

UNIVERSIDADE DO ALGARVE

*COPING STRATEGIES, TIME PERSPECTIVE AND PSYCHOLOGICAL WELL-BEING:  
A COMPARATIVE STUDY IN BELARUSIAN AND PORTUGUESE  
UNIVERSITY STUDENTS*

Kseniya Sych

Dissertação

Mestrado em Psicologia Clínica e da Saúde

Trabalho efetuado sob a orientação de:

Prof. Doutor Luís Sérgio Vieira

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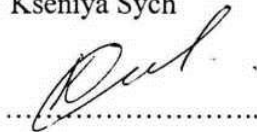
**Coping Strategies, Time Perspective and Psychological Well-Being:  
A Comparative Study in Belarusian and Portuguese University Students**

Mestrado em Psicologia Clínica e da Saúde

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Declaro ser a autora deste trabalho, que é original e inédito. Autores e trabalhos consultados estão devidamente citados no texto e constam da listagem de referências incluída.

Kseniya Sych



(assinatura)

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## Resumo

Com o objetivo de investigar a relação entre estratégias de *coping*, perspectiva temporal e bem-estar psicológico (BEP), apresentamos dois estudos realizados com amostras de estudantes do ensino superior, Bielorrussos ( $n = 82$ ) e Portugueses ( $n = 75$ ).

Os participantes Bielorrussos apresentam um nível inferior de índice de BEP atual bem como ideal, que os seus congéneres Portugueses. Além disso, a amostra Bielorrussa apresenta uma menor pontuação na dimensão do Presente Hedonista e um valor superior na dimensão Presente Fatalista. Por outro lado, os estudantes portugueses apresentam uma menor utilização de distanciamento, fuga e evitamento, bem como de estratégias positivas de reavaliação do que os seus colegas bielorrussos. Por sua vez, os participantes bielorrussos recorrem mais frequentemente a planos intencionais de resolução de problemas, embora esta diferença tenha uma significância estatística marginal.

Na amostra Bielorrussa, os tipos de *coping* focados na emoção, bem como no problema, estão positivamente associados com algumas escalas do BEP. Verificam-se as mesmas associações na amostra de participantes Portugueses, para além de que a procura e o uso de suporte social se apresentam diretamente relacionados com diversas dimensões do BEP. Além disso, em ambas as amostras, a procura e uso de suporte social e de algumas estratégias de *coping* focalizadas na emoção estão negativamente associados com diversas áreas do BEP.

Por sua vez, entre os participantes Bielorrussos o BEP ideal está positivamente relacionada com as estratégias orientadas para a resolução de problema e regulação da emoção, enquanto que apresentam uma associação negativa com a procura e o uso de suporte social. Na amostra Portuguesa, o *coping* focado na emoção demonstrou associações, diretas e inversas, com as dimensões de BEP ideal, enquanto que a procura e uso de suporte social revela uma relação positiva com o BEP que uma pessoa gostaria de ter.

O Passado Negativo bem como o Presente Fatalista revelaram correlações negativas com o BEP atual e ideal, nas amostras Bielorrussa e Portuguesa. No entanto, o Presente Hedonista demonstrou ter uma associação diferente com as dimensões de BEP entre os participantes Bielorrussos e Portugueses. Além disso, ao contrário dos participantes da amostra Bielorrussa, na amostra Portuguesa, o Futuro e o Passado Positivo não revelaram quaisquer associações estatisticamente significativas com BEP atual. Mas, nas duas amostras, uma imagem positiva do passado parece estar diretamente relacionada com algumas dimensões do BEP ideal.

Para os participantes de ambos os países, o *coping* focado na emoção está positivamente associado com o Passado Negativo, enquanto que na amostra Bielorrussa o

*coping* focado no problema revelou uma relação negativa com este quadro temporal. Por sua vez, o Passado Positivo está diretamente associado à procura e uso de suporte social e de *coping* focado na emoção nas amostras Bielorrussa e Portuguesa. Por último, o *coping* focado no problema também se apresenta diretamente relacionado com este quadro temporal. Encontrámos diferentes grupos de *coping* associados com o Presente Fatalista entre os participantes dos dois países. Ou seja, na amostra Bielorrussa a procura e uso de suporte social demonstrou uma associação positiva, enquanto que o *coping* focado no problema apresenta uma relação negativa com esta orientação do tempo. Para os participantes Portugueses apenas o *coping* focado na emoção estava diretamente relacionada com o Presente Fatalista. E, finalmente, para ambas as amostras, a procura e uso de suporte social e as estratégias de *coping* focadas na emoção estavam positivamente ligadas com a orientação futura. Para a amostra Bielorrussa, o *coping* focado no problema também estava diretamente relacionado com este período de tempo.

**Palavras-chave.** Estratégias de *Coping*, Perspetiva Temporal, Bem-Estar Psicológico

## Abstract

With the aim to investigate bivariate relationship of coping strategies, time perspective and psychological well-being (PWB), two studies were conducted in Belarusian (n=82) and Portuguese (n=75) university student samples.

The Belarusian participants demonstrated a lower level of current as well as ideal PWB than the Portuguese counterparts. Besides, lower scores on Present-Hedonistic and a higher level on Present-Fatalistic were captured in the Belarusian sample. Also, the Portuguese students showed a less use of distancing, escape-avoidance as well as positive reappraisal strategies than their Belarusian colleagues. In turn, the Belarusian participants were found to perform a planful problem-solving more frequently though this difference was of marginal significance.

In the Belarusian sample emotion- as well as problem-focused types of coping were positively associated with some PWB scales. The same links were just for the Portuguese participants, in addition to which the search and use of social support were directly related to definite dimensions of PWB. Besides, in both samples the seeking and use of social support and some strategies of emotion-focused coping were negatively associated with the definite PWB areas.

In turn, among the Belarusian participants ideal PWB was positively connected with strategies aimed to problem solution and emotion regulation, while a negative link was revealed with the search and use of social support. In the Portuguese sample, emotion-focused coping demonstrated direct and inverse associations with the dimensions of ideal PWB, while the seeking and use of social support had a positive link with PWB a person would like to have.

Past-Negative as well as Present-Fatalistic revealed negative correlations with both current and ideal PWB scales in the Belarusian as well as in Portuguese samples. However, Present-Hedonistic was proved to have different association with dimensions of PWB among the Belarusian and Portuguese participants. Besides, differently from the Belarusian participants, in the Portuguese sample, Future and Past-Positive did not reveal any statistically significant links with current PWB. But, in both samples, a positive image of past was directly associated with some dimensions of ideal PWB.

For the participants from both countries emotion-focused coping was positively associated with Past-Negative while in the Belarusian sample problem-focused coping revealed a negative link with this temporal frame. In turn, Past-Positive was directly associated with the seeking and use of social support strategies and emotion-focused coping

in the Belarusian and Portuguese samples. For the latter problem-focused coping was also directly linked with this temporal frame. Different groups of coping were found to be associated with Present-Fatalistic among two countries. Namely, in Belarus the search and use of social support demonstrated a positive association, while problem-focused coping – a negative link with this time orientation. For Portuguese participants only emotion-focused coping was directly related to Present-Fatalistic. Finally, for both samples the seeking and use of social support and emotion-focused coping strategies were positively linked to Future orientation. For the Belarusian sample problem-focused coping was also directly connected with this time frame.

**Key words.** Coping Strategies, Time Perspective, Psychological Well-Being

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## List of Abbreviations

AR – Accepting responsibility;  
AUT – Autonomy;  
B - Belarus;  
CC - Confrontive Coping;  
D – Distancing;  
EA – Escape-Avoidance;  
EM – Environmental Mastery;  
F – Future;  
GI - General Index;  
PF - Present-Fatalistic;  
PG - Personal Growth;  
PH - Present-Hedonistic;  
PiL - Purpose in Life;  
PN - Past-Negative;  
P – Portugal;  
PP - Past-Positive;  
PPS – Planful Problem-Solving;  
PR – Positive Reappraisal;  
PRWO - Positive Relations with Others;  
TP – Time Perspective;  
SA - Self-Acceptance;  
SC – Self-Controlling;  
SSS - Seeking Social Support;  
WCQ – Ways of Coping Questionnaire;  
ZTPI – Zimbardo Time Perspective Inventory.

## **Article 1**

### **Coping Strategies, Time Perspective and Psychological Well-Being**

#### **Abstract**

In this literature review the description of such constructs as coping strategies, time perspective, and psychological well-being as well as their correlates were given. Further, an issue of particular concern, bivariate links of all these three constructs were considered. Finally, the necessity of the further research on interaction of coping, time perspective and psychological well-being was grounded.

**Key words.** Coping Strategies, Time Perspective, Psychological Well-Being

## **Introduction**

The growing interest to the positive psychology has been reflected in a number of researches aimed to investigate the nature and potential of the constructs that are supposed to enhance positive psychological functioning. The findings of theoretical as well as empirical studies reasonably allow to emphasize the value of positive psychology's concepts for Health as well as Clinical Psychology (Aspinwall & Richard, 2010; Geers, Wellman, Seligman, Wuyek, & Neff, 2010; Hirsch, Wolford, La Londe, Brunk, & Morris, 2007; Marques, Pais-Ribeiro, & Lopez, 2011). Indeed, it was proved that these constructs, among which are psychological well-being and time perspective, are related to the etiology, prevention, development, outcome and management of different mental and physical health problems (Brannan & Petrie, 2011; Vázquez, Hervás, Rahona, & Gómez, 2009).

The ways through which the positive phenomena may affect health have a particular scientific interest. The conducted investigations allow to consider as a mechanism of such an influence not only biological processes (e.g. neuroendocrine and immune function) but also social and behavioral determinants (e.g. preventive and self-care activities, interpersonal support and networks, stressors' evaluation, diversity and flexibility in application of coping strategies) (Aspinwall & Richard, 2010). The importance of the latter mentioned construct, namely coping, is difficult to overestimate, because this concept reflects the way a person tackles numerous stressful situations in everyday life.

To summarize, it seems to be promising to explore all these three constructs separately as well as in association. The aim of the literature review given below is to provide a brief description of the constructs of coping, time perspective, well-being as well as their correlates. Besides, the findings about the bivariate links of all these three concepts will be referred. And, finally, the conclusions regarding these phenomena will be made with subsequent description of paths of further research in this area.

## **Coping**

Marks, Murray, Evans, and Willig (2000) admit that proposed by Lazarus and Folkman model of stress is the most influential within interactional approach to this phenomenon. The psychological stress is offered to consider as "a particular relationship between the person and the environment that is appraised by person as taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus & Folkman, 1984, p.27). The definition posted above makes it obvious that the due attention should be dedicated to the ways of stress overcome, namely a construct of coping. Indeed, as Ivanov and Garanyan (2010) reasonably state, this phenomenon has become an inalienable part of conceptual field

in contemporary psychology. Such an affirmation is in line with a Lazarus' view (1993) who claims that coping is a crucial concept for theoretical as well as empirical investigations on adaptation and health. Moreover, the construct of coping is very valuable not only because of its possibility to unfold a diversity of responses to a stressful situation but also due to its utility in terms of intervention.

On the whole, it must be admitted that the theoretical as well as practical potential of this construct resulted in a substantial rise in the investigation of coping inclusively such fields as social and behavioral science, public health, medicine and nursing during about four past decades (Folkman & Moskowitz, 2004).

According to Lazarus (1993) the two approaches to coping could be distinguished. The first one, a style approach, considers the coping as a characteristic of a person. In turn, the second one, the process approach, focuses namely on activities aimed to manage stress. These activities may alter with time and be influenced by the adaptational context of stress.

The present investigation is guided by the understanding of coping within a process approach, namely from the standpoints of contextual, cognitive model of coping proposed by Lazarus and Folkman (1984). Therefore, it seems reasonable to pay attention to the basic principles of this approach in general and the model in particular.

According to process approach the coping is defined as “ongoing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus, 1993, p.237). Such a definition implies that the role of coping to adaptational results may be evaluated separately. Moreover, it emphasizes that this concept is used regardless to the degree of adaptiveness, success, consolidation of performed coping strategy. Adaptiveness is understood in terms of the efficacy in improvement of the result. In turn, success implies the degree of reappraisal in relation to coping used by a person. Finally, such a characteristic as consolidation refers to an attained stable way of coping that is performed in a number of stressful encounters (Lazarus, 1993).

It has to be noted that a lot of coping distinctions and groupings were made. Carver and Connor-Smith (2010) offer to consider as the most important the following: problem-versus emotion-focused, engagement versus disengagement, accommodative and meaning-focused coping, proactive. These authors reasonably conclude that all the distinctions do not form a universal matrix where the definite sort of coping responses can be made. In other words, usually a coping reaction may match several cells of the matrix, namely, to be attributed to several groups simultaneously.

Carr (2004), considering the issue of coping classification, admits that the division on problem- and emotion-focused seems to be the most common used. Indeed, this classification may be perceived as at least two major functions of coping. The aim of the first mentioned above is to modify stressful person-environment relationship by influencing the environment or oneself. In turn, the second one implies the change of attention paid at this interaction or alteration of the relational meaning that could decrease the stress while the current state of a person-environment relationship has not changed (Carver & Connor-Smith, 2010; Folkman & Greer, 2000).

The assessment of the coping effectiveness implies the focus on two aspects: the first one is the choice of the appropriate results, and the second – the congruence between the coping and requirements of the situation. Namely, the more the fitness between the appraised controllability of the stressor situation or task and used coping is, the more the chances of the better outcomes are. The ability of people to choose and apply the coping according to the requirements posted by the stressor situation is called flexibility (Folkman & Moskowitz, 2004; Lazarus, 1993).

It seems to be worth attention that according to this model it could not be stated in an unappealable way that there are good or bad copings. Moreover, bearing in mind that the context could be dynamic, it may befall that the coping strategy chosen as effective in the beginning not automatically will be useful to such an extent along the changes occurring in stressful situations (Folkman & Moskowitz, 2004). Moreover, the performance of one coping can be very reasonable and effective in terms of one outcome and, at the same time, can have a negative influence on the achievement of another result of a personal relevance (Folkman & Moskowitz, 2004). Besides, one coping can facilitate the performance of other types of coping (Lazarus, 2006).

### **Research on Coping**

As it was mentioned earlier, sufficient scientific attention was paid to the investigation of coping. In general, it may be admitted that researches demonstrated that coping is a concept of great complexity and multidimensionality, which is connected with environmental as well as personal and dispositional factors (Carver & Connor-Smith, 2010; Folkman & Moskowitz, 2004).

A number of important results were obtained. Some major generalizations of these findings will be presented below. For example, with respect to: changeability, gender, emotions, somatic health, mental health, health-related behavior, and adjustment.

**Changeability:** Coping changes with time in any given stressful situation. Moreover, the stability or consistency of some coping strategies under stressors is greater than the others. If stressors are perceived as unmanageable people tend to use more emotion-focused coping; conversely, if stressful encounters are assessed as controllable with the help of action, problem-focused strategies dominate (Carr, 2004; Carver & Connor-Smith, 2010; Lazarus, 1993).

**Gender:** Matud (2004) reviewing the literature regarding gender difference in coping strategies admits that the inferences are not explicit, though many investigations report about men's tendency to perform problem-focused coping while women prone to use emotion-focused one. And it was proved in the following study of Matud (2004) who found that females between 18 and 65 years old have a higher rate on the emotional as well as avoidance coping styles in comparison with men of the same age.

**Emotions:** The relationship between emotions and coping was and is still promising to explore. It was found that coping and emotion regulation have a firm association from the outset to the outcome of a stressful situation. In other words, the emotions are present during the whole coping process. Namely, not only as the result of the performance of the definite coping strategy, but also as a reaction to new information as well as to reappraisal of the stressor. The incidence of the modality of emotions is determined by the type of solution, that could be successful, unsuccessful and unclear (Folkman & Moskowitz, 2004; Lazarus, 1993).

**Somatic health:** The potential of coping to influence physical health, to contribute into an onset of somatic diseases as well to serve as a factor of their course was proved in a number of studies (Ivanov & Garanyan, 2010).

So, Segerstrom and O'Connor (2012) referring to diverse investigations report that people who avoid rather than make an attempt to change problems and tackle their own emotions may have worse indicators of psychological as well as somatic health. Besides, as Ransom, Jacobsen, Schmidt, and Andrykowski (2005) state, the use of problem-focused coping may provide better physical recovery in case of an early stage breast cancer. Similarly, Kryukova (2005) reports that studies have proved that active (problem-focused) strategies, aimed to cope with the stress induced by an illness, are prognostic criteria of better immune status among people with oncological diseases, HIV, herpes simplex, and also infertility of immune origin. Furthermore, several meta-analyses dedicated to the coping with HIV (Moskowitz, Hult, Bussolari, & Acree, 2009), prostate cancer (Roesch et al., 2005) and diabetes (Duangdao & Roesch, 2008), in general, revealed that adaptive, problem-focused coping, is related to improved physical and psychological health, while high performance of maladaptive (emotion-focused) coping is associated with more negative results, among which

are anxiety, depression as well as poor somatic health (Moskowitz et al., 2009; Roesch et al., 2005). Finally, in a few number of investigations devoted to the post traumatic growth of cancer patients it was found that it may be facilitated by coping strategies aimed to the interaction with the stressors. Such results were obtained both in cross-sectional as well as longitudinal researches (Scrignaro, Barni, & Magrin, 2011).

**Mental health:** The active coping was proved to be effective among population with severe mental disturbances. Meyer (2001) in the investigation on psychiatric inpatients found the inverse association between adaptive coping (namely, acceptance, planning, seeking support) and schizophrenia severity symptoms. Besides, the direct link of the coping strategies mentioned above and psychological well-being was detected on the same group of participants. Moreover, Bijttebier, and Vertommen (1999) identified that the lack in social support seeking along with excessive avoidant coping seem to be a common pattern for personality disorder and can serve as one of distinctive indicators between individuals with normal and abnormal personality functioning. In turn, Avedisova, Kanaeva, Ibragimov & Lyupaeva (2003), in their literature review, report that avoidance coping may have a predictive potential of therapeutic resistance in case of pharmacotherapy of depression.

**Health-related behavior:** Coping is thought to be associated with health-related behavior. McCabe, Roesch, and Aldridge-Gerry (2013) found that the use of problem-focused coping among college students with a high level of extraversion may be a protective factor of daily drinking, whereas the addressing to social support could be associated with higher risk of daily alcohol consumption. Besides, avoidant coping was found to be a risk factor of alcohol and drug abuse (Rasskazova & Gordeeva, 2011).

**Adjustment:** The issue of adjustment and coping has also got scientific attention. For example, the research on repatriation adaptation demonstrated that there were positive associations between problem-focused strategies, on the one hand, and repatriate as well as work adjustment, on the other hand; whereas emotion-focused strategies revealed the opposite relationships with phenomena mentioned above (Herman & Tetrick, 2009). In turn, Chou, Chao, Yang, Yeh, and Lee (2011) showed that passive coping play a mediating role between stress and symptoms of depression among overseas university preparatory Chinese students. In an investigation of Lyrakos (2012), conducted on a sample of university students from Austria, France, Germany, Greece, Italy, Spain, the UK, the positive role of active coping was also proved, namely, it was revealed that stress level and coping strategies aimed to problem source are inversely associated.

In short, it may be concluded that this brief literature review has demonstrated the potential of coping to influence a great number of somatic and mental health outcomes.

Therefore, the further investigation of coping as well as its correlates still seems to be very promising.

