences and ideas. They are energized by reflection and solitude. Introverted types experience people who "stop by" as interruptions and they prefer physical space, which allows for privacy and concentration (Demarest, 1997; Isachsen & Berens, 1988; Myers & Myers, 1990).**

Sensing (S) – iNtuition (N)
Sensing (S) **people focus mainly on what can be perceived by the five senses. They are naturally interested in concrete and verifiable information about what is or what has been. They prefer to work at steady pace with one thing at time.** ***iNtuitive (N)*** **people focus mainly on perceiving patterns and interrelationships. They tend to be interested in flashes of insight, abstractions, theory, and notions of what could be. Intuitive people prefer to work in bursts and wait for inspiration (Demarest, 1997; Isachsen & Berens, 1988; Myers & Myers, 1990).**

Thinking (T) – Feeling (F)
Thinking (T) **people tend to base their conclusions on logical analysis with a focus on objectivity and detachment. They prefer to focus on the work at hand, and do not spend much time on getting to know others and building relationships. They are also often critical of ideas and proposals, and often make suggestions for "how to improve" things.** ***Feeling (F)*** **people tend to base their conclusions on personal or social values with a focus on understanding and harmony. At work, they often want to spend time getting to know others. They are naturally appreciative of people's contributions (Demarest, 1997; Isachsen & Berens, 1988; Myers & Myers, 1990).**

Judging (J) – Perceiving (P)
Judging (J) **people prefer decisiveness and closure. They like to live in an orderly and structured fashion. As a working style, judging types tend to be methodical and systematic, and often develop routine approaches to work. They like to finish things, bring a structure to the work at hand and see the work and play as distinct aspects of life.** ***Perceiving (P)*** **people prefer flexibility and spontaneity. They like to live with options open as long as possible in an unstructured way. Perceiving people tend to be adaptable and often design flexible or innovative approaches to work. They like to start things, but motivation and interest may decline when it is time to finish (Demarest, 1997; Isachsen & Berens, 1988; Myers & Myers, 1990).**

and d) lifestyle (Judging versus Perceiving). These dimensions can also be called dichotomies. For each dichotomy, an individual adopts one preference over the others, which results into a combination of 16 personality types. For example, the letter combination INTP stands for Introverted-iNtuitive-Thinking-Perceiving.

Oakland et al. (2008) found that personality differs in the US and South-Africa. For example, South-African children score higher in Introversion (I), Sensing (S), Feeling (F) and Judging (J), than US children. Personality, values and culture have been studied e.g. by Judge (2001), who found that the Intuitive Thinkers (NT) style dominated North American CEOs, whereas Taiwanese CEOs were more of the Sensing Thinkers (ST) type. The Big Five[1] personality test was used in 36 cultures

1 The factors of the Big Five model are 1) openness (intellect), 2) conscientiousness, 3) extraversion, 4) agreeableness, and 5) neuroticism (emotional stability).

and results indicate that geographically close cultures have similar profiles, and there is a clear contrast between, on one hand, European and American cultures, and, on the other hand, Asian and African cultures. European and North American people were higher in extraversion and openness to experience and lower in agreeableness. According to McCrae and Costa (1989), the MBTI measures aspects of the five dimensions of the five–factor model of personality except for neuroticism. Extraversion is naturally correlated with extroversion, intuition with openness, feeling with agreeableness and judging with conscientiousness.

Psychological capital

Positive psychology has its roots in psychologist Martin Seligman, who proposed to concentrate more on the good sides of people than on the problems. According to Seligman, too often people get stuck on the negative sides of themselves and their personal history (Seligman, 1998). Thus, positive psychology identifies that human beings are gifted with a set of attributes which are positive in their essence, and that these allow individuals to grow continually and develop into full and superior beings, with high impact on performance at work (Luthans & Youssef, 2004; Seligman & Csikszentmihalyi, 2000). Virtuousness is other research field which is related to positive psychology. It is characterized by human impact, moral goodness, and unconditional societal betterment (Bright et al., 2006; Cameron, Bright & Caza 2004). Altogether, positive psychology has made some important contributions to identify which are those attributes that make individuals more or less positive.

At the heart of positive psychology is the notion of psychological capital. Psychological capital is distinctive from traditional economic capital, human capital and social capital. Traditional economic capital includes typically finance and tangible assets; human capital includes experiences, education, skills, knowledge and ideas; social capital stresses relationships, network of contacts and friends; and positive psychological capital stresses confidence, hope, optimism and resilience (Luthans, Luthans & Luthans, 2004). Psychological capital is concerning about who you are and, more importantly, on 'who you are becoming'. Psychological capital is defined here as "an individual's positive psychological state of development that is characterized by: 1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks: 2) making a positive attribution (optimism) about succeeding now and in the future 3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and 4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success' (Luthans et al., 2007). These attributes of psychological capital can be defined as (Luthans & Youssef, 2004):

> *Self-efficacy*: one's conviction (or confidence) about his or her abilities to mobilize the motivation, cognitive resources and courses of action needed to successfully execute a

specific task within a given context. Among the four concepts, self-efficacy is the one which is better structured both from a theoretical and practical standpoint. In fact, it is deeply rooted in Bandura's (1997) human social cognition theories.

Hope: following Snyder's (2000) theory and research on hope, this concept is defined as a positive motivational state that is based on an interactively derived sense of successful: 1) agency (goal-directed energy), and 2) pathways (planning to meet goals).

Optimism: Seligman (1998) claims that optimism is an explanatory style that attributes positive events to personal, permanent, and pervasive causes and interprets negative events in terms of external, temporary, and situation-specific factors.

