Early Career Project Managers: Well-being and Life Satisfaction Analysis

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Abstract
The essentials of the presented paper are the psychological well-being and life satisfaction of early-career project managers (maximum 18 months of experience in project management). The primary goal is to determine whether there is a relationship between the psychological well-being and life satisfaction of early-career project managers, and if relationships exist between these variables, to determine their strength. In the theoretical part of the paper, processed using the analysis of relevant information sources, we deal with the concepts of well-being and life satisfaction. As part of the research description, we define an early carrier project manager and describe a sample of respondents consisting of 88 early carrier project managers. To analyze the well-being and life satisfaction variables, we use the Psychological Well-Being Scale questionnaire and the Life Satisfaction Scale questionnaire, where the results of these questionnaires are subsequently subjected to descriptive statistical analysis. We found that there is a moderately strong and statistically significant relationship between the psychological well-being and life satisfaction of early-career project managers. The results of the research can serve as a basis for developing suitable adaptation programs for early carrier project managers, where HR professionals can devote their attention to improving the well-being of early carrier project managers and their life satisfaction and thus reduce the risk of burnout syndrome, which is a very common phenomenon not only among early carrier professions but also project managers. The issue of well-being appears to be relatively well researched and described, even in the context of project managers. However, the life satisfaction of project managers has not been analyzed in such detail, and it is no longer possible to find the issue of investigating the mutual correlation of well-being and life satisfaction of early-career project managers. It is our research that can narrow this gap in the theories of project management, human resource management, and work psychology.

Keywords: Early Carrier Project Manager; Well-being; Satisfaction with Life.

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1- Introduction
Project management is a highly sought-after profession in today's job market. An individual with experience and capabilities will likely have no trouble finding a job in this field [1, 2]. However, even someone with little experience or a recent graduate can still succeed as a project manager. One of the advantages of being a project manager is that there is no specific professional education required for this position [3–5]. Although it may depend on the industry, skills and personality traits are more important than knowledge of a particular field. If you can manage projects successfully, you can transfer this skill to any industry. While some companies require a university degree in economics, others consider it an advantage, while some don't mention it at all. Attitude, skills, practical experience, and work habits are more important factors [5, 6].

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A project manager is responsible for managing projects, which are change processes with a defined beginning and end and a goal to be achieved. The project manager aims to achieve the goal while adhering to the set schedule, budget, and quality [7–11]. Whether it’s a rebuilding project, transitioning to a new cash register or information system, or marketing a new product, the project manager plans, implements, and evaluates the entire process. The project manager works with human and financial resources, communicates with management, leads the team, coordinates activities, continuously monitors and controls the project, reports on it, and monitors its meaning [12–15]. During the implementation, the project manager must be able to react to changes and solve sudden problems or the client's changing requirements. After the project termination, the project manager hands it over and evaluates it in detail, prepares a summary of lessons learned, and suggests future improvements [16].

Projects are usually complex, difficult, unclear, and unpredictable; therefore, there is no room for experimentation. Managing a project is challenging, dynamic, and involves high levels of responsibility [17–21]. An experienced project manager uses project management standards and methodologies, has years of experience communicating with the project team and stakeholders, resolving conflicts and problems, and has experience with time and personal energy management. However, for early-career project managers, handling the pressure of responsibility for the project's outputs and its entire course, including the project team, can be difficult [22, 23]. It can cause trauma or dissatisfaction if they cannot manage their personal time and energy and devote enough time to work and think about the project. Therefore, it's important to ensure that early-career project managers have sufficient well-being [24–27].

As more organizations focus on sustainability and social responsibility, the number of companies that produce comprehensive reports on their activities is increasing [28]. This trend is also seen in project-oriented companies. As a result, stakeholders are more involved in these companies’ management and decision-making processes [29–32]. It's important to note the shift in managers' approach to human resources towards sustainable human resource management [33, 34]. HR managers engage in practical activities that lead to project managers' engagement, satisfaction, and overall well-being. However, HR managers may have different procedures, even with the same goal. Many HRM practices have been explored in the literature, such as employee training and development, employee involvement in decision-making, competitive wages and incentive compensation, or job design and work-life balance.