### **Time Perspective**

The interaction with time, as Boniwell and Zimbardo (2004) reasonably state, is a crucial quality of objective as well as subjective experience of individual. Namely, time is considered as basis as well as a regulator of social performance. Indeed, consciousness is pierced by time. The evidence of that may be found in the language, where this construct from idiomatic standpoints is perceived like a good that can be revealed, economized, used, wasted, lost, etc. (Boniwell & Zimbardo, 2004).

The awareness of fundamental significance of time processes in human lives has been reflected in theoretical as well as empirical investigations, though the amount of concern from psychology as well as social sciences dedicated to the systematic examination may be assessed as relatively little (Boniwell & Zimbardo, 2004; Zimbardo & Boyd, 1999). Nevertheless, the understanding of temporal processes' importance was embodied in a construct of time perspective, which, in general, may be defined as a representation of a person's way to link psychological phenomena of past, present as well as future (Zimbardo & Boyd, 1999). It is noteworthy, that these temporal frames are subjectively constructed and reconstructed (Boniwell & Zimbardo, 2004; Zimbardo & Boyd, 1999).

McGrath and Kelly (1986, as cited in Boniwell & Zimbardo, 2004) on the basis of literature analysis concluded that about 211 approaches to the time perspective phenomenon may be defined. The current work is guided by an understanding of time perspective offered by Zimbardo and Boyd (1999). Their model represents an extension and advancement of Lewinian tradition, within which this construct is defined as "totality of the individual's views of his psychological future and psychological past existing at a given time" (Lewin, 1951, p.75, as cited in Fortunato & Furey, 2010). Refining the definition mentioned above, Zimbardo and Boyd (1999) consider this construct as a cognitive process which is used by people to perceive, evaluate, interpret a continual stream of both personal and social experiences, distinguish and assign all of them to different time frames, which are past, present, and future. Altogether it provides a person with a certain extent of coherence, continuity, and meanings as well as the sense of order of everything that happened in his/her life. Moreover, the temporal categories mentioned above play a significant role in encoding, storing and retrieving of information as well as influence judgments, decisions, social goals, actions with important involvement and consequences in emotion, cognition and motivation areas (Boniwell & Zimbardo, 2004; Holman & Zimbardo, 2009). The formation of time

perspective is thought to be affected by a great diversity of learned factors, among most salient are cultural, religious, educational aspects, social status, and family modeling (Zimbardo & Boyd, 1999).

Another noteworthy aspect is that definite temporal frames may be dominant while the others are used insufficiently. Altogether it leads to becoming “biased” towards past, present or future (Boniwell & Zimbardo, 2004; Crockett, Weinman, Hankins, & Marteau, 2009; Zimbardo & Boyd, 1999). In other words, though situational factors may influence time orientation, the constant overreliance on any time dimension may lead to occurrence of a dispositional characteristic, which is relatively stable and has predictive potential of how a person will behave in a great variety of situations.

The opposite to being prejudiced is a “balanced time orientation” that implies the individual’s capacity to be flexible in switching among temporal dimensions to a frame congruent to requirement of a situation (Wiberg, Sircova, Wieberg, & Carelli, 2012; Zimbardo & Boyd, 1999).

The factor analysis carried by Zimbardo and Boyd (1999) allowed to infer the existence of five factors that constitute time perspective, namely, Past-Negative, Past-Positive, Present-Fatalistic, Present-Hedonistic, and Future. The definition as well as correlates found in the original investigation of Zimbardo and Boyd (1999) will be given below.

Past-Negative dimension reveals an overall aversive as well as negative image of the past. It is noteworthy, that such perceptions may be a result of real traumatic events or/and negative reconstruction of favorable accidents. This factor was found to be positively associated with self-reported unhappiness as well as low self-esteem, depression, anxiety and aggression.

Past-Positive factor, in turn, represents a positive, sentimental and nostalgic image of the past. It was proved to have significant negative correlations with aggression, depression as well as anxiety and positive link with self-esteem. Besides, women obtained a significantly higher rate in this dimension than men did.

The third factor, Present-Fatalistic, implies the attitude to future as well as life in general as full of hopelessness and helplessness along with perception of incapacity to change anything. This dimension has positive associations with depression, anxiety, aggression and a negative link with the examination of future outcomes.

A pleasure seeking and risky position regarding life as well as time in general is reflected in Present-Hedonistic factor. The strong links were revealed between this temporal

dimension, on the one hand, and ego undercontrol, novelty, sensation seeking, as well as consistency preference (a negative correlation), on the other hand.

Finally, the orientation towards future, which implies efforts to achieve aims as well as rewards, is embodied in the Future factor. Such a position is positively associated with conscientiousness, consideration of future results, consistency preference as well as the amount of weekly time devoted to studying (self-report). In turn, the negative link of this temporal frame was detected with sensation and novelty seeking, depression and anxiety. Additionally, women demonstrated higher scores on this scale in comparison with men.

Though this dimension is out of interest in the present work, it is noteworthy to mention, that a separate (from Zimbardo time perspective inventory scale (ZTPI)) dimension was developed by Boyd and Zimbardo (1996) to assess transcendental future time perspective. People scoring highly on this temporal frame believe that life does not end with the death of a body. Moreover, they are sure that after death there will be a reward as well as punishment for their current behavior.

### **Research on Time Perspective**

The further investigations of time perspective from the standpoints of the model offered by Zimbardo and Boyd (1999) revealed a number of significant associations, some of which will be given below. For example, with respect to: culture, gender and age, academic and work performance, identity status, social network, health-related and risky behavior, mental health, and proenvironmental activities.

Culture: Cultural distinctions in time perspective are usually associated with individualistic or collectivistic orientation of a country. Namely, as Boniwell and Zimbardo (2004) report, individualistic focus leads to being more future-centered in comparison with collectivistic cultures. Nevertheless, it is expected that globalization processes implicitly foster the salience of Future orientation.

Addressing to the descriptive statistics in the studies on time perspective with ZTPI shows that in the USA sample the highest mean score was obtained on Past-Positive scale (Zimbardo & Boyd, 1999). The same temporal frame was the most salient (mean score) in the Russian (Sircova et al., 2007) and Portuguese samples (Ortuño & Gamboa, 2009). In turn, in the French sample Present-Hedonistic was found to have the highest mean rate (Apostolidis & Fieulaine, 2004).

Gender and age: Diverse investigations demonstrated the presence of gender peculiarities in time perspective (D'Alessio, Guarino, Pascalis, Zimbardo, 2003; Díaz-Moralez, 2006; Ortuño & Gamboa, 2009; Sircova et al., 2007; Zimbardo & Boyd, 1999).

In the USA sample females rated higher than males on Future and Past-Positive factors (Zimbardo & Boyd, 1999). In the Italian investigation women scored more on Present-Fatalistic scale and lower on Present-Hedonistic dimension than men did (D'Alessio et al., 2003). In turn, the Spanish study revealed that females have more salient rate on Past factor as well as Present-Fatalistic in comparison with male counterparts (Díaz-Moralez, 2006). In the Russian research, women scored higher on Future, Past-Positive and Present-Fatalistic temporal frames (Sircova et al., 2007). And, finally, the Portuguese women and men showed relatively similar scores on ZTPI, with the only marginal females' superiority on Future scale (Ortuño & Gamboa, 2009).

Regarding the issue of age difference, Sircova et al. (2007), in their review, admit that the present orientation decreases with aging while future dimension becomes more salient.

Academic and work performance: The issue of academic performance and temporal orientation was examined in a number of researches. Harber, Zimbardo, and Boyd (2003) demonstrated the evidence that future-oriented students tend to meet time commitments more effectively than their present-focused counterparts. Besides, developed Future time perspective seems to be associated with the earlier completion of tasks in comparison with present-oriented participants. In line with the previous findings, the results obtained in the research, aimed to identify relationship between time perspective and procrastination in workplace, conducted on Indian sample by Gupta, Hershey, and Gaur (2012). It was revealed that postponing has an inverse association with Future temporal frame while a positive link was detected with Present-Fatalistic dimension. Also, Future time perspective was proved to be a significant variable that mediates a student's involvement in academic process (Horstmanshof & Zimitat, 2007) as well as positively associated with academic success due to higher investment in learning (Peetsma & van der Veen, 2011).

Identity status: Temporal orientation was proved to have a relationship with such an important construct as identity status. Namely, Laghi, Baiocco, Liga, Guarino, and Baumgartner (2013) in the study conducted on the Italian adolescents revealed that the Future as well as Past-Positive time dimensions are associated with an achieved identity integration. By contrast, diffused identity seems to be related with Past-Negative and more salient Present-Fatalistic along with less developed Future orientation. Besides, the time perspective profile may be under the influence of role as well as social status variable (Samuels, 1997, as cited in Zimbardo & Boyd, 1999).

Social network: Furthermore, unique correlations between social network and temporal frames were detected (Holman & Zimbardo, 2009). To be more specific, Past-Negative time perspective was related to insufficient support and high conflict with the

family. In contrast, Past-Positive temporal frame was associated with high family support as well as large networks. In turn, Present-Hedonistic time perspective was characterized by large networks along with higher support from acquaintances and friends. Finally, Future orientation distinguished from other temporal frames by the presence of support provided by significant people.

Health-related and risky behavior: A sufficient amount of scientific concern has been devoted to the link of health-related as well as risky behavior with time perspective. The presence of firm relationship was confirmed in diverse investigations (Apostolidis, Fieulaine, & Soulé, 2006; Hamilton, Kives, Micevski, & Grace, 2003; Henson, Carey, Carey, & Maisto, 2006; Keough, Zimbardo, & Boyd, 1999; McDade et al., 2011; Milfont, Andrade, Belo, & Pessoa, 2008; Wills, Sandy, & Yaeger, 2001; Zimbardo, Keough, & Boyd, 1997).

So, Zimbardo et al. (1997) found that Present time perspective may be considered as an individual difference variable that has a salient relationship with risky driving behavior.

In turn, Henson et al. (2006) in their research on 1568 students revealed that Future time perspective is associated in a positive way with healthy behavior (e.g. seat belt use, physical exercises, use of condom and birth control means) and in a negative way with risky ones (excessive alcohol consumption; drug use over a previous month as well as during the whole life; number of sexual partners over a year and life; frequency of smoking). The opposite interaction was proved for the Present temporal frames.

The evidence regarding the association between time perspective and substance use was also confirmed in other studies. It can be illustrated by findings adducing by Keough et al. (1999). The research conducted on 15 different samples showed that time perspective may predict use of substance (tobacco, alcohol and drugs), namely the latter has a positive link with Present time perspective and a negative one with a Future orientation. The consistent findings were obtained in the research of Wills et al. (2001). In line with the results cited above, is the negative association of Future time perspective and cannabis use, that was proved on the sample of the French adolescents (Apostolidis et al., 2006). Besides, there was evidence that Future orientation seems to predict the use of this type of drug. To some extent, such a conclusion is consistent with the finding got in a study of McDade et al. (2011). Namely, in the research on adolescents' expectations for the future, it was revealed that the way teenagers evaluate their chances in life predicts health behaviors in early adulthood. The higher the perception of success in future is, the more people take care of their health.

Also, in the relatively recent research of time perspective and psychosocial positive functioning among the Italian adolescents with binge eating and drinking, Laghi, Liga, Baumgartner, and Baiocco (2011) suggested that the construct offered by Zimbardo and Boyd

may be considered as a distinctive and important dimension when the psychosocial correlates of binge behaviors are examined. Indeed, it was found out that adolescents performing binge eating and drinking had negative experiences in the past, demonstrated a lower future orientation and a greater tendency to be fatalistic in comparison with the other students. Besides, sleep and dreaming problems were also proved to be related to all the dimensions of time perspective (Zimbardo & Boyd, 1999).

Also, it seems to be worth mentioning that definite temporal dimensions are linked with health activities among people with somatic diagnostics. Hamilton et al. (2003) in the investigation conducted on a cardiac rehabilitation population revealed that Past-Positive along with Future time perspective were associated with health-promoting behaviors.

Mental health: Though the construct of time perspective has been investigated in healthcare area, the studies in clinical and psychiatric settings are still sparse. But nevertheless, there are some findings which may be adduced.

So, Beek, Berghuis, Kerkhof, and Beekman (2011) proved that measures of psychopathology correlate with Present-Fatalistic, Past-Positive, and Past-Negative time factors. It is noteworthy, that the latter dimension is thought to be a very important indicator of psychiatric problems. Besides, Laghi, Baiocco, D'Alessio, and Gurrieri (2009) in the research conducted on high school students revealed that time perspective has salient potential to predict suicidal ideation.

Proenvironmental activities: The statement of Boniwell and Zimbardo (2004) about the significant potential of time perspective to influence not only a life of a particular person but society in general may be proved with the results of investigations of psychological factors affecting the presence of concern in issues about protection of nature.

Milfont, Wilson, and Diniz (2012), whose scientific interest was dedicated to the link of time perspective and proenvironmental attitudes and behavior, found out that Future temporal frame was positively associated with environmental engagement. It is noteworthy, that such an inference was made on the basis of a conducted meta-analysis, which involved 19 independent samples with total 6301 participants from Australia, Brazil, Germany, Mexico, New Zealand, Norway, and the United States.

The conducted literature review allows to conclude that time perspective is an essential phenomenon piercing as well as influencing our life. Numerous investigations proved the association of this construct with important concepts, among which are identity status, academic and work performance, social network, health related and risky behavior, mental health indicators, and proenvironmental engagement. Altogether, it makes possible to

conclude that it seems to be beneficial to know what may enhance temporal dimensions, which, in turn, are thought to be directly related to positive functioning.

### **Psychological Well-Being**

Ryan and Deci (2001) in line with many authors (e.g. Seligman & Csikszentmihalyi, 2000) constitute that during the 20<sup>th</sup> century the scientific interest was mainly concentrated on psychopathology rather than well-being and concepts akin to it. For example, Pressman and Cohen (2005) report that a search in database (PsycINFO) demonstrated over a 20-time prevalence of studies addressing depression and health rather than happiness and health. But it must be admitted that nowadays the amount of researches of positive psychological functioning constantly increases. Such a shift is connected with the growing understanding that the health is not just an absence of mental and somatic disease, but it comprises something more (Seligman & Csikszentmihalyi, 2000). The awareness of it induced a deeper consideration within the existing as well as the elaboration of new psychological concepts and theories.

Considering the historical context, Ryan & Deci (2001) report that two periods of interest in this problem field in the American society can be distinguished, namely, the 1960s, with its understanding of the necessity of prevention activities, and the 2000s, associated with the appearance and development of positive psychology. It is thought that these time points have something in common, namely the relative affluence in economic terms, that probably demonstrated and facilitated awareness that financial well-being is not a sufficient condition for being happy.

The appearance of the concept of well-being, as it was mentioned above, reflected the focus movement towards a new broader understanding of health. But the answer to the question of what well-being comprises is thought to be complex enough, but, nevertheless, utterly important. The clear understanding of the meaning of this concept is essential for diverse practices aimed to foster optimal psychological functioning and experience through the means of different modalities: political, social, economic as well as psychological ones. And, indeed, as Vázquez et al. (2009) reasonably point, a challengeable issue is an inclusion and integration of well-being understanding in a number of pre- and intervention programs on the different levels of societal functioning.

Among the diversity of approaches to well-being understanding two main perspectives may be identified, namely, hedonic and eudaimonic (Lepeshinskii, 2007; Ryan & Deci, 2001; Ryff, 1989; Shevelenkova & Fesenko 2005; Sozontov, 2006). It should be emphasized that

both approaches were proved empirically to have an association with well-being (McMahan & Estes, 2011).

The hedonic approach is associated with the names of Epicurus, Aristippus, Hobbes, Sade, Bentham, Bradburn, Tennen, and Diener (Ryan & Deci, 2001; Shevelenkova & Fesenko, 2005; Vázquez et al., 2009). Within a hedonic perspective well-being is understood as the presence of positive and absence of negative affect (Vázquez et al., 2009). Namely, such a definition implies a search of personal pleasure, joy and comfort with the help of different means that vary from bodily pleasures to a broader focus on emotional-cognitive aspects (Huta, 2011; Ryan & Deci, 2001). Additionally, hedonic well-being, related to the states of relaxation, absence of problems, is mainly embodied in subjective happiness, the increase of which can be stated as the main research as well as intervention goal. The measurement within this approach is more often performed with the assessment of subjective well-being that comprises three main components - satisfaction with life (cognitive evaluation), presence of positive and absence of negative mood (emotional rate), which altogether is usually considered as happiness (Ryan & Deci, 2001; Seligman, 2011).

In turn, Aristotle, Frankl, Ryff, Deci, and Seligman are usually mentioned as the proponents of eudaimonic approach (Vázquez et al., 2009). This perspective includes the concepts that consider personal development as the key and necessary component of well-being (Shevelenkova & Fesenko, 2005). Namely, “engaging in eudaimonic pursuits, or simply eudaimonia, means being motivated and committed to use and develop the best in oneself, in a way that is congruent with one’s true self, and it includes concepts such as striving for excellence, acting with virtue, and having concerns beyond the self and beyond the immediate moment” (Huta, 2011, p. 47). Eudaimonic well-being, in contrast with hedonic, is associated with challenge as well as efforts.

Investigators, describing the eudaimonic approach, usually appeal to the self-determination theory offered by Ryan and Deci (2001) and the concept of psychological well-being proposed by Ryff (1989). Within the self-determination theory personal well-being is connected with three basic psychological needs, namely, autonomy, competence and relatedness. The gratification of these needs is thought to be important to such phenomena as psychological growth, integrity, vitality, self-congruence, and well-being (Ryan & Deci, 2001).

In this study we are guided by the view on well-being offered by Ryff (1989). Therefore, it seems to be reasonable to give it a more detailed description. According to the founder of this theory, the well-being is understood as “the striving for perfection that represents the realization of one’s true potential” (Ryff, 1995, p. 100). The methodological

basis of the Ryff's concept of psychological well-being rooted in developmental psychology (Erikson's model of the stages of psychosocial development; Buhler's formulation of basic life tendencies, which meant to the fulfillment of life; Neugarten's descriptions of changes in person in adult as well as old age); clinical psychology (Maslow's theory of self-actualization, Roger's understanding of the fully functioning human being, the concept of individuation offered by Jung; idea of maturity proposed by Allport). In addition, a positive criteria of mental health offered by Jahoda as well as the concept of positive functioning in later life given by Birren also made a contribution to Ryff's theory (Ryff, 1995). All these theoretical views and perspectives mentioned above allowed to identify dimensions, which if taken together, embrace the diversity of wellness. These measurements are: positive assessments of one's self and one's life (self-acceptance); a sense of life-long evolution and personal development (personal growth); the belief that there is a life's direction which makes it meaningful (purpose in life); the developed and kept good ties with other people (positive relations with others); the capacity of effective management of one's being as well as the surrounding environment (environmental mastery); and a sense of self-determination (autonomy). The more deliberate description of the scales of PWB is shown in Table 1.1 (next page).

### **Research on Psychological Well-Being**

Ryff with her colleagues conducted a number of investigations aimed to explore psychological well-being with various psychosocial variables. Besides, the findings obtained in studies of other psychologists will be also given below. For example, with respect to: sex and age, culture, financial wellness, personal traits, emotions, personal experience, hedonic well-being, physical, mental health, and health-related behaviors.

Sex and age: Regarding sex differences, it was found that in variety datasets women of all the age categories had higher rates on positive relations with others than men did. Also, female participants have a tendency to demonstrate higher assessment on personal growth dimension (Ryff, 1995).