Resilience: this is the most recent addition to psychological capital, and it has been defined as the capacity of rebound of bounce back from adversity, conflict, failure, or even positive events, progress, and increased responsibility (Luthans, 2002b). Taken from positive psychology, the definition of resiliency is to widen with the inclusion of the ability to overcome not only the negative, but also the positive and challenging events.

Some other personality traits are also identified to predict person's productivity: Self-esteem, self-efficacy, locus of control and emotional stability developed by Judge and colleagues (see e.g. Judge & Bono, 2001). These are overlapping in many cases with Luthans and his colleagues' definitions.

Albeit very recent, the studies on psychological capital have proved that it has many positive impacts, for example, on individuals' satisfaction, performance and commitment. For example, Luthans, Avolio, Walumba and Li (2005) found in a study carried out in China, that workers' positive states of hope, optimism and resiliency are significantly correlated with performance. Goldsmith et al. (1997) had already found that psychological capital affects directly (via self-esteem) and indirectly (through locus of control) an individual's real wage. Luthans et al. (2008) suggest that employees' psychological capital mediates the relationship between supportive climate and their performance. Cole, Daly and Mak (2009) found out that psychological capital had a partial mediating effect on employment status and wellbeing; further, individuals with lower psychological capital are at greater risk of being unemployed. Interestingly, some authors started to propose that psychological capital can be developed with interventions. Luthans, Avey, Avolio, Norman and Combs (2006) developed an intervention tool (Psychological Capital Intervention or PCI) which they claim increase people's psychological capital.

After this presentation of Hofstede's culture differences, theory of Myers-Briggs Type and psychological capital the focus is to see how they relate in practise. The following chapters try to answer to the research question "what is the relationship between psychological capital and personality in different cultural context?"

METHOD

Setting

This research was carried out in three countries, Bulgaria, Finland and Portugal. Since the main variables of this work are not specific to particular contexts or situations, data collection followed a snowball technique making use of the researchers' social networks in their working environments. The sample in the three countries is composed of students in psychology and economics courses.

The three countries were selected based on previous collaborative work by two of the researchers. Later on, after investigating Hofstede's framework, the two researchers selected and invited a third researcher to participate. In the end, the countries symbolize three European cultures and regions: Latin (Southern), Nordic (Northern), and Slavic (Eastern). Future research should take into account other representative European cultures.

Participants

The original dataset was composed of 231 valid cases, of which 47 from Bulgaria (20.3%), 78 from Finland (33.8%) and 106 from Portugal (45.9%). Biographical information was also sought in terms of age, gender, marital status, and number of dependents (children). These were some of the variables identified in the literature which may influence the relationships under analysis. Table 3 shows the key bio data per country.

Variables and questionnaires

Two existing scales were adapted and composed into one single questionnaire. Then the questionnaire was translated into Bulgarian, Finnish, and Portuguese, using the translation-back translation technique, whenever needed [2]. The lines below describe in detail the various scales and questions used in the questionnaire.

Myers-Briggs Type Indicator is amongst the most popular personality inventories ever developed. There are several versions since its first appearance during the Second World War, and it has been translated into numerous countries around the globe. Since MBTI is a well-known test with high quality results in several hundreds of studies, the current research used existing versions in the three participating countries which have been already translated and adapted to each country. The Bulgarian test was Form G, adapted for Bulgarian population from Pencheva and Kazandjiev (2001). The Finnish test was the F-version, which has very good internal consistency coefficients (Järlström, 2000: alphas range from 0.79 to 0.86). In Portugal it was used the 88-item

2 In fact, some of the scales have been used in these countries for a long time, therefore in such cases it was just a matter of composing them into the questionnaire.

TABLE 3. Biographical information in the study

		Bulgaria	Finland	Portugal	Total
Age	Mean (SD)	23.4 (3.3)	27.1 (9.5)	28.3 (8.3)	
Gender	F	40 (85.1%)	53 (67.9%)	76 (71.7%)	169 (73.2%)
	M	7 (14.9%)	25 (32.1%)	30 (28.3%)	62 (26.8%)
Marital status	Single	40 (85.1%)	48 (61.5%)	76 (71.7%)	164 (71.0%)
	Other	7 (14.9%)	30 (38.5%)	30 (28.3%)	67 (29.0%)
No. children	None	21 (72.4%)	37 (75.5%)	91 (85.8%)	149 (81.0%)
	One	4 (13.8%)	7 (14.3%)	3 (2.8%)	14 (7.6%)
	Two or more	4 (13.7%)	5 (10.1%)	12 (11.3%)	21 (11.4%)

STEP 1 version, which was translated and adapted to the Portuguese population in 1998.Hence, the researchers were more interested on identifying the several personality types in respondents than on assessing reliability and validity estimates for this scale.

Psychological capital is composed of 40 statements, divided into four groups. In each group, respondents are required to state the degree to which each statement describes him or her as a person (hope and optimism), the degree to which the statement applies to him or her (resilience), and the degree of confidence generally felt to carry out a number of tasks (self-efficacy). All scales were adopted from a number of works: Snyder, Sympson, Ybasco, Borders, Babyak and Higgins (1996, Hope; example of an item: "If I should find myself in a jam, I could think of ways to get out of it"); Scheier and Carver (1985; Optimism: "In uncertain times, I usually expect the best"); Block and Kremen (1996), Klohnen (1996) (Resilience: "I quickly get over and recover from being startled"); and Schwarzer, Hahn and Jerusalem (1993; Self-efficacy: "I can always manage to solve difficult problems if I try hard enough"). All scales were transformed into a 1–6 Likert type, in which 1 represents a lower degree of hope, optimism, resilience, and self-efficacy.

Psychometric quality of psychological capital

Reliability results of psychological capital are shown in table 4, which shows that reliability results are generally good or very good, although the optimism's scale in the Finnish sample shows a smaller value. Overall, these results point to good internal consistency for psychological capital scales.