2- Literature Review

2-1- Well-being

Nowadays, thanks to positive psychology, well-being is coming to the fore, which, from the positive psychology point of view, can be defined as "a state in which a person experiences physical, mental, and social well-being, and his good functioning is more than just the absence of some negative symptoms“ [35, 36].

Well-being is also a very widespread term in both academic and non-specialist literature. Well-being is usually described by different models, and this term can be approached from different perspectives. According to the generally accepted theory, well-being can be divided into three categories, specifically, it is about hedonic, eudaimonic, and social well-being [37]:

- The first category, referred to as the hedonic category, reflects subjective experiences from a person's everyday life. The existing well-being of a given individual can, therefore, be described as the experience of a high level of pleasant emotions and a low level of negative emotions [38].
- Another characterized category is eudaimonic well-being, which consists of the level of autonomy, personal growth, positive relationships, and self-acceptance. According to this view, the overall level of well-being in this category represents well-being as the ability to achieve an individual set of goals of a person [39].
- The last category is social well-being, which is closely related to the individual’s ability to overcome social challenges and live successfully in the social world [40].

It is also important to classify particular categories of well-being, especially because within the framework of human resource management, it is possible to have different effects (even contradictory) on the selected category of well-being through specific procedures [41].

It is possible to classify well-being according to three basic dimensions: subjective and social well-being. The third dimension considers well-being as a problem of physical and mental health, which other authors support [20]. According to the literature mentioned in this study, three basic categories of well-being are recognized. Two other categories were also added to the detailed evaluation of the particular categories of well-being, which finally reflect the five basic elements from Rath & Harter [42]. The five-dimensional model of wellbeing includes career, social, financial, physical, and community well-being:

- **Career well-being:** “It is about how you occupy your time or simply like what you do every day.”
- **Social well-being:** “It is about having strong relationships and love in your life.”
- **Financial well-being:** “It is about effectively managing your economic life”.

...
• **Physical well-being**: “It is about having good health and enough energy to get things done on a daily basis”.

• **Community well-being**: “It is about the sense of engagement you have with the area where you live”.

Only 7% of people are “thriving” in all five elements [42].

This model does not contradict the commonly accepted three-dimensional model; some areas are expanded or classified into more practical categories. These categories reflect HR practices that are typically associated with well-being.

Well-being is a multidimensional and complex construct. It emphasizes the importance of understanding what a person's well-being consists of, including the necessity of a uniform definition and terminology of well-being as well as a quality tool for its measurement [43].

2-1-1. Psychological Well-being

The concept of psychological well-being consists of several core dimensions, namely self-acceptance, meaning of life, autonomy, personal growth, the creation of positive social relations and control, or coping with the environment [44]. Psychological well-being means living a life that makes people feel good, be able to function effectively in it, and cope with negative life experiences, after which they still feel psychological well-being [45]. Wagner et al. [46] analyzed the five domains of psychological well-being that form the PERMA acronym. These are:

- Positive emotions;
- Engagement;
- Positive relationships;
- Meaningfulness;
- Accomplishment.

Psychological well-being can stem from satisfying social and psychological needs or from a sense of freedom that affects personal growth [47]. The concept of psychological well-being is often called subjective well-being. However, its essence is a good feeling and efficient functioning in everyday life. A good feeling includes positive emotions such as satisfaction and happiness, but also self-confidence and quality social relationships. Effective functioning entails the presence of a certain goal in life, a sense of control, the fulfillment of potential, or the satisfaction of social relationships. It is also associated with life satisfaction and a feeling of happiness [48].

The feeling of psychological well-being can be disturbed when a person experiences psychological trauma or stress. The ability to handle difficult life situations, adverse events, and burdens helps a person's resilience.

Sustainable well-being does not represent a constant good feeling in a person that lasts forever because painful emotions are often part of normal life, and the ability to manage them is essential for long-term well-being. However, suppose negative emotions appear in an extreme dimension or last too long. In that case, they can disrupt a person's ability to function in everyday life, and their psychological well-being is threatened [45]. The findings of several studies indicate that positive emotions lead to positive cognitions, positive behaviors, and increased cognitive abilities, and vice versa. These positive cognitions, behaviors, and abilities, in turn, promote positive emotions [45, 49]. In recent years, psychological well-being has been investigated from many points of view; among the most interesting studies we can include [50–52], which all identify psychological well-being as a necessary component of job performance and, of course, quality of life.