Moreover, the presence of age specific character was also detected. Namely, the growth with age in environmental mastery and autonomy was observed, especially from a middle to an old period of adulthood. On the contrary, the decline with aging in the domains of personal growth and purpose in life was detected, and, again it was especially salient from midlife to old age. Finally, there were not any detected differences during ontogenesis on the dimension of self-acceptance, while positive relations with others was characterized by the absence of any discrepancy to rise with the age (Ryff, 1995).

Table 1.1

*Definitions of Theory-Guided Dimensions of Well-Being* (Ryff, 1995, p. 101)

Dimension	Characteristics of a high scorer	Characteristics of a low scorer
<i>Self-acceptance</i>	Possesses positive attitude toward self; acknowledges and accepts multiple aspects of self, including good and bad qualities; feels positive about past life	Feels dissatisfied with self; is disappointed with what has occurred in past life; is troubled about certain personal qualities; wishes to be different than what he or she is
<i>Positive relations with other people</i>	Has warm, satisfying, trusting relationships with others; is concerned about the welfare of others; is capable of strong empathy, affection, and intimacy; understands give-and-take of human relationships	Has few close, trusting relationships with others; finds it difficult to be warm, open, and concerned about others; is isolated and frustrated in interpersonal relationships; is not willing to make compromises to sustain important ties with others
<i>Autonomy</i>	Is self-determining and independent; is able to resist social pressures to think and act in certain ways; regulates behavior from within; evaluates self by personal standards	Is concerned about the expectations and evaluations of others; relies on judgments of others to make important decisions; conforms to social pressures to think and act in certain ways
<i>Environmental mastery</i>	Has sense of mastery and competence in managing the environment; controls complex array of external activities; makes effective use of surrounding opportunities; is able to choose or create contexts suitable to personal needs and values	Has difficulty managing everyday affairs; feels unable to change or improve surrounding context; is unaware of surrounding opportunities; lacks sense of control over external world
<i>Purpose in life</i>	Has goals in life and a sense of directedness; feels there is meaning to present and past life; holds beliefs that give life purpose; has aims and objectives for living	Lacks sense of meaning in life; has few goals or aims, lacks sense of direction; does not see purpose in past life; has no outlooks or beliefs that give life meaning
<i>Personal growth</i>	Has feeling of continued development; sees self as growing and expanding; is open to new experiences; has sense of realizing his or her potential; sees improvement in self and behavior over time; is changing in ways that reflect more self-knowledge and effectiveness	Has sense of personal stagnation; lacks sense of improvement or expansion over time; feels bored and uninterested with life; feels unable to develop new attitudes or behaviors

Culture: The issue of cultural differences in the rates of well-being is intuitively related to the values that dominate in individualistic (independent) and collectivistic (interdependent) cultures. The main hypothesis is that dimensions that are more oriented on self will be more important to independent cultures and, inversely, others-oriented domains

will be of greater significance for interdependent societies. And, indeed, such an assumption was proved on the US and South Korean samples of middle age (Ryff, 1995).

But it must be admitted that though the existence of cultural differences was confirmed, autonomy was found to be a significant predictor of effective functioning and better mental health in both collectivist and individualist countries (Ryan, 2009). For example, in the research of Chirkov and Ryan (2001), conducted in Russia and the USA, it was revealed that, as it was expected, the USA adolescents characterized their parents and teachers as more autonomy supportive compared to their counterparts from Russia, but, nevertheless, the association between less autonomy support and low eudaimonic as well as hedonic well-being was just for both countries.

Financial wellness: As another focus of scientific interest the association between financial wellness and well-being can be pointed. In general, it could be admitted that there is a concurrence in both traditions (hedonic as well as eudaimonic), regarding the issue of wealth and well-being, namely, money is not the source of happiness and well-being (Proctor, Linley, & Maltby, 2009; Ryan & Deci, 2001). To explain such an inference it is necessary to mention that the investigation of the wealth and financial status potential to predict eudaimonic well-being is based on the assumption that individual's preference to material goals achievement do not provide a person with gratification of psychological needs, and, moreover, fosters the inclusion in non-autonomous activity. Altogether, it is expected to lead to lower eudaimonic well-being. And, indeed, this prediction was proved in researches, both cross-sectional and longitudinal (Ryan & Deci, 2001).

Personal traits: Regarding the issue of interplay of psychological well-being and personal traits it was found that low indicators on neuroticism along with high scores of extraversion are the personal dimensions that are most associated with as well as predict all the domains of psychological well-being (Abbott et al., 2008; Huppert, 2009; Augusto-Landa, Pulido-Martos, & López-Zafra, 2010). More concrete links between eudaimonic well-being and personality were identified in the study of Schmutte and Ryff (1997). They found that the extraversion, conscientiousness, and low neuroticism had an association with self-acceptance, environmental mastery and purpose in life; in turn, openness to experience was connected with personal growth; extraversion, and agreeableness were associated with the positive relations with others; and, finally, low neuroticism – with autonomy.

Emotions: As far as the question of well-being and emotions interaction is concerned, the eudaimonic vision, in contrast with the standpoints of hedonic approach, concentrates mainly on emotional access and congruence rather than mere sing of affect (principally, feeling positive emotions) (Ryan & Deci, 2001; Sozontov, 2006). Due to the fact that positive

emotions are not considered as a composing part of eudaimonic well-being, affect is understood as a byproduct of an eudaimonic way of life. Speaking more specifically, researches demonstrated that some modalities of eudaimonic well-being have more potential to produce positive affect, namely, positive relations with others (Ryff & Singer, 1998).

Also, the scientific interest was devoted to the exploration of psychological conditions under which positive emotions emerge. It was found that the gratification of such needs as competence and autonomy was a significant predictor of affect fluctuation both on inter- as well within person levels (Ryan & Deci, 2001). In addition, higher rates in emotional clarity and repair were revealed to determine all the dimensions of psychological well-being after personality traits control (Augusto-Landa et al., 2011).

**Personal experience:** The contribution of normative and non-normative experience into current and future well-being in different age groups was investigated by Ryff and Heidrich (1997). It was found that normative events have a significant potential of prediction of present as well as future well-being. But the essential differences of influence in terms of content of events were detected. Namely, the field of life activities was the most important for young adults; in turn, family and friendship were especially significant predictors for midlife adult people, and, finally, in late life well-being was mainly associated with work experience and education. In addition, non-normative experience revealed the potential to predict personal growth among young adults.

**Hedonic well-being:** Regarding the issue of relation between hedonic and eudaimonic perspective, the evidence of overlap as well as distinctions was demonstrated (Ryan & Deci, 2001). In other words, as Huta (2011) reasonably admits, the concepts of hedonic and eudaimonic well-being are distinctive but it does not mean that they cannot be coherent in an individual's behavior.

Investigation of eudaimonic well-being according to a number of studies seems to be more reasonable than hedonic one. Namely, there is strong evidence that operationalization of well-being in terms of eudaimonic approach might be more important for positive psychological functioning (McMahan & Estes, 2011). Indeed, eudaimonic concept seems to demonstrate firmer association and potential to predict well-being. For example, Park, Peterson, and Ruch (2009) explored the association between different ways of happiness seeking (namely, pleasure, engagement and meaning) and life satisfaction among adults from 27 countries. It was found that all the ways were the predictors of life satisfaction, but, nevertheless, engagement as well as meaning showed firmer relationship. The consistent results were obtained in the investigation of Vella-Brodrick, Park, and Peterson (2009) that allow to emphasize the importance of eudaimonic perspective in terms of being happy.

Moreover, eudaimonic activity was proved to provide people with enduring well-being (Kimiecik, 2011; Michael, Todd, & Shigehiro, 2008). Alternatively, efforts that are made to have simple pleasure are associated with life satisfaction in the short term and are more likely to lead to habituation or disappearing of obtaining pleasant outcomes (Michael et al., 2008; Oishi, Schimmack, & Diener, 2001). Also, in the recent investigation of Wood, Linley, Maltby, Kashdan, and Hurling (2011) it was shown that strengths use results in increased well-being over three and six months. Such a finding is congruent with the very definition of eudaimonic well-being.

Physical and mental health: The issue of association of well-being and health was and still is the focus of scientific interest. Huta (2011), referring to a number of investigations, reasonably concludes that cross-sectional as well as longitudinal researches revealed and proved the association of well-being and health (both mental and somatic).

For example, Chida and Steptoe (2008), who conducted the meta-analysis of prospective, observational, cohort studies of the interplay of well-being and mortality, conclude that positive psychological well-being favorably influences the survival of healthy as well as diseased populations.

In concordance with the previous authors, the statement of Vázquez et al. (2009) about the growing number of studies which demonstrate the link of eudaimonic well-being with health related indicators. Moreover, such a relationship is firmer in comparison with the analogue interaction of hedonic well-being and health relevant markers. For example, Ryff, Singer, and Love (2004) found out that older women with higher levels of eudaimonic well-being demonstrate lower levels of daily salivary cortisol, pro-inflammatory cytokines, cardiovascular risk, and longer duration rapid eye movement sleep, which are related to long-term somatic health.

The consistent results were obtained in the investigation of Friedman, Hayney, Love, Singer, and Ryff (2007). They had explored and confirmed the link between psychological well-being (particularly, positive relations with others and purpose in life) and plasma interleukin-6 and soluble interleukin-6 receptors. The latter are associated with such disorders as Alzheimer's disease, osteoporosis, rheumatoid arthritis, cardiovascular disease, and certain types of cancer. Moreover, the increased levels of soluble IL-6 are linked with depressed mood as well as clinical depression among old people.

A number of investigations demonstrated that well-being may also buffer a negative influence of psychosocial factors. It is possible to illustrate this point through the reference to the study of Friedman et al. (2005). It was found that women with the highest indicators of interleukin-6 had scanty sleep efficiency as well as poor social relationships. But,

nevertheless, the compensatory mechanism was detected: namely, the good relationships had power to make up bad sleep, and, in turn, the same interaction was between good sleep and poor ties with others. Furthermore, the magnitude of such compensations was commensurable to the joint effect of protection caused by social interaction and efficient sleep.

In turn, in the study of Steptoe, O'Donnell, Marmot, and Wardle (2008) a direct link between eudaimonic as well as positive affect and good sleep was detected. Besides, it was revealed that both of them have potential to reduce significantly the negative effect of sleep problems on individual.

Another proof of buffer capability may be found in the research conducted by Tsenkova, Love, Singer, and Ryff (2008). Their study revealed that women with lower socioeconomic indicator over time demonstrate the growth of glycosylated hemoglobin (related to diabetes). The factors moderating such an interplay are eudaimonic as well as hedonic, namely, purpose in life, personal growth and positive affect respectively.

Also, there is evidence that the lack of positive psychological well-being forms a firm risk factor for depression. This factor is independent from the negative functioning and deteriorated physical health. Namely, older people with a low level of psychological well-being demonstrated a very high probability of depression over 10 years (Wood & Joseph, 2010).

Besides, the domains of psychological well-being were proved to protect from suicide ideation among older adults (Heisel & Flett, 2008). It must be admitted, that preventive capacity of psychological well-being from eating disorders was also detected. Namely, the research of Brannan and Petrie (2011) revealed that psychological well-being can be a buffer between body dissatisfaction and bulimic symptomology. To be more specific, the weakest association between dissatisfaction with body and bulimic behavior was observed among women with the high level of psychological well-being.

Health-related behaviors: People with higher rates of psychological well-being were proved to demonstrate health-related behavior. Golub et al. (2011) revealed the positive relationship between psychological well-being and sustained prevention activities. Namely, psychological well-being was found to predict condom use among older adults with HIV. In general, it can be concluded that it is more likely that people perform a health-related activity because of their desire to self-actualize and develop personally rather than merely to reduce the probability of disease onset (Kimiecik, 2011). In other words, it creates a stronger motivation based on approach rather than avoidance in the purpose attainment.

In conclusion, it can be admitted that eudaimonic well-being may serve as a reliable, firm and stable indicator of psychological functioning and be associated with physical and psychological health.

## **Bivariate Links of Coping Strategies, Time Perspective and Psychological Well-Being**

### **Coping Strategies and Psychological Well-Being**

In the association of coping and well-being, as favorable to a positive psychological functioning a problem-focused type is usually mentioned. Faulk, Christian, and Steinhardt (2012) post that coping profiles characterize flourishing, languishing as well as depression. Namely, it was revealed that depressed people use more maladaptive coping in comparison with languishing and flourishing people.

Besides, avoidant coping was proved to be positively related to decreased well-being among mothers of children with autism (Benson, 2009). In line with it, there is the finding of Chao (2011) that students frequently performing avoidant coping in the environment of low social support demonstrated the poorest well-being in a stressful situation. Moreover, it was proved that dysfunctional coping may weaken the buffer potential of social support to increase well-being among college students (Chao, 2012).

Similarly, Gibbons (2010), making a review of literature devoted to nurses' well-being, highlights that emotion-focused coping is considered as detrimental to positive functioning. Also, problem-focused coping was found to play a mediating role between conscientiousness and positive affect (Bartley & Roesch, 2011), the maximization of which is considered as an achievement aim in well-being from hedonic standpoints.

It is noteworthy, that the amount of studies known to us, where a link of coping with well-being from eudaimonic approach is examined, is little. Kling, Seltzer, and Ryff (1997) proved that in late-life challenges, such as community relocation as well as caregiving to an adult child with mental retardation, benefits for psychological well-being came from problem-focused coping.

Nevertheless, Uy, Foo, and Song (2013) report that there is evidence in the literature that problem-focused coping in some situations may become a new stress source and be related in a negative way to well-being. So, McKee-Ryan, Song, Wanberg, and Kinicki (2005) make an inference from their meta-analytical study, regarding physical and psychological well-being during unemployment, that there is no total consensus about what type of coping is positively related to well-being. These authors mention that there are data

that the same class of coping may be favorable to one individual's well-being, while it may have the opposite effect on another person.

It seems that such an incongruence may be explained by the difference of contexts where the phenomena mentioned above are explored. Another possible reason is a sufficient diversity in well-being operationalization as well as the measurement.

Not only the type of coping seems to be important in terms of effectiveness of stress management, but also a variety and frequency of their application. So, Hardie, Critchley, and Morris (2006) found that the diversity of coping strategies is a factor that decreases the level of distress and fosters psychological well-being. In turn, the more frequently coping strategies are used in a stressful situation, the more efficiently a problem solution as well as the higher degree of a subjective stress decrease are (Rasskazova & Gordeeva, 2011).

To summarize, it can be said that there is no consensus regarding the type of coping which is most favorable to well-being. Besides, it has to be admitted that there is lack of investigation of coping association with well-being from an eudaimonic perspective.

### **Coping Strategies and Time Perspective**

The issue of interaction of time perspective with such a significant construct as coping seems to be worth scientific attention. It must be admitted that though the amount of researches dedicated to this area is not relatively numerous, some results are possible to mention here.

Holman and Zimbardo (1999, as cited in Zimbardo & Boyd, 1999) examined the relationship between time perspective, social support and coping with trauma on several samples of college students. It was revealed that Future time perspective was associated with emotional growth coping as well as active coping aimed to problem solution. By contrast, Present-Fatalistic factor had a negative link with the problem-focused coping. Past-Positive dimension directly correlated with emotional growth coping, which, in turn, revealed an inverse association with Past-Negative time perspective. And, finally, Present-Hedonistic temporal frame was associated with avoidance.

Another noteworthy investigation to address was carried up by Epel, Bandura, and Zimbardo (1999) among the homeless from city shelters. It allowed not only to reveal some links between time perspective and coping but also to widen the application of time perspective phenomenon beyond student samples (Zimbardo & Boyd, 1999). The study demonstrated that people with higher scores on future orientation tend to use more proactive coping, whereas more salient present temporal frame has a link with avoidant strategies. Besides, the participants who had obtained a higher rate on future time perspective had a

shorter period of homelessness and more probability to be registered in school. Additionally, the individuals mentioned that they got some "plus points" from their difficult life situation.

The similar pattern of interaction of future time perspective and coping was obtained on the sample of the Greek young adults in the research of Anagnostopoulos and Griva (2012). Namely, this temporal frame was proved to have a positive and significant link with proactive coping.

It may be concluded that problem-focused coping is usually thought to be positively related to future time perspective while emotion-centered coping is thought to have a positive link with present time perspective.

### **Time Perspective and Psychological Well-Being**

Among the questions that have not got explicit answers is the issue of relationship of time orientation and well-being. It is noteworthy, that there were different intuitions with subsequent empirical support regarding what temporal frame is the most favorable in terms of positive functioning. In other words, past (Bryant, Smart, & King, 2005; Kazakina, 1999, as cited in Boniwell & Zimbardo, 2004), present (Diener, Emmons, Larsen, & Griffin, 1985; Kammann & Flett, 1983; Lennings, 2000) and future (Kazakina, 1999, as cited in Boniwell & Zimbardo, 2004; Wills et al., 2001; Zaleski, Cykon, & Kurc, 2001, as cited in Boniwell & Zimbardo, 2004) time orientations were proved to have a link with well-being. As Boniwell, Osin, Linley, and Ivanchenko (2010) admit such inconsistency in the inferences is not surprising due to the complexity as well as diversity in measures of time perspective and well-being constructs.

It seems to be reasonable to adduce the findings, regarding the association of well-being and time perspective measured with ZTPI. So the investigations based on undergraduate students revealed a definite degree of concurrence (Drake, Duncan, Sutherland, Abernethy, & Henry, 2008; Foret, Steger, & Frazier, 2004, as cited in Boniwell et al., 2010, Tov, 2004, as cited in Boniwell et al., 2010). Namely, there was no evidence about the presence of link between future time perspective and well-being measures in these studies. Present-Hedonistic revealed a negative association with happiness, though its magnitude was weak (Drake et al., 2008). In turn, Past temporal frame of both valences had the most robust relationship with measures of well-being. Past-Positive scale was directly related to positive affect and all the dimensions of temporal life satisfaction (Tov, 2004, as cited in Boniwell et al., 2010), happiness, mindfulness (Drake et al., 2008), and meaning in life (Foret et al., 2004, as cited in Boniwell et al., 2010). Besides, Past-Negative time perspective predictably revealed the positive link with negative affect as well as inverse associations with current and

past satisfaction with life (Tov, 2004, as cited in Boniwell et al., 2010), overall life satisfaction and meaning in life (Foret et al., 2004, as cited in Boniwell et al., 2010), mindfulness and subjective happiness (Drake et al., 2008). Additionally, though there is no still a universal solution to detection of balanced time perspective, people with such a time orientation were proved to score significantly higher on life satisfaction (Gao, 2011) as well as happiness and mindfulness (Drake et al., 2008).

It is noteworthy, that the recent study on time perspective and well-being in British and Russian students (Boniwell et al., 2010) in general demonstrates the findings consistent with the inferences described in the previous paragraph. The dimensions of ZTPI and subjective well-being were proved to be correlated in a quite similar way in both countries. The British students demonstrated the strongest negative association between Past-Negative and well-being, while the correlational magnitude of Past-Positive and Present-Hedonistic with positive functioning was lower. In turn, Present-Fatalistic and well-being had a weak correlation, whereas the Future time perspective did not reveal any relationship with life satisfaction and positive affect. The Russian participants showed the same links of Past and Present-Fatalistic scales and well-being. Regarding the Present-Hedonistic scale, it was proved to be moderately related to subjective happiness and not to have any sufficient connections with life satisfaction. Differently from the British sample, the Russian counterparts had a weak correlation of future time perspective with optimism and life satisfaction.