Factor analysis was used to test the empirical structure of the data. Several solutions were tested. Some solutions accepted the number of factors extracted by default, whereas others were forced with 4 and 5 factors. And still others were tried with less data (age up to 30 year-old; see section below). Overall, factor solutions point to one large component, which explains as much

TABLE 4. Reliability results for psychological capital

Variables (# items)	Bulgaria (n = 47)	Finland (n = 78)	Portugal (n = 106)	Global dataset (n = 231)
Hope (6i)	0.72	0.80	0.77	0.78
Optimism (3i)*	0.90	0.57	0.70	0.75
Resilience (14i)	0.79	0.77	0.83	0.81
Self-efficacy (10i)	0.89	0.87	0.91	0.89

Despite the fact that the Optimism scale has 10 items, only 3 are referring to optimism. 4 other items are not coded, while the last 3 are measuring Pessimism.

as 33% of all variance of the 33 items included in the analysis, but which does not pull together a large number of items. In fact, the first component in the free-factor solution is composed of 10 items, which are drawn from optimism, resilience, and self-efficacy. The best result was a forced 4-factor solution, in which the 6 items of hope are clearly put together in a single component.

Given this disappointing pattern of results with psychological capital, other principal component analyses were performed within each of the four mains variables. Results were somehow of better quality, namely hope and self-efficacy showed one single-factor solution each, explaining 48% (Hope) and 51% (Self-efficacy), respectively, of all variables (6 items in Hope and 10 in Self-efficacy). Optimism showed 3 factors, of which the first one explains 30% of the variance, and aggregates the three items of optimism plus two of the non-coded ones. The three items of pessimism are also clearly put together into a single factor. Problems arise with resilience, which structure shows four components (first one explains 31% of the variance of all 14 items), and items are scattered around the four components.

Results from exploratory component analysis as well as from reliability analysis suggest that the theoretical frameworks of psychological capital are in general appropriate, and that the instruments used capture with quality the underlined constructs. However, some results are not as satisfactory as expected, and therefore more analysis is necessary in order to explore further these inconsistencies between theory and data. Since the primary aim of the current paper was not to investigate these issues, a decision was taken to proceed with the main analyses, yet leaving a word of caution when reading results involving the above-identified problematic scales.

RESULTS

Results shown are the final set of a sequence of various statistical analyses. Firstly personality structures of each country are presented, as well as patterns of psychological capital. Finally countries, psychological capital and MBTI-preferences are analyzed together.

MBTI preferences in Bulgaria, Finland and Portugal

In order to find if the difference in predominant types in the three countries were statistically significant, Selection Ratio Type Tables (SRTT) software was employed. SRTT is a program developed by the Center for Application of Psychological Type (CAPT) which enables researchers to make comparisons between samples. Results are presented in terms of chi-square analysis, as well as Fisher's exact probability when samples are very small. The analysis produces the co-called Self-selection index (I), which represents the ratio of percent of type in group (sample) to the percent in the base. The base in this case is represented by the whole sample.

Table 5 summarizes the results. When the distribution of personality types per country is compared to the whole dataset, it can be observed that students from Bulgaria and Portugal favoured more iNtuition, whereas students from Finland were predominantly Sensing ones. Bulgarian students differed from others with regard to the Extraversion-Introversion and Judging-Perceiving axes: they are more Introverted and Judging than Finnish and Portuguese students. Thinking-Feeling distribution was similar across countries.

TABLE 5. Personality preferences by country and statistical differences between countries

	Bulgaria % (N = 37)	Finland % (N = 63)	Portugal % (N = 76)
Extraversion (E)	**40.54**** **(15)**	**63.49 (40)**	**68.42 (52)**
Introversion (I)	***59.46**** ***(22)***	**36.51 (23)**	**31.58 (24)**
Sensing (S)	**8.11***** **(3)**	***80.95***** ***(51)***	**38.16*** **(29)**
iNtuition (N)	***91.89***** ***(34)***	**19.05***** **(12)**	***61.84**** ***(47)***
Thinking (T)	**45.95 (17)**	**46.03 (29)**	**48.68 (37)**
Feeling (F)	**54.05 (20)**	**53.97 (34)**	**51.32 (39)**
Judging (J)	***62.16**** ***(23)***	**41.27 (26)**	**40.79 (31)**
Perceiving (P)	**37.80*** **(14)**	**58.73 (37)**	**59.21 (45)**

*** p < 0.05**
**** p < 0.01**
***** p < 0.001**

Normal text means the amount by country is less thanall data, *bold italic* means it is more than all data.

Psychological Capital in Bulgaria, Finland and Portugal

As shown in Table 6, the three countries differ statistically in all variables except self-efficacy. Finnish people rated themselves lowest in every dimension. The highest difference is shown on the Optimism scale, with the Portuguese scoring markedly higher than the Finnish.

TABLE 6. Psychological capital means across countries

Variables	Bulgaria (n = 44)	Finland (n = 62)	Portugal (n = 76)	Global dataset (n = 182)
Hope	**4.4**	**4.1**	**4.5**	**4.3***
Optimism	**4.4**	**3.9**	**4.7**	**4.3****
Resilience	**4.3**	**4.1**	**4.4**	**4.3***
Self-efficacy	**4.3**	**4.2**	**4.4**	**4.3**

*** p <0.05**
**** p<0.001**
Underlined means represent differences between countries, after Scheffe and Duncan's post-hoc tests

A low level of Optimism when compared to the other samples, does not necessarily mean than Finnish people are more pessimist than people from other nations. In fact, when the Pessimism scale is used (three items in Scheier & Carver's text, 1985), Portuguese also score the highest value (3.2), followed by the Finnish (2.9), and the Bulgarian (2.8), albeit these differences are not statistically different. How one can be simultaneously Optimist and Pessimist, is an interesting matter, which will be discussed in the last section of this text.