It is worth mentioning, that in the same study of Boniwell et al. (2010) some measures of eudaimonic well-being were included. In the British sample, actualization of potential was inversely related to Past-Negative and Present-Fatalistic (moderate and low magnitudes respectively), and directly linked with Present-Hedonistic and Past-Positive (a medium effect size). In turn, among the Russian participants, purpose in life was negatively associated with Present-Fatalistic and Past-Negative (strong and moderate magnitudes respectively), and positively correlated with Past-Positive and Future (small and medium effect sizes).

It may be inferred that there is no common opinion regarding time perspective and well-being association. Besides, there is a lack of studies investigating these associations from eudaimonic approach to well-being.

## **Conclusions**

The conducted literature review allows to conclude that all three considered constructs have a number of correlates, including important health outcomes. Due to this as well as some

other reasons, which will be given below, the issue of interaction of coping, time perspective and well-being may still be promising to explore.

The link of time perspective and well-being has been usually investigated from the point of hedonic approach, while eudaimonic one has not received the equal amount of scientific attention. The same is just to the issue of coping and psychological well-being association.

Besides, most studies regarding these variables were carried up on English speaking samples that does not allow to make inferences about the presence or lack of cultural peculiarities. Also, it should be admitted that there are few investigations in this problem area on Russian speaking samples due to the relatively recent validation of a number of instruments often applied for investigation of the constructs that are used to associate with positive psychology nowadays.

Also, as it was demonstrated above, most of the researches, were devoted to the investigation of current, rarely future, psychological well-being. Taking into consideration the fact that psychological well-being is a subjective construct in view of one's being assessments it could be assumed that every person has his or her own image of a state of ideal psychological well-being, he or she would like to have, which, besides, may serve as a criterion of evaluation of the current functioning as well as reflect individual needs and aspirations (Shevelenkova & Fesenko, 2005). The detection of presence or absence of any significant difference between current and ideal psychological well-being may provide investigators with the information about the necessity and areas which can be tackled in the intervention activities.

Finally, findings concerning bivariate correlations of coping, time perspective and psychological well-being can be productive in terms of detection of risk groups, early prevention as well as intervention.

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## Article 2

### **Coping Strategies, Time Perspective and Psychological Well-Being: A Comparative Study in Belarusian and Portuguese University Students**

#### Abstract

Two studies investigating bivariate relationship of coping strategies, time perspective (TP) and psychological well-being (PWB) in Belarusian ( $n=82$ ) and Portuguese ( $n=75$ ) university student samples were conducted.

The Portuguese participants demonstrated a higher level of current as well as ideal PWB than their Belarusian counterparts. Besides, higher scores on Present-Hedonistic (PH) and a lower level of Present-Fatalistic (PF) were detected on the Portuguese sample in comparison with the Belarusian sample. Additionally, the Belarusian students showed a greater use of distancing, escape-avoidance and positive reappraisal strategies than their Portuguese counterparts. In turn, though this difference was marginal, the Belarusian participants were found to perform a playful problem-solving more often.

In both samples emotion-focused as well as the search and use of social support coping were inversely associated with some domains of PWB, while emotion- and problem-focused types of coping were directly related to definite PWB scales. Additionally, the search and use of social support demonstrated a positive link with some PWB dimensions in the Portuguese sample. In turn, in association of coping and ideal PWB less common features were detected, namely, only emotion-focused coping was positively linked with ideal PWB in both samples.

Past-Negative (PN) as well as Present-Fatalistic showed negative correlations with some domains of both current and ideal PWB in the Belarusian as well as the Portuguese samples. However, Present-Hedonistic was proved to have different association with PWB among the Belarusian and Portuguese participants. Besides, on the contrary with the Belarusian participants, in the Portuguese sample, Future (F) and Past-Positive (PP) did not reveal any significant links with current PWB dimensions.

Finally, Past-Negative and Present-Hedonistic temporal frames were positively associated only with emotion-focused coping among the Belarusian as well as Portuguese students. Besides, some similarities in both samples were detected on Future and Past-Positive, namely these time orientations were directly related to coping strategies aimed at emotion regulation as well as the seek and use of social support. No common features were met on Present-Fatalistic scale.

**Key words.** Coping Strategies, Time Perspective, Psychological Well-Being

## **Introduction**

The increasing scientific interest in positive psychology determined the conduction of theoretical as well as empirical researches that allowed to highlight the value of positive psychology's concepts for Health as well as Clinical Psychology (Aspinwall & Richard, 2010; Geers, Wellman, Seligman, Wuyek, & Neff, 2010; Hirsch, Wolford, La Londe, Brunk, & Morris, 2007; Marques, Pais-Ribeiro, & Lopez, 2011). It was demonstrated that these concepts, among which well-being and time perspective are, are connected with the etiology, prevention, course, outcome and management of various problems with health, both mental and physical (Brannan & Petrie, 2011; Hirsch et al., 2007; Vázquez, Hervás, Rahona, & Gómez, 2009).

Regarding the issue of mechanisms of such influences, besides biological processes, social as well as behavioral determinants were mentioned (Aspinwall & Richard, 2010). Namely, the concept of coping is thought to belong to the latter group of determinants. The significance of this construct seems to be difficult to overrate due to the fact that this phenomenon is a reflection of how a person faces a great diversity of stressful situations generated in everyday life.

It may be concluded that the exploration of these constructs separately as well as in interaction is thought to be reasonable as well as promising, especially taking into account a relatively few investigations devoted to this issue.

## **The Notion of Coping**

The present investigation is based on the understanding of coping from the standpoints of the contextual, cognitive model proposed by Lazarus and Folkman (1984). Within this approach, the coping is defined as "ongoing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus, 1993, p.237). There are two major functions of coping that became a criterion of the classification, which is thought to be the most common used (Carr, 2004). The aim of problem-focused coping is to alert stressful person-environment relationship by influencing the problem source. In turn, emotion-focused coping supposes the change of attention dedicated to this interaction or modification of the relational meaning that could minimize the stress while the current situation of a person-environment interaction has not been changed (Carver & Connor-Smith, 2010; Folkman & Greer, 2000).

The assessment of the coping effectiveness is related to the issue of fitness between the appraised controllability of the stressful situation and used coping. An individual's ability to select as well as perform coping adequate to stress context is called flexibility (Folkman &

Moskowitz, 2004; Lazarus, 1993). The more this correspondence is, the higher probability of better results are (Folkman & Moskowitz, 2004; Lazarus, 1993). Therefore, according to this model it could not be stated in an unappealable way that there are inherently good or bad copings.

The researches on coping do not provide us with univocal inference regarding gender aspects in coping use, though, as Matud (2004) mentions, in many studies men are described as having a tendency to perform problem-focused coping, whereas women – emotion-focused.

In the investigations dedicated to different coping types, avoidant coping was proved to be positively related to worse indicators of psychological as well as somatic health (Segerstrom & O'Connor, 2012). In line with it, there is a conclusion of several meta-analyses about adaptiveness of problem-focused coping (Duangdao & Roesch, 2008; Moskowitz, Hult, Bussolari, & Acree, 2009; Roesch et al., 2005) and maladaptiveness of excessive emotion-focused coping use (Moskowitz et al., 2009; Roesch et al., 2005) in tackling with different severe somatic illnesses. The consistent inferences regarding a direct link of problem-focused coping with favorable outcomes in oncology were also reported by Kryukova (2005), Ransom, Jacobsen, Schmidt, and Andrykowski (2005) as well as Scrignaro, Barni, and Magrin (2011).

The active coping was proved to be effective among population with severe mental disturbances (Meyer, 2001) while avoidant coping seems to be an essential feature within a personality disorder pattern (Bijttebier & Vertommen, 1999). Besides, this type of coping may predict therapeutic resistance in case of depression (Avedisova, Kanaeva, Ibragimov, & Lyupaeva, 2003).

Also, problem-focused coping was proved to have a protective potential regarding risky behavior (McCabe, Roesch, & Aldridge-Gerry, 2013; Rasskazova & Gordeeva, 2011). Moreover, active coping also demonstrated positive association with repatriate and work adaptation (Herman & Tetrick, 2009) as well as university adjustment (Chou, Chao, Yang, Yeh, & Lee, 2011; Lyrakos, 2012).

### **The Notion of Time Perspective**

The interaction with time, as Boniwell and Zimbardo (2004) reasonably claim, is a significant quality of individual experience, which includes objective as well as subjective components. Namely, time is perceived as basis as well as a regulator of social life.

The understanding of fundamental importance of time processes has been resulted in theoretical as well as empirical investigations. However, it is thought that psychology as well

as other social sciences dedicated relatively little attention to the systematic research in this problem field (Boniwell & Zimbardo, 2004; Zimbardo & Boyd, 1999). Nevertheless, the awareness of temporal processes' potential was reflected in a construct of time perspective.

The current work is grounded on the understanding of time perspective offered by Zimbardo and Boyd (1999). They consider this construct as a cognitive process which is used by people and involved in perception, assessment, interpretation of a continual flow of personal and social experiences, differentiation and attribution of them to various time frames, which are past, present and future.

Altogether it gives a person a definite extent of coherence, continuity, meanings, and the sense of order in everything that occurred in his or her life. Moreover, these time frames play an important role in encoding, storing and retrieving of information as well as affect opinions, decisions, social purposes, and actions (Boniwell & Zimbardo, 2004; Holman & Zimbardo, 2009). Besides, a great diversity of learned factors is thought to be involved in the time perspective formation (Zimbardo & Boyd, 1999).

It is remarkable that certain temporal frames may dominate while the others are used less. Altogether, it results in being "biased" towards past, present or future (Boniwell & Zimbardo, 2004; Crockett, Weinman, Hankins, & Marteau, 2009; Zimbardo & Boyd, 1999). On the contrary, a "balanced time orientation" implies that the individual is flexible in switching among time frames to a dimension adequate to context requirement (Wiberg, Sircova, Wieberg, & Carelli, 2012; Zimbardo & Boyd, 1999).

The factor analysis conducted by Zimbardo and Boyd (1999) allowed to identify the five factors that form time perspective, namely, Past-Negative, Past-Positive, Present-Fatalistic, Present-Hedonistic, and Future. The definition as well as correlates detected in the original research of Zimbardo and Boyd (1999) are shown in Table 2.1.

The subsequent studies of time perspective from the standpoints of the theory proposed by Zimbardo and Boyd (1999) demonstrated a number of significant links, some of which will be briefly described below.

Regarding culture differences in time perspective, countries with individualistic focus tend to be more future-centered than collectivistic cultures, though for the latter ones it may be changing due to globalization (Boniwell & Zimbardo, 2004). Also the descriptive statistics in the researches on time perspective with the ZTPI demonstrate that in the USA study Past-Positive had the highest mean score (Zimbardo & Boyd, 1999). Besides, in the Russian (Sircova et al., 2007) and Portuguese (Ortuño & Gamboa, 2009) investigations this temporal dimension was also the most distinctive in terms of mean rate. In the French research the highest mean score was on the Present-Hedonistic factor (Apostolidis & Fieulaine, 2004).

Table 2.1

*Time Perspective Orientations Proposed by Zimbardo and Colleagues*

Time Perspective Orientation	Description
<i>Past-Negative</i>	Overall aversive as well as negative image of the past. Such a view may be a result of real traumatic events or/and negative reconstruction of favorable accidents. This factor was found to be positively associated with self-reported unhappiness low self-esteem, depression, anxiety and aggression.
<i>Past-Positive</i>	A positive, sentimental and nostalgic image of the past. It has significant negative correlations with aggression, depression, anxiety, and positive link with self-esteem. Besides, women obtained a significantly higher rate in this dimension in comparison with men.
<i>Present-Fatalistic</i>	The attitude to future as well as life in general as full of hopelessness and helplessness along with the perception of incapacity to change anything. This dimension has positive associations with depression, anxiety, aggression and a negative link with the examination of future outcomes
<i>Present-Hedonistic</i>	A pleasure seeking and risky position regarding life as well as time in general. It has strong links with ego undercontrol, novelty, sensation seeking, as well as inconsistency preference.
<i>Future factor</i>	The orientation towards future, which implies efforts to achieve aims as well as rewards. It is directly associated with conscientiousness, consideration of future results, consistency preference as well as the amount of weekly time devoted to studying. In turn, the negative link was detected with sensation and novelty seeking, depression and anxiety. Women demonstrated higher scores on this scale in comparison with men.

Diverse investigations demonstrated the presence of sex peculiarities in time perspective (D'Alessio, Guarino, Pascalis, Zimbardo, 2003; Díaz-Moralez, 2006; Ortuño & Gamboa, 2009; Sircova et al., 2007; Zimbardo & Boyd, 1999). Namely, in the USA (Zimbardo & Boyd, 1999), Russian (Sircova et al., 2007) and Spanish (Díaz-Moralez, 2006) samples women scored higher on Past-Positive. Besides, females showed a more salient level on Present-Fatalistic than males did in the Italian (D'Alessio et al., 2003), Russian (Sircova et al., 2007) and Spanish (Díaz-Moralez, 2006) studies. Additionally, women had a higher Future rate in the investigations held in the USA (Zimbardo & Boyd, 1999) and Portugal (Ortuño & Gamboa, 2009), though in the latter sample the difference was of marginal significance. In the Spanish study females had higher scores on Past-Negative in comparison with men (Díaz-Moralez, 2006). In turn, in the Italian research men had a more salient level on Present-Hedonistic (D'Alessio et al., 2003). And, finally, the Russian investigation showed a superior men's rate on Future factor (Sircova et al., 2007).

In terms of age difference, the comparative review shows that with aging Present orientation tends to give way to more salient Future temporal frame (Sircova et al., 2007).

The research on academic as well as job performance and time perspective showed some remarkable findings. Future time perspective was proved to be positively related to academic success (Horstmanshof & Zimitat, 2007; Peetsma & van der Veen, 2011), better following time commitments and deadlines (Harber, Zimbardo, & Boyd, 2003) as well as to be inversely associated with procrastination in the workplace (Gupta, Hershey, & Gaur, 2012).

Besides, the relationship of identity status and time perspective was examined. Namely, the Future as well as Past-Positive time frames were proved to be associated with achieved identity integration while diffused identity was linked with Past-Negative and more prominent Present-Fatalistic along with less salient orientation towards Future (Laghi, Baiocco, Liga, Guarino, & Baumgartner, 2013).

The issue of social networks and temporal frames revealed that Past-Negative was associated with insufficient support and a high family conflict. By contrast, Past-Positive temporal frame was related to high support from family as well as large networks. In turn, Present-Hedonistic was linked with large networks and higher support from acquaintances and friends. Finally, Future orientation differed from other time dimensions with support from significant others (Holman & Zimbardo, 2009).

A considerable amount of scientific interest has been dedicated to the relationship of health-related as well as risky behavior with time perspective. In general, it may be inferred that Future time perspective demonstrated a direct association with healthy and inverse link with risky behavior, while the opposite pattern was usually found to be just for Present time orientation (Apostolidis, Fieulaine, & Soulé, 2006; Hamilton, Kives, Micevski, & Grace, 2003; Henson, Carey, Carey, & Maisto, 2006; Keough, Zimbardo & Boyd, 1999; Laghi, Liga, Baumgartner, & Baiocco, 2011; Milfont, Andrade, Belo, & Pessoa, 2008; Wills, Sandy, & Yaeger, 2001; Zimbardo, Keough, & Boyd, 1997).

Besides, time perspective was proved to be related to mental health issues, such as suicidal ideation (Laghi, Baiocco, D'Alessio, & Gurrieri, 2009) as well as psychopathology measures in general (Beek, Berghuis, Kerkhof, & Beekman, 2011).

### **The Notion of Psychological Well-Being**

The appearance of the concept of well-being reflected the focus shift towards a new understanding of health as something more than the mere absence of mental and somatic disease. The clear understanding of the meaning of well-being is utterly important for various

practices designed to promote optimal psychological functioning and experience through the means of diverse modalities: political, social, economic as well as psychological. And, indeed, as Vázquez et al. (2009) reasonably state, the inclusion as well as integration of well-being understanding in a variety of prevention and intervention projects of different levels of societal functioning seems to be a challengeable issue.

Two approaches to well-being understanding are usually mentioned (Lepeshinskii, 2007; Ryan & Deci, 2001; Ryff, 1989; Shevelenkova & Fesenko 2005; Sozontov, 2006). Within a hedonic perspective well-being is understood as the presence of positive affect and absence of negative one (Vázquez et al., 2009). The measurement within this approach supposes the evaluation of subjective well-being that includes three main components - satisfaction with life (cognitive assessment), presence of positive and absence of negative mood (emotional rate), which altogether are used to be defined as happiness (Ryan & Deci, 2001).

The other, eudaimonic approach, encompasses the concepts that highlight personal development as the central and necessary component of well-being (Shevelenkova & Fesenko, 2005). Namely, “engaging in eudaimonic pursuits, or simply eudaimonia, means being motivated and committed to use and develop the best in oneself, in a way that is congruent with one’s true self, and it includes the concepts such as striving for excellence, acting with virtue, and having concerns beyond the self and beyond the immediate moment” (Huta, 2011, p. 47). On the contrary with hedonic perspective, eudaimonic well-being is linked with challenge as well as with efforts.

This study is guided by the eudaimonic view on well-being proposed by Ryff (1989). She considers well-being as “the striving for perfection that represents the realization of one’s true potential” (Ryff, 1995, p. 100). Giving a brief characteristic to the methodological basis of the Ryff’s understanding of PWB, it may be said that it took root in developmental and clinical psychology, besides, a positive criteria of mental health offered by Jahoda as well as the concept of positive functioning in later life given by Birren were used.

Altogether, it allowed to identify dimensions, which if taken together, encompass the variety of wellness. These domains are: self-acceptance (positive evaluation of one’s self and one’s life); personal growth (a sense of continuous life-long evolution and personal development); purpose in life (the assurance that there is a direction in life which makes it meaningful); positive relations with others (the elaborated and maintained good ties with other people); environmental mastery (the ability of effective guidance of one’s being as well as the surrounding environment); and autonomy (self-determination sense).

Researchers on psychological well-being revealed the presence of age, sex and cultural differences (Chirkov & Ryan, 2001; Ryan, 2009; Ryff, 1995). Besides, financial wellness was not proved to be a source of eudaimonic well-being (Proctor, Linley, & Maltby, 2009; Ryan & Deci, 2001). Also some personal traits were found to be related to psychological well-being as well as to predict it (Abbott et al., 2008; Huppert, 2009; Augusto-Landa, Pulido-Martos, & López-Zafra, 2010; Schmutte & Ryff, 1997). Regarding the issue of emotions and psychological well-being, a dimension of positive relations with others showed more potential to generate positive affect (Ryff & Singer, 1998). Also, scientific interest was dedicated to the exploration of the contribution of normative and non-normative experience into current and future well-being in different age groups (Ryff & Heidrich, 1997).

Another remarkable finding is that operationalization of well-being from eudaimonic standpoints may be more important for positive psychological functioning (McMahan & Estes, 2011). Indeed, an eudaimonic concept was proved to demonstrate a firmer association and potential to predict well-being (Kimiecik, 2011; Michael, Todd, & Shigehiro, 2008; Park, Peterson, & Ruch, 2009; Vella-Brodrick, Park, & Peterson, 2009; Wood, Linley, Maltby, Kashdan, & Hurling, 2011).