Relationship of Opposite Personality Preferences with Psychological Capital in Bulgaria, Finland and Portugal

The opposite personality preferences' (Extraversion vs. Introversion, Sensing vs. iNtuition, Thinking vs. Feeling and Judging vs. Perceiving) are compared in relation to psychological capital by each country.

Extraversion vs. Introversion (Table 7)

In all countries, Extraverted people tend to rate higher their psychological capital qualities than Introverted people. The exception was in Optimism, where statistically significant differences did not occur. Portuguese and Finnish people differed significantly in all dimensions but Optimism, whereas Bulgarian people did not have significant differences. However they showed a similar tendency; also Bulgarian Extraverts rated their psychological capital higher than Introverts. Especially Portuguese Extraverts tend to rate themselves higher than others. Finnish Introverts were rating themselves clearly lower than others.

TABLE 7. Extraversion vs. Introversion and Psychological Capital by countries

	Hope	Optimism	Resilience	Self-efficacy	Psychological capital Total
Extraversion (E) – Means					
All countries (N = 144)	**4.50**	**4.47**	**4.48**	**4.48**	**4.49**
Bulgaria (N = 16)	**4.47**	**4.49**	**4.41**	**4.46**	**4.48**
Finland (N = 53)	**4.26**	**4.06**	**4.36**	**4.37**	**4.28**
Portugal (N = 75)	***4.67***	***4.76***	***4.58***	***4.57***	***4.64***
Introversion (I) – Means					
All countries (N = 79)	**4.17**	**4.30**	**4.11**	**4.18**	**4.19**
Bulgaria (N = 23)	**4.26**	**4.26**	**4.30**	**4.23**	**4.26**
Finland (N = 25)	*3.87*	*3.79*	*3.69*	*3.95*	*3.83*
Portugal (N = 31)	**4.35**	***4.76***	**4.30**	**4.32**	**4.43**
t-value E vs. I					
All countries	**3.17**	**1.24**	**4.58**	**3.39**	**3.58**
Bulgaria	**0.92**	**0.60**	**0.56**	**1.13**	**1.02**
Finland	**1.98**	**1.33**	**5.95**	**3.00**	**3.73**
Portugal	**2.38**	**–0.21**	**2.17**	**1.66**	**1.65**
Sig. (2-tailed) E vs. I					
All countries	***0.00*****	**0.21**	***0.00******	***0.00******	***0.00******
Bulgaria	**0.36**	**0.55**	**0.58**	**0.26**	**0.31**
Finland	***0.06*****	**0.19**	***0.00******	***0.00*****	***0.00******
Portugal	***0.02*****	**0.98**	***0.03*****	***0.10****	**0.10**

*** p < 0.10**
**** p < 0.05**
***** p < 0.01**

Bold oblique **indicate the highest value of the three countries.** *Italics* **indicate the smallest value of the three countries**

Sensing vs. iNtuition (Table 8)

In the total sample, iNtuitives tend to appraisal their psychological capital qualities higher than Sensing people. This tendency occurs in Finland and Portugal, but in the Bulgarian sample the means are inverted, although the statistically significant results did not occur in Portugal (the Bulgarian sample was too small). Statistically in Finland Sensing and iNtuition differs in Resiliency and Self-Efficiency, when iNtuitives thought being more resilient and self-efficient than Sensing people.

Sensing people in Bulgaria rated highest values when comparing the countries. Finnish Sensing people rated their psychological capital lowest. However, here must be reminded that there were only four people representing Sensing people in Bulgaria.

TABLE 8 – Sensing vs. Intuition and Psychological Capital by countries

	Hope	Optimism	Resilience	Self-efficacy	Psychological capital Total
Sensing (S) – Means					
All countries (N = 113)	**4.30**	**4.27**	**4.25**	**4.30**	**4.28**
Bulgaria (N = 4)	***4.75***	***5.00***	***4.55***	***4.58***	***4.72***
Finland (N = 61)	*4.08*	*3.93*	*4.06*	*4.16*	*4.06*
Portugal (N = 48)	**4.53**	**4.65**	**4.45**	**4.45**	**4.52**
Intuition (N) – Means					
All countries (N = 110)	**4.47**	**4.56**	**4.46**	**4.45**	**4.50**
Bulgaria (N = 35)	**4.30**	**4.27**	**4.32**	**4.29**	**4.30**
Finland (N = 17)	**4.33**	**4.12**	**4.46**	**4.51**	**4.41**
Portugal (N = 58)	**4.61**	**4.85**	**4.53**	**4.53**	**4.63**
t-value S vs. N					
All countries	**–1.78**	**–2.27**	**–2.62**	**–1.77**	**–2.66**
Bulgaria +	**–**	**–**	**–**	**–**	**–**
Finland	**–1.25**	**–0.81**	**–2.64**	**–2.13**	**–2.39**
Portugal	**–0.57**	**–1.33**	**–0.69**	**–0.64**	**–0.94**
Sig. (2-tailed) S vs. N					
All countries	***0.08****	***0.02****	***0.01****	***0.08****	***0.01****
Bulgaria +	**–**	**–**	**–**	**–**	**–**
Finland	**0.22**	**0.42**	***0.01****	**0.04****	***0.02****
Portugal	**0.57**	**0.19**	**0.49**	**0.52**	**0.35**

*** p < 0.10**
**** p < 0.05**
***** p < 0.01**

Bold oblique **indicate the highest value of the three countries.** *Italics* **indicate the smallest value of the three countries**
+ Not enough data available to make reliable comparisons with statistical analyses

Thinking vs. Feeling (Table 9)

In all data Thinking people tend to appraisal themselves higher in the psychological capital in every dimension, except Resilience. In Finland statistically significant differs occurred in Self-Efficiency and in Portugal Hope and Self-Efficiency. In Bulgaria statistically significant differences did not occur but the tendency was similar. When looking the means by countries, Portuguese Thinking people rated themselves highest and the Finnish Feeling people rated their psychological capital skills lowest.