A number of investigations (cross-sectional as well as longitudinal) revealed and proved a positive association of psychological well-being and mental as well as somatic health (Brannan & Petrie, 2011; Chida & Steptoe, 2008; Friedman et al., 2005; Friedman, Hayney, Love, Singer, & Ryff, 2007; Heisel & Flett, 2008; Ryff, Singer, & Love, 2004; Steptoe, O'Donnell, Marmot, & Wardle, 2008; Tsenkova, Love, Singer, & Ryff, 2008; Vázquez et al., 2009; Wood & Joseph, 2010). Besides, psychological well-being demonstrated a direct link with health-related behavior (Golub et al., 2011; Kimiecik, 2011).

## **Bivariate Associations of Coping Strategies, Time Perspective and Psychological Well-Being**

### **Coping Strategies and Psychological Well-Being**

In the association of coping and well-being, a problem-focused type is often adduced as conducive to positive psychological functioning (Bartley & Roesch, 2011; Faulk, Christian, & Steinhardt, 2012). On the contrary, avoidant coping is usually reported to be directly related to decreased well-being (Benson, 2009; Chao, 2011, 2012). Similarly, Gibbons (2010), in a literature review of well-being of nurses, mentions that emotion-focused coping is thought to be detrimental to positive functioning.

Nevertheless, Uy, Foo, and Song (2013) report that there is evidence in the literature that problem-focused coping in some contexts may become a new source of stress and be inversely related to well-being. So, McKee-Ryan, Song, Wanberg, and Kinicki (2005) draw a conclusion from their meta-analytical study, regarding physical and psychological well-being during unemployment, that there is no total agreement about what type of coping is favorable for well-being. These authors refer to the data that the same coping type may be conducive to one individual's well-being whereas it will have the opposite influence on another person.

Such an incongruence as well as diversity of opinions may be caused by a variety in well-being operationalization as well as measurement. Another possible explanation is the distinction of contexts where the phenomena mentioned above are explored.

Not only the type of coping seems to be significant in terms of effectiveness of stress management, but also a variety as well as frequency of their use. So, Hardie, Critchley, and Morris (2006) found that the coping strategies diversity is a factor that declines the level of distress and fosters psychological well-being. In turn, the more the frequency of coping strategies use in a stressful situation is, the more the efficiency in problem solution as well the higher degree of subjective stress decline are (Rasskazova & Gordeeva, 2011).

It must be admitted, that the amount of studies known to us, where an association of coping with well-being from eudaimonic perspective is considered, seems to be little. However, it is possible to adduce to Kling, Seltzer, and Ryff (1997) who found that in late-life challenges, such as community relocation and caregiving to mentally retarded adult child, problem-focused coping was beneficial for psychological well-being.

To summarize, it can be said that there is no the only inference regarding the type of coping most conducive to well-being. In addition, it has to be admitted that the research on coping association with well-being from eudaimonic perspective is relatively scarce.

### **Coping Strategies and Time Perspective**

The issue of association of time perspective and coping seems to be worth scientific concern. It must be admitted that though the amount of studies in this field is not relatively numerous, some findings are possible to adduce here.

Holman and Zimbardo (1999, as cited in Zimbardo & Boyd, 1999) explored the relationship of time perspective, social support and coping with trauma on several samples of college students. It was found that Future temporal frame was linked with emotional growth and active coping aimed to problem solution. On the contrary, Present-Fatalistic dimension revealed an inverse association with the problem-focused coping. Past-Positive frame was directly related to emotional growth coping, which, in turn, showed a negative association

with Past-Negative factor. And, finally, Present-Hedonistic orientation was positively associated with avoidance.

Another noteworthy study was held by Epel, Bandura, and Zimbardo (1999) among the homeless from city shelters. It was found that people with a higher rate on Future orientation tended to use more proactive coping while more prominent Present factor was related to avoidant strategies. Besides, the participants who scored higher on Future time perspective had a shorter period of homelessness and a greater probability to be registered in school. Also, these individuals reported that they acquired some "plus points" from their difficult life events.

The similar interaction pattern of Future factor and coping was found on the sample of the Greek young adults in the research of Anagnostopoulos and Griva (2012). Namely, this time frame was proved to be directly related to proactive coping.

It may be summarized that problem-focused coping seems to be often mentioned as positively related to Future time perspective, while emotion-centered coping may be thought to have a direct association with Present time perspective.

### **Time Perspective and Psychological Well-Being**

Among the questions that were not answered explicitly is the issue of association of time orientation and well-being. It is worthy to mention, that there were different intuitions with subsequent empirical evidence regarding what temporal frames foster positive functioning. In other words, past (Bryant, Smart, & King, 2005; Kazakina, 1999, as cited in Boniwell & Zimbardo, 2004), present (Diener, Emmons, Larsen, & Griffin, 1985; Kammann & Flett, 1983; Lennings, 2000) and future (Kazakina, 1999, as cited in Boniwell & Zimbardo, 2004; Wills et al., 2001; Zaleski, Cykon, & Kurc, 2001, as cited in Boniwell & Zimbardo, 2004) time orientations were found to have a link with well-being. As Boniwell, Osin, Linley, and Ivanchenko (2010) admit such an incongruence in the findings is predictable due to the complexity and variety in measures of time perspective and well-being constructs.

A brief report of the findings, regarding the association of well-being and time perspective measured with Zimbardo Time Perspective Inventory seems to be reasonable to give below. So in the studies of undergraduate students a certain degree of concurrence was obtained (Drake, Duncan, Sutherland, Abernethy, & Henry, 2008; Foret, Steger, & Frazier, 2004, as cited in Boniwell et al., 2010; Tov, 2004, as cited in Boniwell et al., 2010). Namely, in these investigations a link between Future time perspective and well-being measures was not detected. In turn, Present-Hedonistic was inversely associated with happiness, though the magnitude of the correlation was weak (Drake et al., 2008). Past temporal frame of both signs

had the most robust links with well-being measures. Namely, Past-Positive factor was directly associated with positive affect and all the dimensions of temporal life satisfaction (Tov, 2004, as cited in Boniwell et al., 2010); happiness, mindfulness (Drake et al., 2008); and meaning in life (Foret et al., 2004, as cited in Boniwell et al., 2010). On the contrary, Past-Negative temporal frame predictably demonstrated the direct link with negative affect and inverse associations with current and past life satisfaction (Tov, 2004, as cited in Boniwell et al., 2010); overall satisfaction with life and meaning in life (Foret et al., 2004, as cited in Boniwell et al., 2010); mindfulness and subjective happiness (Drake et al., 2008). Moreover, although there is no still a universal way of detection of balanced time perspective, people with such a time orientation were found to have more salient life satisfaction (Gao, 2011) as well as happiness and mindfulness (Drake et al., 2008).

It is remarkable, that the relatively recent study on time perspective and well-being of the British and Russian students (Boniwell et al., 2010) in general revealed the results congruent to the findings described in the paragraph above. The factors of ZTPI and subjective well-being were found to be associated in a quite similar way in both samples. The British participants demonstrated the strongest inverse link of Past-Negative and positive functioning, whereas the correlational magnitude of Past-Positive, Present-Hedonistic and well-being association was lower. In turn, Present-Fatalistic and well-being had a weak correlation, while the Future factor was not found to have any links with life satisfaction and positive affect. The Russian participants demonstrated quite similar associations between Past and Present-Fatalistic orientations and well-being. In turn, Present-Hedonistic scale was weakly and directly related to subjective happiness, and did not have any significant links with life satisfaction. Different from the British sample, the Russian counterparts showed a weak correlation of Future factor with optimism and life satisfaction.

It must be admitted, that in the same research of Boniwell et al. (2010) the association of time perspective and eudaimonic well-being measures were considered. Namely, in the British study Past-Negative and Present-Fatalistic were inversely linked (moderate and weak magnitudes respectively) with actualization of potential while Present-Hedonistic and Past-Positive were directly associated with this construct (medium effect sizes). In turn, in the Russian sample, purpose in life was associated with Present-Fatalistic and Past-Negative (strong and moderate magnitudes respectively) in a negative way, and positively linked with Past-Positive and Future temporal frames (small and medium effect sizes).

It may be summarized that there is no common opinion regarding time perspective and well-being relationship. Besides, studies investigating these associations from eudaimonic standpoints to well-being are relatively scarce

## Synthesis

The brief literature review allows to conclude that the issue of interaction of coping, time perspective and well-being seems to be promising to explore due to the following reasons.

The relationship of time perspective and well-being has been usually examined from the hedonic standpoints, while eudaimonic approach has not received the equal amount of scientific concern. The same is just about the issue of coping and psychological well-being association.

Another reason is that most researches regarding these variables were conducted on English speaking samples that does not allow to draw conclusions about the presence or lack of cultural specificity. Besides, it is noteworthy that there are few investigations in this problem field on Russian speaking samples because of the relatively recent validation of instruments widely applied for exploration of the constructs that are usually associated with positive psychology today.

As it was demonstrated above, most studies, were dedicated to investigation of current, rarely future, psychological well-being. Such conclusions are in line with the inference made by Shevelenkova and Fesenko (2005) that most instruments aimed to assess positive functioning, including the scales of PWB offered by Ryff, in fact, measure actual or current level of well-being. Basing on this assumption, in this work “current” or “actual” PWB will be used as synonym of PWB. If to bear in mind that psychological well-being is a subjective construct in view of one`s being evaluation, it may be supposed that an individual has his/her own image of a state of ideal psychological well-being, he or she would like to have. Moreover, ideal PWB may serve a criterion of assessment of the current functioning (Shevelenkova & Fesenko, 2005) as well as could describe needs and wishes of a person. The identification of presence or absence of any essential distinctions between current and ideal psychological well-being can give investigators information not only regarding the necessity but also point out areas which could be tackled in intervention activities.

Findings regarding bivariate associations of coping, time perspective and psychological well-being can be fruitful in terms of risk groups detection, early prevention as well as intervention.

Grounding on all the reasons mentioned above the general objective of the study was to explore bivariate associations of time perspective, coping strategies and psychological well-being. The attainment of the set purpose implied the realization of specific aims:

- to identify the relationship of coping strategies, time perspective, and the current PWB of the Belarusian university students;

- to research the interaction of coping strategies, time perspective, and the current PWB of the Portuguese university students;
- to investigate the link of coping strategies, time perspective, and the ideal PWB of the Belarusian university students;
- to study the relationship of coping strategies, time perspective, and the ideal PWB of the Portuguese university students;
- to compare the results obtained in the Belarusian and Portuguese samples.

## Method

### Participants

A total of 157 individuals participated in the investigation. 52.2% of the sample consisted of the students of Brest State University named after A.S. Pushkin (Brest, Belarus) and 47.8% - students of the University of Algarve (Faro, Portugal), aged between 17 and 22 ( $M=19.43$ ;  $SD=1.30$ ). Most individuals were females - 56.1%.

### Instruments

Some sociodemographic items were included in the questionnaires to obtain information about gender, age, marital status, nationality, course, year, presence or absence of work, form of study (only in the Belarusian sample).

Time Perspective: *The Zimbardo Time Perspective Inventory* (Zimbardo & Boyd, 1999) is a 56-item self-report instrument which captures attitudes and behaviors regarding time. It comprises five scales, namely Past-Negative, Past-Positive, Present-Fatalistic, Present-Hedonistic, and Future. Altogether, it allows to assess time perspective in a multidimensional way. It is asked to evaluate how true each item is on a Likert scale (ranging from 1-very untrue till 5-very true).

*Belarusian sample.* The Russian language version of ZTPI made by Sircova, Sokolova, and Mitina (2008) was applied. This adaptation includes the same set of items which replicates a five-factor structure of original instrument with minor differences. Namely, the 7<sup>th</sup> item load onto PN instead of PP, the 11<sup>th</sup> and 25<sup>th</sup> item on PN as well PP, the 52<sup>nd</sup> - onto PH and F instead of PF.

*Portuguese sample.* The Portuguese language adaptation performed by Ortuño and Gamboa (2009) was used. In this version five factors were met as well as the results similar to the original investigation of Zimbardo and Boyd (1999).

Coping: *Ways of Coping Questionnaire (WCQ)*, offered by Folkman and Lazarus (1988), consists of 50 items and measures the strategies which an individual uses in a stressful

situation. Participants are asked to rate how they act in a stressful situation on a four-point scale (0 - not at all, 3 - usually). This questionnaire allows to detect eight ways of coping. Confrontive coping – aggressive efforts aimed to change the situation. It implies a definite degree of hostility as well as readiness to risk. Distancing - cognitive efforts to detach from the situation and decrease its significance. Self-controlling – efforts to regulate one`s feelings as well as actions. Seeking social support – efforts in searching information, tangible (actions) and emotional support. Accepting responsibility – admitting of one`s role in a problem with a concomitant attempt to solve it. Escape-avoidance - mental striving and behavioral efforts aimed to escape or avoid a problem. Planful problem-solving – voluntary problem-focused efforts to change the situation, including an analytical approach to a problem. Positive reappraisal – efforts aimed to elaborate a positive meaning with a focus on one`s personal development; also includes religious thinking. All the coping strategies are divided in three groups on the criteria of problem solution, search and use of social support and emotion regulation. So, planful problem-solving, seeking social support and six emotion-focused strategies are distinguished.

*Belarusian sample.* The Russian language version made by Kryukova and Kuftyak (2007) was used. It includes the original 50 items and is characterized by acceptable psychometric properties (Kryukova & Kuftyak, 2007).

*Portuguese sample.* The Portuguese adaptation performed by Pais-Ribeiro and Santos (2001) was applied. It includes 48 of original items, two were eliminated after the translation. Psychometric properties are reported to be similar to the original instrument (Pais-Ribeiro & Santos, 2001).

Current Psychological Well-Being: *The Scales of Psychological Well-Being* (Ryff, 1989) aimed to measure eudaimonic well-being consisting of six theoretically derived parameters of optimal psychological functioning: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. The instrument includes 84 items which participants are asked to assess according to a 1 (strongly disagree) to 6 (strongly agree) response format.

*Belarusian sample.* The Russian language adaptation executed by Lepeshinskii (2007) was used. It contains 84 original items. The psychometric procedures confirmed the necessary level of reliability and validity of this version (Lepeshinskii, 2007).

*Portuguese sample.* The Portuguese version made by Ferreira and Simões (1999) was applied. It consists of 84 original items and is characterized by the necessary psychometric indicators (Ferreira & Simões, 1999).

Ideal Psychological Well-Being: The same instruments, which were mentioned in the two previous paragraphs, were used. The only difference was a new instruction, where the participants were asked to assess the items from the position of how they would like to treat themselves and their life.

### **Procedure**

The participation in the investigation was voluntary and did not include any incentive. The application of the instruments (in paper) was held with a one-week break, namely, firstly, the participants filled in the 84-item scales of PWB (Ryff, 1989) and ZTPI. In one week the same group of individuals completed the WCQ and the 84-item scales of PWB (but with a different instruction). The participants wrote their two first letters of their name and surname as well as the two last digits of their mobile phone on all paper blanks, which made it possible to match the questionnaires.

The statistical analysis was conducted with the help of the IBM SPSS Statistics 21. The bivariate correlational analysis and t-test were performed.

## **Results and Discussion**

### **Sociodemographic Data**

*The Belarusian sample.* Most of the participants were female (54.9%), the mean age of the sample is 18.64. Most students have a budget type of education (69.5%) and do not have a job (96.3%). Most individuals are the students of the second year (63.4%). In terms of specialties, 46.3% of participants study history, 34.1% - biology-chemistry, and 19.5% - physical culture. Regarding the marital status all participants were single, most of them are not in relationship (70.4%).

*The Portuguese sample.* As in the Belarusian sample, most individuals were female (57.3%), Portuguese (97.3%), the mean age of the sample is 20.28. Most participants have the second year of studies (51.4%), and 54.1% of the sample are the students of psychology department. Besides, only 2.7 % of students have a job. As in the Belarusian sample, all the participants were single, and 32.7% of them were in relationship.

### **Current Psychological Well-Being**

The Portuguese college students demonstrated a higher rating on the index of current PWB in general as well as on particular scales, exclusively the area of purpose in life where the significant difference was not detected (see Table 2.2).

It must be admitted that in both samples the highest mean scores were obtained on the personal growth scale. This dimension was also the most salient in the previous studies held on the Belarusian (Lepeshinskii, 2007) and Portuguese (Ferreira & Simões, 1999) samples of this age group. This feeling of evolution and personal development may be connected with new environment, determined by university education, which differs significantly from prior school setting.

Table 2.2

*Group Statistics and Independent t-test Results on Current PWB of the Belarusian and Portuguese University Students*

Scale	Country	<i>M</i>	<i>SD</i>	<i>SE</i>	t-test report*	<i>r</i>
<i>PRWO</i>	Belarus	57.39	9.14	1.01	$t(155) = -2.89, p = .00$	.23
	Portugal	62.11	11.30	1.31		
<i>AUT</i>	Belarus	55.39	9.64	1.06	$t(155) = -2.71, p = .01$	.22
	Portugal	59.63	9.91	1.14		
<i>EM</i>	Belarus	52.78	9.09	1.00	$t(155) = -2.96, p = .00$	.23
	Portugal	57.05	9.00	1.14		
<i>PG</i>	Belarus	61.27	8.94	.99	$t(155) = -2.96, p = .00$	.23
	Portugal	65.40	8.52	.98		
<i>PiL</i>	Belarus	58.48	9.27	1.02	$t(155) = -1.75, p = .08$	
	Portugal	61.08	9.39	1.08		
<i>SA</i>	Belarus	53.73	10.32	1.14	$t(155) = -3.78, p = .00$	.29
	Portugal	60.29	11.45	1.32		
<i>GI</i>	Belarus	339.04	42.05	4.64	$t(155) = -3.72, p = .00$	.29
	Portugal	365.56	47.30	5.46		

*Note.* PRWO-positive relations with others; AUT-autonomy, EM – environmental mastery; PG-personal growth; PiL-purpose in life; SA-self-acceptance; GI-general index.

\* two-tailed

Regarding gender differences in current PWB, Portuguese female students demonstrated a significantly higher level on the following scales: positive relations with others ( $t(73) = -2.33, p = .02, r = .26$ ); purpose in life ( $t(73) = -2.79, p = .01, r = .31$ ), personal growth ( $t(73) = -2.46, p = .02, r = .28$ ) as well as the general index ( $t(73) = -2.45, p = .02, r = .28$ ) than their male counterparts. Such results are in line with the finding that women of all age categories had a greater rate on positive relations with others as well as tend to assess personal growth dimension higher in comparison with men (Ryff, 1995). It must be admitted that the correlations of the same directions were obtained between gender and PWB scales.

Within the Belarusian sample no gender differences were captured.

## Ideal Psychological Well-Being

With regard to the ideal PWB, as it shown in Table 2.3, the Portuguese students again demonstrated higher ratings on the general index as well as on four out of the six scales (except for environmental mastery and purpose in life).

Table 2.3  
*Group Statistics and Independent t-test Results on Ideal PWB of the Belarusian and Portuguese University Students*

Scale	Country	<i>M</i>	<i>SD</i>	<i>SE</i>	t-test report*	<i>r</i>
<i>iPRWO</i>	Belarus	64.13	10.65	1.18	$t(155) = -2.54, p = .01$	.20
	Portugal	68.79	12.68	1.42		
<i>iAUT</i>	Belarus	58.62	8.64	.95	$t(155) = -4.30, p = .00$	.33
	Portugal	64.96	9.84	1.14		
<i>iEM</i>	Belarus	62.29	10.52	1.16	$t(155) = -.72, p = .48$	
	Portugal	63.55	11.39	1.31		
<i>iPG</i>	Belarus	64.16	9.42	1.04	$t(155) = -3.43, p = .00$	.27
	Portugal	69.21	9.02	1.04		
<i>iPiL</i>	Belarus	63.51	9.44	1.04	$t(155) = -1.08, p = .28$	
	Portugal	65.13	9.28	1.07		
<i>iSA</i>	Belarus	62.32	10.52	1.16	$t(155) = -3.44, p = .00$	.27
	Portugal	68.19	10.84	1.25		
<i>iGI</i>	Belarus	375.04	50.45	5.57	$t(155) = -2.97, p = .00$	.23
	Portugal	399.83	54.25	6.26		

Note. i-ideal; PRWO-positive relations with others; AUT-autonomy, EM – environmental mastery; PG-personal growth; PiL-purpose in life; SA-self-acceptance; GI-general index.