TABLE 9. Thinking vs. Feeling and Psychological Capital by countries

	Hope	Optimism	Resilience	Self-efficacy	Psychological capital Total
Thinking (T) – Means					
All countries (N = 115)	**4.51**	**4.54**	**4.40**	**4.52**	**4.50**
Bulgaria (N = 18)	**4.53**	**4.54**	**4.37**	**4.50**	**4.48**
Finland (N = 38)	**4.25**	**4.06**	*4.15*	**4.40**	**4.23**
Portugal (N = 59)	***4.68***	***4.84***	***4.56***	***4.61***	***4.67***
Feeling (F) – Means					
All countries (N = 108)	**4.24**	**4.28**	**4.30**	**4.22**	**4.26**
Bulgaria (N = 21)	**4.19**	**4.18**	**4.33**	**4.17**	**4.22**
Finland (N = 40)	*4.04*	*3.88*	*4.15*	*4.09*	*4.04*
Portugal (N = 47)	**4.44**	**4.66**	**4.41**	**4.35**	**4.47**
t-value T vs. F					
All countries	**2.91**	**2.05**	**1.23**	**3.53**	**2.96**
Bulgaria	**2.54**	**0.42**	**4.35**	**0.07**	**0.03**
Finland	**1.26**	**0.93**	**–0.13**	**2.30**	**1.57**
Portugal	**1.97**	**1.22**	**1.31**	**1.97**	**1.82**
Sig. (2-tailed) T vs. F					
All countries	***0.00******	***0.04*****	**0.22**	***0.00******	***0.00******
Bulgaria	**0.13**	**0.35**	**0.86**	**0.11**	**0.22**
Finland	**0.21**	**0.35**	**0.99**	***0.02*****	**0.12**
Portugal	***0.06****	**0.23**	**0.19**	***0.05****	***0.07****

*** p < 0.10**
**** p < 0.05**
***** p < 0.01**

***Bold oblique* indicate the highest value of the three countries.** *Italics* **indicate the smallest value of the three countries**

Judging vs. Perceiving (Table 10)

Perceiving people tend to appraise themselves higher than Judging types in Finland and Portugal, but in Bulgaria the tendency was vice versa. In Finland statistical differences occurred in case of Hope and in Portugal in every dimension. Portuguese Perceiving types were having most psychological capital qualities and Finnish Judging types least.

TABLE 10. Judging vs. Perceiving and Psychological Capital by countries

	Hope	Optimism	Resilience	Self-efficacy	Psychological capital Total
Judging (J)					
All countries (N = 107)	**4.39**	**4.33**	**4.29**	**4.33**	**4.33**
Bulgaria (N = 25) – Mean	**4.41**	**4.36**	**4.32**	**4.41**	**4.38**
Finland (N = 36) – Mean	**4.33**	**4.03**	**4.16**	**4.35**	**4.21**
Portugal (N = 46) – Mean	**4.42**	**4.54**	**4.37**	**4.28**	**4.40**
Perceiving (P)					
All countries (N = 116)	**4.38**	**4.49**	**4.40**	**4.41**	**4.43**
Bulgaria (N = 14) – Mean	**4.23**	**4.33**	**4.39**	**4.16**	**4.29**
Finland (N = 42) – Mean	*3.97*	*3.92*	*4.13*	*4.14*	*4.06*
Portugal (N = 60) – Mean	***4.69***	***4.93***	***4.59***	***4.66***	***4.72***
t-value J vs. P					
All countries	**0.12**	**–1.32**	**–1.44**	**–0.86**	**–1.18**
Bulgaria	**1.98**	**0.37**	**2.08**	**2.25**	**2.50**
Finland	**2.23**	**0.56**	**0.19**	**1.48**	**1.28**
Portugal	**–2.27**	**–2.63**	**–1.92**	**–2.86**	**–2.79**
Sig. (2-tailed) J vs. P					
All countries	**0.90**	**0.19**	**0.15**	**0.39**	**0.24**
Bulgaria	**0.42**	**0.95**	**0.75**	**0.25**	**0.70**
Finland	***0.03*****	**0.58**	**0.85**	**0.14**	**0.20**
Portugal	***0.02*****	***0.01*****	***0.06****	***0.01*****	***0.00*****

*** p < 0.10**
**** p < 0.05**
***** p < 0.01**

Bold oblique **indicate the highest value of the three countries.** *Italics* **indicate the smallest value of the three countries**

Relationship of Similar Personality Preferences with Psychological Capital in Bulgaria, Finland and Portugal

Similar personality preferences were compared in these three countries to find out more specific cultural differences. That means that extraverted people from the three countries were studied in relation to psychological capital dimensions, then introverted, then sensing, etc.

Comparison of Extraverted and Introverted people are presented in Table 11. Extraverted Portuguese people were scoring more on hope and on optimism than Finnish Extraverted people. Similarly total psychological capital was significantly higher with Portuguese Extraverts than Finnish extraverts. Concerning Introverts, significant results were also found in all dimensions expect self-efficacy. Post-hoc test showed that the Bulgarian and Portuguese Introverted people tend to rate their resilience and total psychological capital higher than Finnish people. Portuguese Introverts rated their optimism also higher than Finnish Introverts.

TABLE 11. Extraverted preferences compared and Introverted preferences compared with psychological capital by countries

	Hope	Optimism	Resilience	Self-efficacy	Psychological capital Total
Extraversion (E) – Means					
All countries (N = 144)	**4.50**	**4.47**	**4.48**	**4.48**	**4.49**
Bulgaria (N = 16)	**4.47**	**4.49**	**4.41**	**4.46**	**4.48**
Finland (N = 54)	**4.26**	**4.06**	**4.36**	**4.37**	**4.28**
Portugal (N = 75)	**4.67**	**4.76**	**4.58**	**4.57**	**4.64**
Extraverted in comparison					
F-value	**6.27**	**11.27**	**2.50**	**1.04**	**6.57**
Sig.	**0.00*** **	**0.00*** **	**0.09**	**0.36**	**0.00*** **
Post-hoc (Tukey HSD)	**Fin < Port.**	**Fin < Port.**	**–**	**–**	**Fin < Port.**
Introversion (I) – Means					
All countries (N = 79)	**4.17**	**4.30**	**4.11**	**4.18**	**4.19**
Bulgaria (N = 23)	**4.26**	**4.26**	**4.30**	**4.23**	**4.26**
Finland (N = 25)	**3.87**	**3.79**	**3.69**	**3.95**	**3.83**
Portugal (N = 31)	**4.35**	**4.76**	**4.30**	**4.32**	**4.43**
Introverted in comparison					
F-value	**3.34**	**7.88**	**9.10**	**1.91**	**7.66**
Sig.	**0.04****	**0.00*** **	**0.00*** **	**0.16**	**0.00*** **
Post-hoc (Tukey HSD)	**–**	**Fin < Port.**	**Fin < Bulg & Port.**	**–**	**Fin < Bulg & Port.**

*** p < 0.10**
**** p < 0.05**
***** p < 0.01**

Table 12 presents comparisons of Sensing and iNtuitive people in the three cultural contexts. Bulgarian Sensing people were left out of analyses due to their small sample size (N=4). The t-test shows that Portuguese Sensing people were higher in hope, optimism, resilience, self-efficacy, and total psychological capital than Finnish Sensing people. Also iNtuitive people report statistically significant results were found, however post-hoc analysis shows that Bulgarian and Portuguese intuitive people are more optimistic than Finnish iNtuitive people.

TABLE 12. Sensing preferences compared and iNtuitive preferences compared with psychological capital by countries

	Hope	Optimism	Resilience	Self-efficacy	Psychological capital Total
Sensing (S) – Means					
All countries (N = 113)	**4.30**	**4.27**	**4.25**	**4.30**	**4.28**
(Bulgaria (N = 4))	**(4.75)**	**(5.00)**	**(4.55)**	**(4.58)**	**(4.72)**
Finland (N = 61)	**4.08**	**3.93**	**4.06**	**4.16**	**4.06**
Portugal (N = 48)	**4.53**	**4.65**	**4.45**	**4.45**	**4.52**
Sensing in comparison					
(Fin-Port)	**4.34**	**6.73**	**4.05**	**2.35**	**5.27**
t-value	**0.00*** **	**0.00*** **	**0.00*** **	**0.02*** **	**0.00*** **
Sig.	**Fin. < Port.**	**Fin. < Port.**	**Fin. < Port.**	**Fin. < Port.**	**Fin. < Port.**
iNtuition (N) – Means					
All countries (N = 110)	**4.47**	**4.56**	**4.46**	**4.45**	**4.50**
Bulgaria (N = 35)	**4.30**	**4.27**	**4.32**	**4.29**	**4.30**
Finland (N = 17)	**4.33**	**4.12**	**4.46**	**4.51**	**4.41**
Portugal (N = 58)	**4.61**	**4.85**	**4.53**	**4.53**	**4.63**
iNtuition in comparison					
F-value	**2.85**	**6.16**	**1.27**	**1.66**	**3.53**
Sig.	**0.06***	**0.00** **	**0.28**	**0.19**	**0.03** **
Post-hoc (Tukey HSD)	**–**	**Fin. < Bulg & Port.**	**–**	**–**	**–**

*** p < 0.10**
**** p < 0.05**
***** p < 0.01**

Sensing persons from Bulgaria are not included for statistical analyses, due to small number of data to make reliable comparisons with statistical analyses

Comparison of Thinking and Feeling people are presented in Table 13. Portuguese Thinking people rated themselves significantly higher in hope, optimism, resilience and total psychological capital than Finnish Thinking people. In the case of Feeling types, Portuguese people rated again themselves higher than Finnish people. This was statistically significant according to the post-hoc tests in hope, optimism and total psychological capital.

TABLE 13. Thinking preferences compared and Feeling preferences compared with psychological capital by countries

	Hope	Optimism	Resilience	Self-efficacy	Psychological capital Total
Thinking (T) – Means					
All countries (N = 115)	**4.51**	**4.54**	**4.40**	**4.52**	**4.50**
Bulgaria (N = 18)	**4.53**	**4.54**	**4.37**	**4.50**	**4.48**
Finland (N = 38)	**4.25**	**4.06**	**4.15**	**4.40**	**4.23**
Portugal (N = 59)	**4.68**	**4.84**	**4.56**	**4.61**	**4.67**
Thinking in comparison					
F-value	**4.553**	**9.33**	**5.26**	**1.03**	**6.54**
Sig.	**0.013****	**0.00*****	**0.01****	**0.36**	**0.00****
Post-hoc (Tukey HSD)	**Fin. < Port.**	**Fin. < Port.**	**Fin. < Port.**	**–**	**Fin. < Port.**
Feeling (F) – Means					
All countries (N = 108)	**4.24**	**4.28**	**4.30**	**4.22**	**4.26**
Bulgaria (N = 21)	**4.19**	**4.18**	**4.33**	**4.17**	**4.22**
Finland (N = 40)	**4.04**	**3.88**	**4.15**	**4.09**	**4.04**
Portugal (N = 47)	**4.44**	**4.66**	**4.41**	**4.35**	**4.47**
Feeling in comparison					
F-value	**4.46**	**9.60**	**2.62**	**1.54**	**6.13**
Sig.	**0.14****	**0.00*****	**0.08***	**0.22**	**0.00*****
Post-hoc (Tukey HSD)	**Fin. < Port.**	**Fin. < Port.**	**–**	**–**	**Fin. < Port.**