\* two-tailed

Such distinctions in the perceptions of the ideal PWB may be explained by the difference in the actual PWB. Probably, participants with a greater level of current PWB believe in and assess the probability to improve the actual level of PWB as higher. Somehow such an assumption is in line with the statement that ideal PWB describes potential aspects of a personal performance as well as the extent of direction to realize the domains of positive functioning (Shevelenkova & Fesenko, 2005). Moreover, the same authors found that people with a higher level of current PWB have more salient values and, consequently, meaning life orientations, which apriori are expected to have an increased probability to be achieved.

It must be admitted that the scores on the current PWB were found to be significantly lower than the scores on the ideal PWB in both samples (see Table 2.4). It is noteworthy, that the similar distinctions were obtained in the study of Fesenko (2005).

The Belarusian women would like to have a higher level of positive relations with others than men ( $t(80) = -1.97; p = .05, r = .22$ ). Besides, the significant difference ( $t(80) = -2.45; p = .02, r = .26$ ) was detected in the perceptions of ideal environmental mastery, namely, female participants would like to have a more salient rate on this dimension. It is noteworthy

that the correlations of the same direction were obtained between gender and ideal PWB scales.

Table 2.4  
*Group Statistics and Dependent t-test Results on Current and Ideal PWB of the Belarusian and Portuguese University Students*

Country	Pairs of Dimensions	<i>M</i>	<i>SD</i>	<i>SE</i>	<i>t</i> -test report*	<i>r</i>
Belarus	<i>PRWOC</i> - <i>PRWOi</i>	-6.74	9.18	1.01	<i>t</i> (81)=-6.65, <i>p</i> = .00	.59
	<i>AUTc</i> - <i>AUTi</i>	-3.23	9.58	1.06	<i>t</i> (81)=-3.05, <i>p</i> = .00	.32
	<i>EMc</i> - <i>EMi</i>	-9.51	11.54	1.27	<i>t</i> (81)=-7.47, <i>p</i> = .00	.64
	<i>PGc</i> - <i>PGi</i>	-2.89	9.37	1.04	<i>t</i> (81)=-2.79, <i>p</i> = .01	.30
	<i>PiLc</i> - <i>PiLi</i>	-5.04	9.88	1.09	<i>t</i> (81)=-4.62, <i>p</i> = .00	.46
	<i>SAC</i> - <i>SAi</i>	-8.59	9.84	1.09	<i>t</i> (81)=-7.90, <i>p</i> = .00	.66
	<i>GENERALc</i> - <i>GENERALi</i>	-36.00	44.36	4.90	<i>t</i> (81)=-7.35, <i>p</i> = .00	.63
Portugal	<i>PRWOC</i> - <i>PRWOi</i>	-6.68	9.21	1.06	<i>t</i> (74)=-6.28, <i>p</i> = .00	.59
	<i>AUTc</i> - <i>AUTi</i>	-5.33	8.90	1.03	<i>t</i> (74)=-5.19, <i>p</i> = .00	.52
	<i>EMc</i> - <i>EMi</i>	-6.49	10.82	1.25	<i>t</i> (74)=-5.20, <i>p</i> = .00	.52
	<i>PGc</i> - <i>PGi</i>	-3.81	7.60	.88	<i>t</i> (74)=-4.35, <i>p</i> = .00	.45
	<i>PiLc</i> - <i>PiLi</i>	-4.05	8.03	.93	<i>t</i> (74)=-4.37, <i>p</i> = .00	.42
	<i>SAC</i> - <i>SAi</i>	-7.89	11.83	1.37	<i>t</i> (74)=-5.78, <i>p</i> = .00	.56
	<i>GENERALc</i> - <i>GENERALi</i>	-34.27	45.33	5.23	<i>t</i> (74)=-6.55, <i>p</i> = .00	.61

*Note.* c-current; i-ideal; PRWO-positive relations with others; AUT-autonomy, EM – environmental mastery; PG-personal growth; PiL-purpose in life; SA-self-acceptance; GI-general index.

\* two-tailed

The desire to have a greater level of positive relations with others corresponds to the overall tendency to attribute more significance by women to interpersonal links, that in general corresponds to the traditional gender role of female (Burn, 2004). In turn, a wish to have a more salient environmental mastery dimension may reveal the societal conditions more fostering men`s development of capacity to manage their own being as well as surrounding environment. Again, somehow it is congruent with a traditional male gender role that includes a norm of competitiveness while a female role focuses more on family creation and implies being more passive (Burn, 2004).

In turn, on the five out of the six scales regarding the ideal PWB Portuguese female students had higher scores in comparison with men, namely positive relations with others (*t*(73)= -3.33; *p*= .00, *r*= .36); environmental mastery (*t*(73)=-3.69, *p*= .00, *r*= .40); personal growth (*t*(73)= -3.69, *p*= .02, *r*= .26); purpose in life (*t*(73)= -3.36, *p*= .00, *r*= .37) and self-acceptance (*t*(73)= -3.15, *p*= .00, *r*= .35). Besides, female participants would like to have a higher rate of well-being in general in comparison with male colleagues (*t*(73)= -3.46; *p*= .00, *r*= .37). The correlations of the same direction were obtained between gender and ideal PWB scales. Such a difference may be explained in two ways. Firstly, it may be assumed that the

Portuguese male students are more satisfied with their current PWB than their male counterparts. The other possible explanation is that the male participants may believe less in a possibility to achieve a higher level on the dimensions mentioned above. To some extent such a suggestion is confirmed by a more salient rate on Present-Fatalistic of the Portuguese male students.

### Time Perspective

As it is reflected in Table 2.5, there were some differences on time perspective dimensions between the two samples. To be more specific, the Portuguese participants obtained significantly higher scores on Present-Hedonistic ( $t(155) = -2.46, p = .02, r = .30$ ) and a lower level on Present-Fatalistic scale ( $t(155) = 2.33, p = .02, r = .18$ ) in comparison with the Belarusian students.

The higher level of Present-Fatalistic of the Belarusian participants may be associated with a lower socioeconomic level in comparison with the Portuguese ones. Also, the educational system of Belarus is thought to have more strict limits and a lower level of flexibility. It may also explain the feeling of not being able to change something regarding university context that seems to occupy the significant part of life in this sample.

Table 2.5

*Group Statistics and Independent t-test Results on Time Perspective of the Belarusian and Portuguese University Students*

Scales	Country	<i>M</i>	<i>SD</i>	<i>SE</i>	t-test report*	<i>r</i>
<i>PH</i>	Belarus	3.49	.45	.05	$t(155) = -2.46, p = .02$	.19
	Portugal	3.66	.42	.05		
<i>PP</i>	Belarus	3.67	.50	.05	$t(155) = 1.61, p = .11$	
	Portugal	3.54	.52	.06		
<i>PF</i>	Belarus	2.95	.55	.06	$t(155) = 2.33, p = .02$	.18
	Portugal	2.74	.59	.07		
<i>PN</i>	Belarus	3.05	.51	.06	$t(126,74) = 1.14, p = .26$	
	Portugal	2.93	.78	.09		
<i>F</i>	Belarus	3.38	.46	.05	$t(155) = .88, p = .38$	
	Portugal	3.30	.64	.07		

Note. PH-Present-Hedonistic; PF-Present-Fatalistic; PP-Past-Positive; PN-Past-Negative; F-Future.

\* two-tailed

A Past-Positive scale revealed the highest mean score in comparison with other four dimensions in the Belarusian sample. It is noteworthy, that the same result was obtained in the study in Russia (Sircova et al., 2007) as well as Portugal (Ortuño & Gamboa, 2009). Moreover, the Belarusian female participants rated more on Past-Positive dimension in comparison with male individuals ( $t(80) = -2.68, p = .01, r = .29$ ). The same difference on this

scale was revealed in the studies on the Spanish (Díaz-Morales, 2006), and the USA samples (Zimbardo & Boyd, 1999). The marginal differences were obtained on Present-Fatalistic ( $t(80)=-2.01, p=.05, r=.22$ ) as well as Present-Hedonistic ( $t(80)=-1.99, p=.05, r=.22$ ), where the women showed higher rates than the men. It is noteworthy that in the Russian (Sircova et al., 2007), Italian (D'Alessio et al., 2003) as well as Spanish (Díaz-Morales, 2006) investigations the women also scored significantly higher on Present-Fatalistic scale in comparison with the men. It must be admitted that correlations of the same directions were revealed between gender and time perspective scales.

It is remarkable, that among all the scales of time perspective, Present-Hedonistic had the highest mean score in the Portuguese sample. It must be admitted that in the French sample this temporal frame was also the leading (Apostolidis & Fieulaine, 2004). The higher rate on Present-Hedonistic may be explained by diverse factors among which are historical past as well as climate conditions. Besides, the presence of more firm student traditions which imply engagement in a great number of activities associated with hedonic pleasures may also impact in more salient indicators of this temporal frame.

In turn, the Portuguese male students obtained a significantly higher score on Present-Hedonistic ( $t(73)=2.62, p=.01, r=.29$ ) as well as on Present-Fatalistic ( $t(73)=2.72, p=.01, r=.31$ ) than their female counterparts. The same correlational directions were found between gender and time perspective in the Portuguese sample. Regarding Present-Hedonistic temporal frame, the identical gender difference was met in the Italian study (D'Alessio et al., 2003). The higher scores on Present-Fatalistic may be explained by economic crisis, which also has resulted in a high rate of unemployment which may influence the perception of people to be able to manage definite life domains. Besides, due to the traditional male gender role that claims a norm of status and success (Burn, 2004), men may be more sensitive to such negative changes.

## **Coping Strategies**

The differences in coping performance in the Belarusian and Portuguese participants were detected (see Table 2.6). On average, the Portuguese students demonstrated less use of such coping strategies as distancing ( $t(138.95)=2.71, p=.01; r=.22$ ); escape-avoidance ( $t(155)=6.68, p=.00, r=.47$ ) and positive reappraisal ( $t(155)=2.04, p=.04, r=.16$ ) in comparison with the colleagues from Belarus. In turn, the Belarusian students are thought to perform a planful problem-solving more than Portuguese participants ( $t(155)=1.94, p=.05, r=.15$ ).

It may be assumed that the Belarusian participants use emotion-focused coping more frequently. Somehow, more salient Present-Fatalistic dimension, which implies the perception of situations as uncontrollable, may explain the higher rate of such a coping type.

There was a significant difference in the use of some coping strategies in the Belarusian sample. The female participants obtained higher scores on seeking social support ( $t(80) = -1.97$ ;  $p = .05$ ,  $r = .22$ ); accepting responsibility ( $t(80) = -3.09$ ,  $p = .00$ ,  $r = .33$ ); and positive reappraisal ( $t(80) = -3.05$ ;  $p = .00$ ,  $r = .32$ ) in comparison with the Belarusian males counterparts. Such a difference may be accounted to the traditional male gender role that includes the norm of intellectual toughness, that, in turn may be associated with lower readiness to ask for help and admit one's own responsibility as well as change one's own opinion.

Table 2.6  
*Group Statistics and Independent t-test Results on Coping Strategies of the Belarusian and Portuguese University Students*

Coping strategy	Country	<i>M</i>	<i>SD</i>	<i>SE</i>	<i>t</i> -test report*	<i>r</i>
<i>CC</i>	Belarus	54.54	13.53	1.49	$t(155) = .85$ , $p = .40$	
	Portugal	52.52	16.32	1.88		
<i>D</i>	Belarus	55.76	11.86	1.31	$t(138.95) = 2.71$ , $p = .01$	.22
	Portugal	49.78	15.36	1.77		
<i>SC</i>	Belarus	63.82	12.54	1.38	$t(155) = 1.23$ , $p = .22$	
	Portugal	61.21	14.19	1.64		
<i>SSS</i>	Belarus	60.37	14.68	1.62	$t(155) = 1.58$ , $p = .12$	
	Portugal	56.52	15.86	1.83		
<i>AR</i>	Belarus	64.02	17.80	1.97	$t(153.90) = -1.52$ , $p = .13$	
	Portugal	68.00	14.95	1.73		
<i>EA</i>	Belarus	54.52	13.53	1.49	$t(155) = 6.68$ , $p = .00$	.47
	Portugal	38.86	15.85	1.83		
<i>PPS</i>	Belarus	64.97	16.21	1.79	$t(155) = 1.94$ , $p = .05$	.15
	Portugal	60.07	15.27	1.76		
<i>PR</i>	Belarus	63.71	18.19	2.01	$t(155) = 2.04$ , $p = .04$	.16
	Portugal	58.16	15.66	1.81		

*Note.* CC - confrontive coping; D - distancing; SC - self-controlling; SSS - seeking social support; AR - accepting responsibility; EA - escape-avoidance; PPS - planful problem-solving; PR - positive reappraisal  
\* two-tailed

In turn, the Portuguese male university students use confrontive coping ( $t(73) = 3.65$ ,  $p = .00$ ,  $r = .39$ ) and distancing ( $t(75) = 3.49$ ,  $p = .00$ ,  $r = .38$ ) more frequently than their female counterparts. The higher performance of confrontive coping strategy, that implies a definite degree of hostility, aggressive efforts as well as being prone to risk, seems to be more in line with the traditional male gender role, where such manifestations are socially "permitted". Besides, the salient rate on Present-Fatalistic of men may explain the more frequent use of

coping strategies related to emotion-focused group. It should be mentioned that the correlations of the same directions were detected between gender and coping strategies in both samples.

### **The Relationship of Coping Strategies and Current Psychological Well-Being**

The significant links were captured between coping strategies and PWB in both samples (see Table 2.7).

The Belarusian sample: Among the Belarusian students, as it is shown in Table 2.7, distancing, escape-avoidance, seeking social support were confirmed to be inversely related with different dimensions of PWB. Namely, distancing was found to be negatively correlated with autonomy and environmental mastery (a weak magnitude). The passive attitude implied by this coping strategy probably does not allow a person to elaborate necessary samples of successful solutions, which, in turn, may lead to an increased level of self-competence and self-efficacy, which are necessary to feel oneself as an autonomous person, able to manage environment and respond to its challenges. In turn, seeking social support had a moderate negative link with autonomy. This way of coping supposes interaction with others, which, if being excessive, may lead to overreliance on others' opinion in self-assessment as well as making decisions. Escape-avoidance was inversely and weakly associated with autonomy, purpose in life as well as general index of PWB. The absence of interaction with stressful situations again may not provide a person with experiences, fostering a sense of self-determination as well as feeling of directedness of one's life.

Conversely, positive reappraisal as well as planful problem-solving were found to have a positive link with the areas of PWB (see Table 2.7). To be more specific, positive reappraisal was directly linked with positive relations with others (a weak magnitude), personal growth (a medium effect size), and general index of PWB (a low magnitude). The finding of positive meaning in situations that cannot be changed or directly influenced may be very beneficial for PWB. It is consistent with an inference of Folkman and Greer (2000) about the potential of meaning-based coping to maintain psychological wellness. In turn, planful problem-solving was positively correlated with all the dimensions (a moderate magnitude) as well as general index of PWB (a large effect size). The latter coping strategy, which is thought to be problem-focused, is the only one that was proved to be correlated with all PWB scales within the Belarusian sample. To some extent, it is congruent with the inferences about the adaptiveness of this coping type in variety of contexts (Bartley & Roesch, 2011; Duangdao & Roesch, 2008; Faulk et al., 2012; Kling et al., 1997; Moskowitz et al., 2009; Roesch et al., 2005; Scignaro et al., 2011).

Table 2.7

*Pearson Correlations between Coping Strategies and Current PWB in the Belarusian and Portuguese Samples*

Scales of PWB/Coping	Confrontive Coping		Distancing		Self-controlling		Seeking social support		Accepting responsibility		Escape-avoidance		Planful problem-solving		Positive reappraisal		
	B	P	B	P	B	P	B	P	B	P	B	P	B	P	B	P	
Country																	
PRWO	-.03	-.02	-.02	<b>-.31**</b>	.09	-.03	.10	<b>.28*</b>	.15	.11	-.21	<b>-.36**</b>	<b>.30**</b>	.05	<b>.24*</b>		-.03
AUT	.05	-.11	<b>-.29**</b>	-.09	.08	.12	<b>-.32**</b>	<b>-.24*</b>	-.09	-.04	<b>-.29**</b>	<b>-.31**</b>	<b>.39**</b>	-.01	.06		-.11
EM	-.05	-.05	<b>-.23*</b>	-.22	.16	<b>.23*</b>	.01	<b>.30**</b>	-.10	.17	-.21	<b>-.28*</b>	<b>.43**</b>	<b>.24*</b>	.14		.12
PG	-.10	.05	-.04	-.20	.12	.15	.00	.15	.11	<b>.30**</b>	-.19	-.19	<b>.33**</b>	.18	<b>.30**</b>		.20
PiL	-.12	-.04	-.15	<b>-.29*</b>	.19	<b>.24*</b>	.02	.19	.13	.20	<b>-.24*</b>	<b>-.32**</b>	<b>.36*</b>	.22	.12		.13
SA	-.05	-.07	-.13	-.15	.12	.11	.04	.13	-.09	.01	-.14	<b>-.33**</b>	<b>.41**</b>	.17	.18		.00
GI	-.06	-.05	-.19	<b>-.27*</b>	.17	.16	-.04	.17	.02	.15	<b>-.28**</b>	<b>-.38**</b>	<b>.50**</b>	.17	<b>.23*</b>		.07

Note. PRWO - positive relations with others; AUT - autonomy, EM – environmental mastery; PG - personal growth; PiL-purpose in life; SA - self-acceptance; GI- general index; B-Belarus; P-Portugal.

\* Correlation is significant at the .05 level (2-tailed).

\*\* Correlation is significant at the .01 level (2-tailed).

The Portuguese sample: Among the Portuguese students, as it is shown in Table 2.7, distancing, seeking social support, escape-avoidance were proved to have negative correlations with different dimensions of PWB. Namely, distancing was inversely related to positive relations with others (a medium effect size), purpose in life and general index of PWB (weak magnitudes). Indeed, it is possible that detachment from situations, including interpersonal interaction, may lead to deterioration in this sphere of life. Besides, such a coping strategy, which does not imply active attitude, may not foster meaning construction that is made through involvement in a great number of contexts and situations. As in the Belarusian sample, seeking social support was also found to be weakly negatively associated with autonomy. The possible explanation of such a link was given in a previous section. Besides, escape-avoidance revealed the highest number of negative associations with scales of PWB, namely, it was inversely and significantly linked with general index as well as the five out of the six scales of PWB (except personal growth). It must be admitted that only one link was weak, while the rest were of a moderate magnitude. It is consistent with the findings regarding maladaptiveness of avoidant coping in a variety of contexts (Moskowitz et al., 2009; Rasskazova & Gordeeva, 2011; Roesch et al., 2005; Segerstrom & O'Connor, 2012).

In turn, some direct links of coping strategies with PWB dimensions were detected in the Portuguese sample (see Table 2.7). Self-controlling was positively associated with environmental mastery as well as purpose in life (weak magnitudes). The effective management of surrounding environment may require a definite level of one's self-control

regardless the presence or absence of a person's opportunity to effect directly the source of problem situations. In turn, the link of this coping strategy and purpose in life seems to be reasonable because following to one's principles and rights sometimes may demand efforts in regulation of one's emotions as well as actions. Such an association may not be surprising if to bear in mind the higher level of Present-Hedonistic temporal frame among the Portuguese students.

In turn, seeking social support had direct links with positive relations with others and environmental mastery (a weak and moderate effect size respectively). The performance of this coping strategy implies the interaction with others and may include a belief that people can help. Besides, a certain degree of trust to others is needed to demonstrate the necessity of outside help. Further receiving of asked assistance may reinforce a person's readiness to cooperate with others and to be open to them. In turn, positive relations with others, that supposes developed and kept good ties, may foster addressing to others. Especially, it seems to be reasonable taking into account the collectivistic culture of the Portuguese. Altogether, it may explain the revealed association. In turn, environmental mastery, the high scores of which reflect a person's capacity of effective management of the environment, may also be enhanced by appropriate (in terms of fitness to a given context) use of seeking social support coping strategy.

Accepting responsibility was moderately and positively connected with personal growth. Such a link seems to be consistent with the essence of eudaimonic approach, where self-responsibility is required for realization of one's true potential. It is not surprising, that the more the feeling of constant development is, the more the understanding of oneself as the main actor is. And, finally, as in the Belarusian sample, planful problem-solving was also directly associated with environmental mastery (a weak magnitude). The active attitude implied by this coping strategy seems to be conducive to the effective use of opportunities as well as the creation of the contexts correspondent as well as favorable to values and needs of personal relevance.

### **The Relationship of Coping Strategies and Ideal Psychological Well-Being**

As it is shown in Table 2.8, the associations of coping and ideal PWB were revealed in both samples.

The Belarusian sample: The direct links were found between some coping strategies and ideal PWB (see Table 2.8). Namely, self-controlling had a small positive correlation with ideal positive relations with others, and a moderate link with ideal environmental mastery as well as a weak connection with the general index of ideal PWB. The ability to control as well

as regulate one's emotions and actions seems to be favorable for the maintenance of a higher level of positive ties with others. Besides, for the Belarusian students the more use of self-controlling is associated with environmental mastery, the greater level of which they would like to achieve. Within such an association it seems to be reasonable to take into account the stricter process of education mentioned above. Planful problem-solving revealed positive though weak links with ideal environmental mastery, ideal personal growth, ideal self-acceptance, and moderate associations with ideal purpose in life and ideal general index. As we see, four out of the six scales as well as the general index of ideal PWB are associated with the performance of active coping, aimed to problem solution. It again highlights the importance of this coping type. Besides, the active attitude of a person is in line with different philosophical backgrounds of PWB where a person is perceived as an active creator of his or her life (Ryff & Singer, 2008). Also a weak direct link of positive reappraisal and ideal personal growth was detected. Such an association seems to be reasonable. Namely, it may be assumed that identifying positive meaning in situations, especially uncontrollable or unchangeable, may be very resourceful and fostering to the feeling of a continued personal evolution.

Table 2.8

*Pearson Correlations between Coping Strategies and Ideal PWB in the Belarusian and Portuguese Samples*

Scales of PWB/ Coping	Confrontive coping		Distancing		Self-controlling		Seeking social support		Accepting responsibility		Escape-avoidance		Planful problem-solving		Positive reappraisal	
	B	P	B	P	B	P	B	P	B	P	B	P	B	P	B	P
<i>iPRWO</i>	-.08	.07	.02	<b>-.31**</b>	<b>.22*</b>	.01	.05	<b>.28*</b>	.12	.17	-.10	<b>-.24*</b>	.18	.11	.17	-.04
<i>iAUT</i>	-.05	.05	-.10	-.21	.11	.12	<b>-.24*</b>	.01	.05	.03	-.19	<b>-.37**</b>	.22	.12	-.04	-.15
<i>iEM</i>	-.07	-.04	.02	<b>-.25*</b>	<b>.35**</b>	.10	-.13	.20	.12	.14	-.07	<b>-.23*</b>	<b>.27*</b>	.09	.07	-.02
<i>iPG</i>	-.01	.07	-.07	-.13	.16	.10	-.06	<b>.23*</b>	.09	<b>.24*</b>	-.07	-.20	<b>.33**</b>	.14	<b>.22*</b>	.03
<i>iPiL</i>	-.07	-.05	-.14	<b>-.36**</b>	.19	.13	-.05	.21	.08	.13	-.04	<b>-.35**</b>	<b>.29**</b>	.18	.14	.05
<i>iSA</i>	-.04	.00	-.13	<b>-.31**</b>	.18	-.01	-.21	.15	-.08	.07	-.15	<b>-.31**</b>	<b>.26*</b>	.05	.06	-.06
<i>iGI</i>	-.06	.01	-.08	<b>-.31**</b>	<b>.24*</b>	.08	-.12	.21	.07	.15	-.12	<b>-.33**</b>	<b>.30**</b>	.13	.12	-.04

Note. i-ideal; PRWO-positive relations with others; AUT-autonomy, EM – environmental mastery; PG-personal growth; PiL-purpose in life; SA-self-acceptance; GI-general index; B-Belarus; P-Portugal.

\* Correlation is significant at the .05 level (2-tailed).

\*\* Correlation is significant at the .01 level (2-tailed).

In turn, seeking social support was weakly and negatively associated with ideal autonomy (see Table 2.8). Such a link is understandable, namely, overreliance on others in problem solution may deteriorate the feeling of self-determination, and, vice-versa, a person with a salient autonomy, probably has a lower tendency to search help from others. It is

noteworthy that this coping strategy was also found to be inversely related to the same area of current PWB.

The Portuguese sample: The direct relationships of some coping strategies and domains of ideal PWB were also detected among the Portuguese participants (see Table 2.8). Seeking social support demonstrated positive and weak but, nevertheless, significant associations with ideal positive relations with others and personal growth. For the Portuguese students the search and use of help from others may be favorable for improving ties with others, the greater level of which they would like to have. Such an association seems to be reasonable bearing in mind that Portugal has a collectivistic culture, with salient family values and the presence of mutual assistance. Besides, a higher feeling of continued development may be also facilitated by situations implying interaction with others. Accepting responsibility was weakly and positively linked with ideal personal growth. The same association, though of stronger magnitude, was observed in the attitude to current PWB. It may emphasize again the importance of being responsible if a person wants to have a greater feeling of one's development. And, vice-versa, an individual with a greater level of ideal personal growth may be expected to have more salient accountability.

In turn, as it is shown in Table 2.8, distancing and escape-avoidance were proved to be negatively associated with ideal PWB. Namely, distancing had significant negative correlations with almost all the scales (except ideal autonomy as well as personal growth) and the general index of ideal PWB. Only one link was weak while the rest were moderate. In turn, escape-avoidance was inversely related to five out of the six scales of ideal PWB (except personal growth), including the general index. The magnitude of the links ranged from small to moderate. It is noteworthy, that both these coping strategies imply the absence of any efforts to change a stress source. Such a passive attitude seems to be contrary to eudaimonic understanding of PWB. Especially, this opposition may be salient when we consider the desirable higher level of positive psychological functioning. Also, to some extent it is in line with the research findings about negative outcomes of avoidant coping usage in a diversity of contexts (e.g. Chou et al., 2011; Herman & Tetrick, 2009).

### **The Relationship of Time Perspective and Current Psychological Well-Being**

The time perspective dimensions and PWB scales were proved to have associations in both samples (see Table 2.9).

The Belarusian sample: Among the Belarusian students Past-Positive, Present-Hedonistic and Future were proved to demonstrate a positive association with the scales of PWB (see Table 2.9). Namely, Past-Positive had direct significant associations (ranging from weak to moderate) with all the scales of PWB except autonomy. The found correlations are in

line with studies that revealed direct links between Past-Positive and well-being measures (Boniwell et al., 2010; Drake et al., 2008). In turn, Present-Hedonistic had a direct significant (though weak) association with positive relations with others and personal growth. The detected relationship may be explained by the following factors. A university context implies constant interpersonal interaction. Besides, student environment may provide people with new sources of hedonistic activities which may be performed together (e.g. parties, trips, relationship, etc.). All these features of social setting may explain the revealed link. Besides, a diversity of new contexts provided by academic life allows to explore various possible identities (Schwartz et al., 2011). So, it may be assumed that the orientation to novelty as well as pleasure can be favorable to some extent to personal growth. The latter, namely supposes the presence of openness to new experience as well as increase in self-knowledge. Finally, Future was directly and significantly associated with almost all the scales (except positive relations with others and autonomy). It is noteworthy, that only one correlation had a small effect size, while the rest demonstrated moderate magnitude. The obtained link to some extent is consistent with the researchers that highlighted this time orientation as fostering well-being (Kazakina, 1999, as cited in Boniwell & Zimbardo, 2004; Wills et al., 2001; Zaleski, Cykon, & Kurc, 2001, as cited in Boniwell & Zimbardo, 2004). Moreover, in the study of Boniwell et al. (2010) the intuition about the association of Future temporal frame and measures of eudaimonic well-being was confirmed on the sample of the Russian students. Indeed, the revealed link seems to be reasonable, if to bear in mind the essence of eudaimonic approach to optimal functioning, on the one hand, and efforts to achieve aims and rewards as the description of future time orientation, on the other hand.

Table 2.9

*Pearson Correlations between Time Perspective and Current PWB in the Belarusian and Portuguese Samples*

Scales of TP/PWB	<i>Past-Negative</i>		<i>Past-Positive</i>		<i>Present-Hedonistic</i>		<i>Present-Fatalistic</i>		<i>Future</i>	
	B	P	B	P	B	P	B	P	B	P
<i>PRWO</i>	-.27*	-.41**	.38**	.12	.23*	.01	-.19	-.36**	.20	-.07
<i>AUT</i>	-.40**	-.32**	.13	.00	.02	-.15	-.26*	-.34**	.11	-.14
<i>EM</i>	-.50**	-.43**	.27*	.11	.12	-.16	-.36**	-.45**	.39**	.02
<i>PG</i>	-.28*	-.17	.39**	.22	.27*	.07	-.33**	-.32**	.36**	-.10
<i>PiL</i>	-.43**	-.35**	.24*	.11	-.09	-.28*	-.54**	-.60**	.43**	-.01
<i>SA</i>	-.62**	-.56**	.25*	.11	.06	-.16	-.41**	-.41**	.24*	-.08
<i>GI</i>	-.57**	-.48**	.37**	.14	.13	-.14	-.47**	-.52**	.38**	-.01

*Note.* TP-time perspective; PRWO-positive relations with others; AUT-autonomy, EM – environmental mastery; PG-personal growth; PiL-purpose in life; SA-self-acceptance; GI-general index; B-Belarus; P-Portugal.

\* Correlation is significant at the .05 level (2-tailed).

\*\* Correlation is significant at the .01 level (2-tailed).

Regarding negative associations, as it is shown in Table 2.9, they were detected between Past-Negative, Present-Fatalistic, on the one side, and the dimensions of PWB, on the other. The effect size of links ranged from small to large. To be more specific, Past-Negative was inversely associated with all the areas of PWB while Present-Fatalistic was found to have negative significant correlations with five out of the six domains as well as the general index of PWB. The captured links seem to be just. Indeed, an aversive image of past may put obstacles in acquisition and development of qualities that are thought to be necessary for recognition as well as realization of one's own potential. In turn, a fatalistic attitude to life almost excludes any feeling of being responsible for one's own life as well as the activity aimed to achievements of personal significance. The revealed associations are consistent with researches in which these time orientations (together as well as separately) were proved to be inversely linked to well-being from eudaimonic as well hedonic approaches (Boniwell et al., 2010; Drake et al., 2008).

The Portuguese sample: Among the Portuguese students, as it is reflected in Table 2.9, Past-Negative was significantly and inversely correlated with all the scales except personal growth while Present-Fatalistic had negative associations with all the scales, including the general index of PWB. The magnitude of correlations ranged from medium to large. It may be said that the revealed links, in general, are in line with data obtained on the Belarusian sample. Differently to the Belarusian participants, Present-Hedonistic was found to have a weak inverse association with purpose in life. Probably, excessive involvement in pleasure and novelty seeking activity, low ego-control, which characterize hedonistic orientation toward present do not foster the acquisition of values as well as meaning elaboration that may result in a developed sense of directedness. And, on the contrary, the presence of salient meaning in life, which guides people's activity, may reflect in a less tendency to search temporary pleasures and joys. Also, the higher level of Present-Hedonistic in the Portuguese sample in comparison with the Belarusian one may also impact to the explanation of the obtained link. Another cross-sample difference in the obtained results was the lack of any significant positive associations of Future and Past-Positive time dimensions with PWB.

### **The Relationship of Time Perspective and Ideal Psychological Well-Being**

The links of time perspective factors and ideal PWB scales were captured in both samples, as it is shown in Table 2.10.

The Belarusian sample: The ideal PWB was found to be associated with time perspective factors (see Table 2.10). Namely, it was revealed, that the higher scores on Past-Negative are, the lower the level of all the dimensions of ideal PWB is (a medium effect size).

It seems that people with a negative image of the past may not believe or may not consider as necessary the achievement of a greater well-being. Besides, Present-Fatalistic was proved to be inversely related with all the dimensions of ideal PWB, excluding positive relations with others. The magnitude of links varied from weak to moderate. Namely, the more a person believes that his/her life is predestined, the lower level he or she would like or consider as possible to have in different domains of PWB. In other words, the focus on this temporal frame may result in the lack of self-trust to be able to achieve salient PWB. It must be admitted that the same associations regarding Past-Negative and Present-Fatalistic were just in attitude to the current PWB.

Table 2.10

*Pearson Correlations between Time Perspective and Ideal PWB in the Belarusian and Portuguese Samples*

Scales of PWB/Time perspective	<i>Past Negative</i>		<i>Past-Positive</i>		<i>Present-Hedonistic</i>		<i>Present-Fatalistic</i>		<i>Future</i>	
	B	P	B	P	B	P	B	P	B	P
<i>iPRWO</i>	<b>-.40**</b>	-.11	<b>.31**</b>	<b>.25*</b>	.13	.01	-.19	<b>-.39**</b>	.01	.01
<i>iAUT</i>	<b>-.40**</b>	-.14	-.06	.03	-.20	-.14	<b>-.30**</b>	<b>-.52**</b>	-.04	.01
<i>iEM</i>	<b>-.37**</b>	-.15	.09	.01	.03	<b>-.24*</b>	<b>-.25*</b>	<b>-.47**</b>	-.02	.08
<i>iPG</i>	<b>-.37**</b>	-.06	.12	<b>.27*</b>	.17	.03	<b>-.31**</b>	<b>-.37**</b>	.05	.07
<i>iPiL</i>	<b>-.44**</b>	<b>-.26*</b>	.17	.06	-.08	<b>-.32**</b>	<b>-.27*</b>	<b>-.61**</b>	.12	-.01
<i>iSA</i>	<b>-.44**</b>	-.22	.03	.06	.10	<b>-.24*</b>	<b>-.26*</b>	<b>-.54**</b>	-.13	-.01
<i>iGI</i>	<b>-.47**</b>	-.18	.13	.14	.04	-.17	<b>-.31**</b>	<b>-.55**</b>	.00	.04

*Note.* i-ideal; PRWO-positive relations with others; AUT-autonomy, EM – environmental mastery; PG-personal growth; PiL-purpose in life; SA-self-acceptance; GI-general index; B-Belarus; P-Portugal.

\* Correlation is significant at the .05 level (2-tailed).

\*\* Correlation is significant at the .01 level (2-tailed).

In comparison with the actual PWB link, less positive associations of time perspective and ideal PWB were found (see Table 2.10). Namely, only Past-Positive was moderately and directly related to the ideal positive relations with others. In other words, the more favorable view on the past is, the more salient level of positive relations with others people would like to have. Probably, such positive past experience may have created a definite standard as well as the belief that the attainment of this level is possible.

The Portuguese sample: All the three time orientations which were proved to be negatively associated with current PWB, also were inversely related to the ideal PWB (see Table 2.10). Present-Fatalistic demonstrated the highest number of negative links with the dimensions of ideal PWB, the effect size of which was moderate and large. As it was assumed above, the attitude that nothing can be changed by one's own actions may reflect in less pretension regarding PWB, the person would like to have. In contrast with current PWB, Past-

Negative showed only one significant weak inverse association, namely with purpose in life. The more aversive, or pessimistic perception of the past is, the lower level of life meaning a person may imagine as ideal. It is consistent with the description of a low rate on purpose in life, when a person does not see any sense in what has already happened (Ryff & Singer, 2008). Finally, Present-Hedonistic demonstrated more (in comparison with current PWB) significant negative interactions with ideal perceptions of PWB. Namely, besides purpose in life (a moderate link) it was also inversely related to environmental mastery and self-acceptance (small effect sizes). The more a person is focused on joys he or she can get “here and now”, the less pretension an individual may have regarding effective environment management, that seems to require a definite degree of self-control as well as consistency preference, which are not typical for Present-Hedonistic orientation. Additionally, being excessively involved in hedonic activities may not provide a person with experience that foster a deeper understanding of various aspects of one’s own personality that is a prerequisite of self-acceptance. To be more specific, it may happen that an individual cannot even imagine or does not consider as possible to achieve a high level of positive self-attitude.

Being different from associations with current PWB, Past-Positive demonstrated direct significant, though of a weak magnitude, correlations with the ideal positive relations with others as well as personal growth (see Table 2.10). It may be assumed that an individual who had favorable past may have acquired a definite pattern of psychologically healthy ties with others, that may result in the desire as well as realizing as something possible to attain a greater level of positive relations. Besides, as it was proved in studies, people with higher Past-Positive tend to have a greater self-esteem (Zimbardo & Boyd, 1999), that may explain the desire to score more on the dimension of personal growth.

### **The Relationship of Time Perspective and Coping Strategies**

For the Belarusian as well as Portuguese students time perspective factors and coping strategies were found to be linked (see Table 2.11).

The Belarusian sample: Among the Belarusian students time perspective and coping strategies demonstrated associations of different direction as well as magnitude (see Table 2.11). Past-Negative had direct moderate correlations with distancing and escape-avoidance, while planful problem-solving was weakly and inversely associated with this temporal dimension. It means that the more negative perception of the past is, the more a person uses emotion- and less problem-focused coping. To some extent, such correlations are in line with the studies that confirm adaptiveness of active coping in various contexts (Duangdao & Roesch, 2008; Kling et al., 1997; Moskowitz et al., 2009; Roesch et al., 2005; Scrignaro et al.,

2011) and maladaptiveness of passive strategies (Moskowitz et al., 2009; Rasskazova & Gordeeva, 2011; Roesch et al., 2005; Segerstrom & O'Connor, 2012). On the other hand, the detected associations may illustrate, that a more salient use of emotion- as well as less performance of problem-focused coping can lead to the perception of the past as more aversive.