*** p < 0.10**
**** p < 0.05**
***** p < 0.01**

Comparison of Judging and Perceiving people are presented in Table 14. Surprisingly, only one significant finding was found in the case of Judging. Portuguese judging people are more optimistic than Finnish ones. On the other hand, Perceiving people differed greatly: Portuguese perceiving people were rating themselves clearly higher in hope, optimism, self-efficiency, and total psychological capital, than Bulgarian and Finnish perceivers. Additionally, Portuguese Perceivers were more resilient than Finnish ones.

TABLE 14. Judging preferences compared and Perceiving preferences compared with psychological capital by countries

	Hope	Optimism	Resilience	Self-efficacy	Psychological capital Total
Judging (J)					
All countries (N = 107)	**4.39**	**4.33**	**4.29**	**4.33**	**4.33**
Bulgaria (N = 25)	**4.41**	**4.36**	**4.32**	**4.41**	**4.38**
Finland (N = 36)	**4.33**	**4.03**	**4.16**	**4.35**	**4.21**
Portugal (N = 46)	**4.42**	**4.54**	**4.37**	**4.28**	**4.40**
Judging in comparison					
F-value	**1.71**	**3.83**	**1.31**	**0.40**	**1.15**
Sig.	**0.84**	**0.03****	**0.27**	**0.67**	**0.32**
Post-hoc (Tukey HSD)	**–**	**Fin. < Port.**	**–**	**–**	**–**
Perceiving (P)					
All countries (N = 116)	**4.38**	**4.49**	**4.40**	**4.41**	**4.43**
Bulgaria (N = 14)	**4.23**	**4.33**	**4.39**	**4.16**	**4.29**
Finland (N = 42)	**3.97**	**3.92**	**4.13**	**4.14**	**4.06**
Portugal (N = 60)	**4.69**	**4.93**	**4.59**	**4.66**	**4.72**
Perceiving in comparison					
F-value	**16.77**	**17.68**	**7.64**	**8.03**	**17.00**
Sig.	**0.00*****	**0.00*****	**0.00*****	**0.00*****	**0.00*****
Post-hoc (Tukey HSD)	**Fin. & Bulg. < Port.**	**Fin. & Bulg. < Port.**	**Fin. < Port.**	**Bulg. & Fin. < Port.**	**Fin. & Bulg. < Port.**

*** p < 0.10**
**** p < 0.05**
***** p < 0.01**

Overall, results show that Finnish people tend to rate their psychological capital dimensions lower than Portuguese almost in case of every personality preference. When looking at all the means, Bulgarian iNtuitives rated their psychological capital lowest and Portuguese Perceiving types their psychological capital highest.

DISCUSSION

In this study, the target was to compare psychological differences in Eastern, Southern and Northern parts of Europe. Personality was measured with the Myers-Briggs Type Indicator (MBTI). Psychological capital was measured using a variety of existing measures. Hofstede's cultural dimensions were taking into account when interpreting results.

Personality

Regarding differences in personality types, the Bulgarian students varied mostly from others, with several statistically significant differences reported. Bulgarian students are more Introverted, iNtuitive and Judging than others. This is consistent with the theoretical expectations regarding this matter: the higher the educational level, the more favoured are Introverted and Judging types. Introversion reflects the independent work on understanding of concepts and ideas, whereas Judgment reflects persistence, goal orientation, higher academic success and lower dropout (MacDaid, McCaulley & Kainz, 1986). MacDaid et al. (1986) also expect that iNtuition would be more favoured with the raise in educational level, as it replicates a theoretical, abstract and symbolic approach toward learning. This has been confirmed in the current research, with Bulgaria and Portugal. Higher education in Bulgaria is traditionally very high valued and the present results suggest that the type preferences of most Bulgarian students are consistent with the demands of higher education. The findings on this research, however, only partly confirm previous research, in which 442 Bulgarian students scored higher on Introversion, Sensing, Thinking and Judging. Particularly in social and humanitarian sciences, the overrepresented preferences were Introversion, iNtuition, Feeling and Perceiving; students from technical and mathematical sciences show a higher predominance of iNtuition and Feeling (Boyanova, 2006).Thus, further research is needed to clarify if personality of contemporary students respond to the demands of higher education or it is only related to their educational or career choice.

Surprisingly, Finnish students were almost all (80%) concrete Sensing types. Earlier studies indicate that the amount of Sensing students is 52% in Finland in a sample of 752 students (Hautala & Routamaa, 2007). Perhaps the Sensing-iNtuition distribution is changing in university students in Finland. In 2002, in Finland, 33% of the population (at the age 25–64 years) had a higher degree, and the amount of well-educated people was increasing all the time. Earlier research indicates that Introverted, iNtuitive and Judging types have a tendency to succeed better at their studies than their counterparts (Extraverted, Sensing and Perceiving) (Myers, McCaulley, Quenk & Hammer, 1998). In the same way, Introverted and Judging types tend to succeed better in studies in Finland (Hautala & Routamaa, 2007). It would be interesting to know if Bulgarian university system demands more of these skills than for example what is naturally presented in the Introversion and Judging types.

Psychological Capital in cultural context

Results from psychological capital revealed that the three participating countries differ markedly in Hope, Optimism, and Resilience. Self-efficacy does not change over the three samples. Since no previous works exist which help explain these differences, the findings reported here need to be confirmed in future studies, as well as more research is needed in order to understand, for example, why the Portuguese score higher on Optimism. In lack of such research, one is left with hypothetical explanations in need for confirmation. For example, the Bulgarian and the Portuguese samples were mainly composed of students in psychology, whereas the Finnish sample had a large part of students in economics. This difference might have affected results. It may be that psychology students are more aware of psychological mindsets and can more easily influence/affect their own attitudes and psychological well-being. Additionally, it is commonly known that communality enhances happiness, and thus it may be that people in strong individuality countries like Finland do not experience themselves as positively in psychological capital.

A finding which seems to corroborate some of the few existing studies on the matter is that the Portuguese score high both in the Optimism and the Pessimism scale. A similar pattern was found recently by Lopes (2008), who reported high Optimism and Pessimism values both in students and workers in Portugal. His explanation for the phenomenon is that Optimism is affected by different contents, such as time frame. Hence, one can be optimist in the short-run, but pessimist in the long run, and both states do not challenge each other. A similar stream of propositions and findings have been proposed by other authors (e.g. Luthans & Youssef, 2004), with regards to the non-conflicting nature of optimism and pessimism.

Finnish people have clearly lower power distance than Bulgaria and Portugal. When power distance is small, people with power try to look less powerful (de Mooij & Hofstede, 2002). This may explain modest answers of Finnish people. This would be interesting to compare more widely in different cultures.

Personality, culture and psychological capital

When looking at the results of the three countries, the Portuguese Perceiving types have the highest psychological capital (also Bulgarian sensing types were high but again, the sample is very small), whereas the Finnish Introverted types scored the lowest in all psychological capital dimensions. This is important knowledge, for example, for expatriates. It can be assumed that low psychological capital cultures and personalities may experience difficulties when being expatriates in high psychological capital cultures. E.g. Finnish Introverted person would feel him/herself very uncomfortable in a Portuguese Extraverted marketing company. Since the current study was carried out with students, these are mere hypotheses which deserve more attention in the future from researchers.

There were thirteen (13) statistically significant differences in the data; in the case of Portugal there were twelve (12) and in the case of Finland there were nine (9). Thus personality impacts clearly in psychological capital. In Bulgaria the differences did not exist between personality and psychological capital, even though the tendency was the same. It may be due to a smaller sample from Bulgaria.

Interesting is that personality preferences were having similar tendencies related to psychological capital, especially in Finland and Portugal. Extraverted, iNtuitive, Thinking and Perceiving types had higher values in psychological capital in Finland and Portugal than their counterparts (Introverted, Sensing, Feeling and Judging types). Moutafi, Furnham and Crump (2007) study indicated that Introverted and Sensing types do not reach so high managerial level than people with Extraverted and Intuitive tendencies. Psychological capital is related to high self-esteem (Goldsmith et al., 1997) and high self-esteem has been proved to be typical for leaders. According to the current study, Extraverts and iNtuitives rated themselves high in psychological capital. Thus it may be that high self-esteem is more typical with certain personalities and this high self-esteem may lead to better working possibilities.

Two final notes on interpreting these findings from psychological capital. Firstly, the current data collection phase was carried out in late 2007 and especially in the first months of 2008, hence well before the current global Economic crises. This may help explain why results in general were so high (in a 1–6 Likert scale, an average of 4.3 is considerably high). Secondly, the global sample is made of students, which are usually younger people who have not yet entered labour market and experienced the pros and cons of prolonged search for a job and/or of initial poor working conditions. This interpretation is not based on any existing theoretical work. Rather, it results from the fact that authors of the current text have been in contact with students for over 15 years, and have observed and registered that the years shortly after courses conclusion, can be of disillusionment, frustration, and unhappiness for recently-graduated people, as they start looking for a job, accept minor tasks and jobs, or take non-paid jobs to gain some work experience.

CONCLUSIONS, LIMITATIONS AND FURTHER STUDIES

The current study had several limitations. Here are some of the points to consider in future research. The three samples were constituted via convenient sampling, which meant that they all relate to the authors' working environments. Furthermore, they were mostly students, although in the present case that may be not an influent factor, since there are no reasons to think that students differ from other groups in such fundamental aspects such as personality and psychological capital.

Although such differences may be found across different layers of society, the use of similar samples across the three countries allowed observing interesting results which require further investigation and confirmation with other samples.

For convenience reasons, three distinct MBTI versions were used. Although the researchers were only interested in obtaining the same, standardised-pattern of personality types, it is not possible to guarantee that respondents were influenced by answering to a different instrument.

Other variables which may have caused undesirable effects were not taken into account. Examples are profession and social-economic status. Though respondents were largely from a student environment, this is not a guarantee for assuming that they shared economic, financial, or familiar conditions. Yet another variable which may be important and which deserves further research in the future is culture. We may hypothesise that some cultures tend to appraise themselves lower (Finnish appraised themselves lower than others) than others (such as Finland), but these tendencies need to be confirmed with larger and more diverse samples.

All in all, this study revealed some interesting relationships between psychological capital, personality, and culture. This is also an interesting field to explore further behaviours and their foundations, therefore offering new perspectives in Psychology, in a broad view, and in positive psychology, in a specific perspective. Future studies might focus on adaptability of psychological capital qualities and some strategies that could be learned from different cultures and personalities.

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