Table 2.11

*Pearson Correlations between Coping Strategies and Time Perspective in the Belarusian and Portuguese Samples*

Time perspective/ Coping	<i>Past-Negative</i>		<i>Past- Positive</i>		<i>Present-Hedonistic</i>		<i>Present-Fatalistic</i>		<i>Future</i>		
	B	P	B	P	B	P	B	P	B	P	
Country											
CC	.21	<b>.26*</b>	-.20	<b>.28*</b>	<b>.25*</b>	<b>.43**</b>	.13	.09	-.06	<b>.25*</b>	
D	<b>.43**</b>	.22	-.14	.03	.10	<b>.46**</b>	.17	<b>.47**</b>	-.15	.12	
SC	.05	.21	.10	<b>.30**</b>	.03	.16	-.13	.09	.07	.12	
SSS	.15	.11	<b>.24*</b>	.20	.04	.16	<b>.24*</b>	-.08	<b>.29**</b>	<b>.24*</b>	
AR	.16	.19	.15	<b>.29*</b>	-.05	.21	.00	-.04	.15	.17	
EA	<b>.40**</b>	<b>.51**</b>	-.08	.17	.14	<b>.36**</b>	.20	<b>.49**</b>	-.15	.20	
PPS	<b>-.26*</b>	.11	-.01	<b>.29*</b>	.06	.21	<b>-.35**</b>	.00	<b>.28*</b>	.08	
PR	-.05	.14	<b>.30**</b>	<b>.27*</b>	<b>.25*</b>	<b>.26*</b>	-.03	.15	<b>.25*</b>	.01	

Note. CC - confrontive coping; D – distancing; SC – self-controlling; SSS - seeking social support; AR – accepting responsibility; EA – escape-avoidance; PPS – planful problem-solving; PR – positive reappraisal; B-Belarus; P-Portugal.

\* Correlation is significant at the .05 level (2-tailed).

\*\* Correlation is significant at the .01 level (2-tailed).

In turn, Past-Positive had significant direct links with seeking social support and positive reappraisal (small and medium effect sizes respectively). As it is visible, both types of coping are positively linked with a favorable image of the past. It may highlight the statement about the importance of flexibility in coping performance regarding the level of perceived control in a situation (Folkman & Moskowitz, 2004; Lazarus, 1993).

Present-Hedonistic was found to be related to emotion-focused coping type, namely weakly and directly interacted with confrontive coping and positive reappraisal. Such links may be explained by some characteristics of this temporal orientation that is a low level of ego-control, which seems to be congruent with risk readiness implied by confrontive coping. Besides, inconsistency preference may not be expected to be favorable to coping aimed to direct interaction with stress source.

Present-Fatalistic was significantly and positively correlated with seeking social support (a low effect size) and negatively with planful problem-solving (a moderate effect size). The inherent to Present-Fatalistic time orientation attitude of worthlessness of one's own active efforts to change a problem situation may explain detected links. Moreover, the

obtained data are consistent with the findings of Holman and Zimbardo (1999, as cited in Zimbardo & Boyd, 1999) about the inverse link of this time perspective scale with problem-focused coping.

Finally, Future demonstrated salient weak direct associations with seeking social support, planful problem-solving and positive reappraisal. As it was proved in other studies this temporal frame is associated with active (Holman & Zimbardo, 1999, as cited in Zimbardo & Boyd, 1999) and proactive coping (Epel et al., 1999). It is also consistent with the characteristic of people with salient future time perspective, who are described as actively planning as well as exerting to attain formulated goals. In turn, the link with the emotion-focused and the search and use of social support coping may again underscore the importance of flexibility as well as diversity in coping performance.

The Portuguese sample: The Portuguese participants demonstrated statistically significant direct associations of time perspective and coping strategies (see Table 2.11). Past-Negative was found to be saliently and positively correlated with confrontive coping and escape-avoidance (small and large effect sizes respectively). It means that an aversive view on past associates with emotion-focused coping. The same link was found in the Belarusian sample. It may be assumed that factual negative events or their perception in such a light, probably, do not provide the person with an opportunity to acquire an active position in problem solutions. An indirect proof of such a hypothesis may be inverse associations of Past-Negative with all the scales of PWB, which were revealed earlier.

In turn, Past-Positive revealed the biggest number of significant associations with coping strategies. Namely, it was directly linked with confrontive coping, self-controlling, accepting responsibility, planful problem-solving, and positive reappraisal. One link was of moderate magnitude while the rest had small effect sizes. So, it may be inferred that both emotion- as well as problem-focused coping type are related to positive perception of the past.

Present-Hedonistic interacted with confrontive coping, distancing, escape-avoidance and positive reappraisal in significant as well as positive way. The first three associations were moderate while the last one was weak. The revealed findings are consistent with the results obtained by Holman and Zimbardo (as cited in Zimbardo & Boyd, 1999) regarding a positive link between Present-Hedonistic and avoidant coping. Moreover, it must be admitted that the emotion-focused coping was also proved to be related to this temporal frame among the students from Belarus, though the Portuguese counterparts are characterized by a greater number of significant links of coping strategies and Present-Hedonistic.

In turn, Present-Fatalistic had salient moderate direct links with distancing and escape-avoidance. Such a relationship seems to be reasonable taking into account core attitudes of

people with this temporal frame. Namely, the lack of belief in one's own potential to change something may lead to the reliance on emotion-focused coping. And, vice versa, the more people use such a coping type, the more they may reinforce their attitude of predestined life. It must be admitted that the same correlation was obtained in the study of Holman and Zimbardo (1999, as cited in Zimbardo & Boyd, 1999) as well as Epel et al. (1999).

Finally, as in the Belarusian sample, Future time orientation was proved to be associated with both coping types, namely, significant, though of small effect sizes, positive links with confrontive coping and seeking social support.

### **General Discussion**

The conducted statistical procedures regarding bivariate relationship of coping strategies, time perspective and psychological well-being, allowed to detect the presence of common as well as specific associations in both samples which will be summarized below while more deliberate interpretation of obtained links was offered in a previous section.

#### **Coping Strategies and Psychological Well-Being**

Problem-focused coping was proved to be positively related to the areas of PWB in both samples. Moreover, it must be admitted that among the Belarusian students this coping strategy demonstrated a direct link with all the domains of eudaimonic well-being, including the general index. To some extent it highlights the inferences about the adaptiveness of this coping type in various contexts (Bartley & Roesch, 2011; Duangdao & Roesch, 2008; Faulk et al., 2012; Kling et al., 1997; Moskowitz et al., 2009; Roesch et al., 2005; Scignaro et al., 2011).

Some ways of emotion-centered coping were found to be directly correlated to definite scales of PWB in both samples. The distinctive feature in the Portuguese sample was the direct association of the search and use of social support coping type and some scales of PWB.

In turn, some ways of emotion-focused coping as well as the seek and use of social support strategies were revealed to be negatively correlated to definite PWB domains in both samples. It is remarkable, that the number as well the ways of coping inversely related to PWB areas were the same for participants from Belarus and Portugal. Namely, distancing, seeking social support as well as escape-avoidance were proved to be negatively linked to some areas of PWB. The detected associations seem to be reasonable, bearing in mind the essence of eudaimonic approach, which emphasizes the importance of the active attitude. It is noteworthy, that in the Portuguese sample escape-avoidance demonstrated negative

correlations with five out of the six scales of PWB and general index. It is in concordance with the finding regarding maladaptiveness of avoidant coping in a variety of contexts (Moskowitz et al., 2009; Rasskazova & Gordeeva, 2011; Roesch et al., 2005; Segerstrom & O'Connor, 2012).

In general, these results may be considered as congruent with the claim about impossibility to state in unappealable way which coping type is effective (Folkman & Moskowitz, 2004; Lazarus, 1993). But, nevertheless, for the current samples, escape-avoidance as well as distancing strategies do not seem to be favorable to psychological well-being, while planful problem-solving showed only positive associations of statistical significance with PWB domains. Finally, it may be concluded, that the obtained links are in line with the assertion that a diversity of ways of coping is a factor that promotes PWB (Hardie et al., 2006).

### **Coping Strategies and Ideal Psychological Well-Being**

The correlational analysis of coping and ideal PWB revealed that for the both samples some strategies of emotion-focused coping were positively associated with definite areas of PWB the participants would like to have. Additionally, problem-focused coping demonstrated direct link whereas the search and use of social support revealed an inverse association with ideal PWB dimensions for Belarusian participants. In turn, differing from the Belarusian sample, seeking social support was positively related, while some emotion-focused coping strategies showed a negative association with the level of well-being the Portuguese college students would like to have.

It must be admitted that there were not any coincidences in association of ways of coping and ideal PWB areas in both samples. It is noteworthy that for Belarusians problem-focused coping was connected with maximum scales (four and general index) of ideal PWB. It seems that the more a person uses active coping, the more he or she considers as possible and desirable to achieve the greater degree of positive functioning. And, vice-versa, the aspiration to have a higher level of psychological well-being may foster the performance of problem-focused coping. In turn, among the Portuguese distancing demonstrated inverse links with overall score and four areas, while escape-avoidance - with five out of the six dimensions as well as the general index of PWB individuals would like to have. On the one hand, the more frequent performance of these coping strategies may lead to a lower level of psychological well-being a person would like and consider as possible to have. And, on the other hand, it may be assumed, the lower the pretension to positive functioning is, the more addressing to the distancing and escape-avoidance is.

Such an association may highlight one more time the importance of these coping types for each sample in terms of the current as well as ideal PWB.

### **Time Perspective and Psychological Well-Being**

The common features were found in association of time perspective and PWB in two samples. Namely, Past-Negative and Present-Fatalistic were inversely associated almost with all the scales as well as the general index of PWB. The obtained links not only supplemented the existing studies, where these temporal frames were confirmed to be negatively related to hedonic well-being (Boniwell et al., 2010; Drake et al., 2008; Foret et al., 2004, as cited in Boniwell et al., 2010; Tov, 2004, as cited in Boniwell et al., 2010), but also contributed to relatively scarce researches on time perspective and eudaimonic well-being. It is noteworthy, that the results of the current study are in line with the findings of Boniwell et al. (2010), where Past-Negative and Present-Fatalistic were inversely associated with measures of eudaimonic well-being on the samples of the Russian and British students. The obtained findings may underscore the importance of an active position of a person for having well-being, both hedonic and eudaimonic.

It must be admitted that while Present-Hedonistic was found to be negatively associated with one scale of PWB among the Portuguese, for the Belarusians this temporal frame demonstrated positive links with the two domains of eudaimonic wellness. Such a difference may be explained by a more salient rate of Present-Hedonistic among the students from Portugal in comparison with their counterparts from Belarus. Besides, the result obtained among participants from Belarus is in line with the detected positive link of measure of eudaimonic well-being and Present-Hedonistic in the study on the British students (Boniwell et al., 2010).

Being different from the Belarusian sample, Future as well as Past-Positive did not demonstrate any positive links of statistical significance with the dimensions of PWB among the Portuguese participants. It is partially consistent with the results obtained in the study of Boniwell et al. (2010) where no association between Future and eudaimonic well-being measure was detected in the sample of the British students. In turn, as it was mentioned above, while Past-Negative revealed an inverse link with PWB, Past-Positive did not have any significant association with positive psychological functioning in the Portuguese sample. It may be explained by the absence of the relationship between Past-Positive and Past-Negative among the Portuguese participants ( $r = .11$ ), which was also met in the Portuguese sample in the study of Ortuño and Gamboa (2009).

It is noteworthy, that the results obtained among the Belarusians are in line with the findings of Boniwell et al. (2010), namely, the Russian participants demonstrated a positive link between Future and purpose in life, which is thought to be a measure of eudaimonic well-being. Besides, a positive image of the past was proved to be directly associated with eudaimonic well-being measurement, both in the Russian and British samples (Boniwell et al., 2010). Moreover, all the dimensions involved in balanced time perspective (Zimbardo & Boyd, 1999) were found to have positive links with PWB among the Belarusians.

### **Time Perspective and Ideal Psychological Well-Being**

In relationship of time perspective and ideal PWB, Present-Fatalistic remained to have inverse links with the five out of the six scales of ideal PWB as well as the general index in the Belarusian sample and with all the dimensions of ideal PWB among the Portuguese students. The obtained association seems to be reasonable, taking into account the very description of people with this salient temporal frame. As Zimbardo and Boyd (1999) conclude, students with this time factor are thought to post a complicated issue. Namely, though they are young and smart people who in general are surrounded with the atmosphere conducive to the feeling of self-efficacy, the attitude that any efforts are useless to change something in a positive way, leads to the belief that nothing is possible to improve, both in present and future. It may be inferred, that the lower the level of ideal psychological well-being is, the more passive the person tends to be. Besides, it may be assumed that in the context of a difficult economic situation, both in Belarus and Portugal, the revealed association may be even more salient. Such a finding again highlights the significance of this temporal frame not only for current PWB but also for the level of PWB a person would like and probably believes as possible to have.

In turn, Past-Negative, as with the current eudaimonic well-being, revealed a negative correlation with the ideal PWB in both samples, though the amount of significant links among the Portuguese decreased from six to one while for the Belarusians it was related again to all the scales and general index. Being different from the links with current PWB (in the Portuguese sample), Past-Positive was found to be positively correlated with some domains of ideal PWB in both samples. As in the association of time perspective and actual PWB, Present-Hedonistic demonstrated an inverse relation with some ideal PWB dimensions in the Portuguese sample.

## **Coping Strategies and Time Perspective**

Finally, in coping and time perspective association, some common as well as distinctive features of the two samples may be identified.

Namely, Past-Negative and Present-Hedonistic revealed positive associations only with some strategies of emotion-focused coping. It is remarkable, that in the studies of Holman and Zimbardo (1999, as cited in Zimbardo & Boyd, 1999) as well as Epel et al. (1999) the same relationship was detected in regard to Present-Hedonistic frame and coping. Also, the obtained findings seem to be in line with the inferences of many studies about maladaptiveness of this coping type in various settings (Moskowitz et al., 2009; Rasskazova & Gordeeva, 2011; Roesch et al., 2005; Segerstrom & O'Connor, 2012). It is noteworthy, that among the Belarusian participants, problem-focused coping was inversely associated with Past-Negative. It may be assumed that the performance of active coping provides people with a greater level of self-efficacy, that, in turn, may decrease the significance of the aversive events in the past or lead to the perception of what have already happened as less negative. And, vice-versa, probably, the less the performance of coping aimed to problem solution is, the more the aversive perception of past events may be.

In turn, Past-Positive was directly related to some strategies of emotion-focused coping in both samples. The distinctive feature of the Belarusian sample was a direct link of this temporal frame with the search and use of social support while in the Portuguese sample problem-focused coping revealed a positive association with this time factor.

As regards Future temporal frame, it was directly associated with the search and use of social support as well as some strategies of emotion-focused coping in both samples. Besides, for the Belarusian participants, problem-focused coping was positively connected with Future orientation. The latter link is in line with the findings of Holman and Zimbardo (1999, as cited in Zimbardo & Boyd, 1999) about the relationship of Future time perspective and active coping.

It is remarkable that there were not any coincidences in the two samples in relationship of Present-Fatalistic and coping strategies. For the Belarusians the search and use of social support while for the Portuguese emotion-focused coping strategies were positively related to this temporal frame. Such connections are in line with the passive attitude implied by fatalistic perception of future as well as life in general. Besides, a problem-focused type revealed an inverse link with this time factor among the Belarussian students. It is noteworthy, that the same association was detected in the study of Holman and Zimbardo (1999, as cited in Zimbardo & Boyd, 1999).

## **Conclusions**

In the current study there was an attempt to explore relationships of coping, time perspective and psychological well-being. Such a concern seems to be reasonable due to a great potential of all these three constructs to influence in a positive way a variety of somatic as well as mental health indicators. Besides, there was an attempt to make up relatively little interest to the issue of eudaimonic well-being and time perspective, especially on the Russian speaking samples. Also, the idea of importance to investigate not only current but ideal PWB offered by Shevelenkova and Fesenko (2005) was endeavored.

## **Implementations of the Study**

Firstly, the detected associations of coping strategies and eudaimonic well-being allow to infer that activities aimed on the development of flexibility in coping performance may be fostering to PWB improvement. Besides, the special attention should be paid at people frequently using such ways of coping as distancing and escape-avoidance, which were proved to be negatively linked with positive functioning, both current and ideal. In addition, for the Belarusian sample it seems to be reasonable to foster the use of problem-focused coping type as conducive to the actual as well as the ideal level of psychological well-being. The mentioned prevention and intervention arrangements may be considered as utterly important, bearing in mind the linkage of PWB with mental and physical health proved in the previous studies.

Secondly, the found links of time perspective and PWB, allow to suppose that it may be reasonable for people of the two countries with salient Past-Negative and/or Present-Fatalistic time factors to receive psychological assistance aimed to reduce the magnitude of influence of aversive perception of the past as well as to reinforce the more active position in attitude to own life. The latter seems to be very important, especially for students, taking into account, that new educational environment may offer a great diversity of contexts fostering not only to actual self-development but also the investment in many areas of future. That is why the arrangements aimed to elaborate the belief of person's potential to manage life with one's own actions seem to be promising and fruitful for many branches of psychology, including Health and Clinical psychology. Namely, in regard to the last mentioned area, it is especially reasonable, taking into account that time perspective factors were proved to be associated with mental health, health-related and risky behaviors in many studies.

Also, a more active attitude to one's own life seems to be important not only for the current level of PWB, but also for the rate of PWB a person would like and consider as

possible to have. That is why the actions mentioned above may be conducive not only for the present, but also for the future wellness of individual.

Besides, for the Belarusian participants a reinforcement of Future and Past-Positive temporal frame seems to be reasonable in terms of the current level of PWB.

Thirdly, the detected in the present study associations may highlight the assumption of the reasonability to bring into focus coping strategies of people with diverse salience of temporal frames.

Being more specific, for the Belarusian participants it may be beneficial to acquire and use problem-focused coping as proved to be inversely related to Past-Negative as well as Present-Fatalistic. Besides, some attention should be paid at people frequently performing the search and use of social support, which was found to be positively linked with Present-Fatalistic temporal frame. Also, the diversity and flexibility in coping strategies application seem to be promising for Past-Positive and Future time perspective.

In case of the Portuguese students, the attention should be directed to the salient emotion-focused coping, which is positively associated with Past-Negative and Present temporal frames, that, in turn, were proved to have negative linkage with current and ideal PWB.

Besides, similarly to the Belarusian sample, the increase of diversity as well as flexibility in coping strategies performance is thought to be favorable, especially for Past-Positive as well as Future temporal frames.

### **Limitations and Suggestions for Future Studies**

Nevertheless, some limitations of the present study should be mentioned. A small size as well as relative homogeneity of the sample may not allow to generalize obtained results. That is why a suggestion to increase a number as well as to include a heterogeneous sample may be embodied in the following research.

Besides, the age difference between the Belarusian and Portuguese participants may be a shortcoming of the current study, though it may be suggested to consider this age category as young adults.

In turn, the correlational design of this study does not allow to make conclusions about causality in relationship of the considered variables. In future, the application of more complex statistical procedures as well as a design change may make up the limitation mentioned above.

Also, the absence of formulation of a concrete stressful situation in coping measurement does not allow to make context specific conclusions. Besides, some controversy

in type of coping classification offered by the authors may also decrease the accuracy of conclusions. In general, it is thought that this instrument has some psychometric weakness (Wong, Reker, & Peacock, 2006). But in this study this measurement was applied because of the necessity to assess coping construct in both samples by the same instrument. At the moment of research conduction WCQ was the only option. Future explorations may include application of instrument overcoming shortcomings of the used questionnaire.

Finally, it must be taken into account that the measurement of the ideal PWB was not intended by the author of this instrument, though Ryff used these scales for investigation of future perceptions of PWB. That is why the obtained data should be interpreted cautiously.

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