2-2- Life Satisfaction

Life satisfaction is a part of subjective well-being, which comprises two components: an emotional and a cognitive component. The cognitive or judgmental component is thus conceived as life satisfaction. The level of life satisfaction depends on the standard that each individual sets for himself and, therefore, comes from within, which means that it is formed on the basis of a person's own judgment and not on some criterion set by a researcher [53]. Life satisfaction is the acceptance of or satisfaction with the life events of a person or the fulfillment of his life wishes and needs. Life satisfaction is a subjective evaluation of a person's quality of life, where his judgments about this satisfaction contain a wider cognitive component [54].

Researchers have reported that life satisfaction or its essential components are linked with reduced morbidity, increased longevity, fewer symptoms of ill health, positive emotions with increased resilience, motivation, task persistence, creativity, information processing, and memory, as well as goal attainment. Life satisfaction is correlated with job satisfaction, and organizational commitment is negatively related to intention to quit, actual turnover, absence from work, and poor employee behavior. Improved life satisfaction is positively related to reduced mental health issues and burnout [55].
Arthaud-Day et al. [56] propose a model of life satisfaction where its levels within specific domains are precursors of overall life satisfaction, and overall life satisfaction, in turn, mediates the relationship between individual domains of life satisfaction and human performance. In this model, they list leisure, family, university, and housing satisfaction as the main domains of life satisfaction. This model is the core model of the research carried out in the presented paper.

Like psychological well-being, life satisfaction in the context of management has been properly investigated in recent years. Among the important studies, we can include, for example, [57-59], when these studies focus on the correlation of various factors of life satisfaction and, of course, professional performance.

3- Material and Methods

3-1- Conceptual Framework of the Research Problem

The presented paper deals with the relationship between psychological well-being and the life satisfaction of early-career project managers. We are based on Ryff & Keyes’ [60] understanding of psychological well-being in the Psychological Well-Being Scale questionnaire (PWBS), which distinguishes the dimensions of self-acceptance, independence, coping with the environment, the meaning of life, and positive relationships with others. Furthermore, we are based on understanding life satisfaction according to Diener et al. [49] in the Satisfaction with Life Scale (SWLS) questionnaire.

However, the problem in examining well-being is qualitative, and it is difficult to define the essence of this term. Therefore, if the well-being of employees is investigated, the research is often focused on, for example, working conditions, the balance between work and private life, overall physical and mental health, personal and professional development, and other important factors, which are subsequently a common part of sustainability reports [61]. Although the analysis of metrics, their trends, and annual changes can be beneficial to a particular group of stakeholders, there is always a risk that more flattering results of employee satisfaction and well-being will be presented, especially due to the nature of sustainability reports (e.g., the qualitative nature of the data), so the common rhetoric can differ significantly from reality [62].

3-2- Research Objective, Research Questions, and Hypotheses

The research objective is to find out if there is a relationship between psychological well-being (positive relationships with others, self-acceptance, independence, personal growth, coping with the environment, meaning in life) and the life satisfaction of early-career project managers. Through our research, we will evaluate assumption A1: We assume that there is a positive correlation between psychological well-being and the life satisfaction of early-career project managers [63, 64].

3-3- Research File

88 early carrier project managers took part in the research, where an early carrier project manager is perceived as a person working in the position of project manager for less than 18 months, younger than 30 years, regardless of the length of previous experience in another field. The research group consisted of 55 men (62% of the research group) and 33 women (38% of the research group) aged 26 to 28 years (M=26.8, SD=0.67).

The data collection was intentional and was carried out in the period April–October 2023, when the respondents were early-career project managers and participants in the MBA courses focused on Project Management and Planning at the Business Institute, Cambridge Business School, European School of Business and Management and Cardiff Academy in Prague.

We are aware of the fact that an early-career project manager can also be a person over 30 years old if we take into context the fact that the project manager has been in the position for less than 18 months and has not worked in the field of project management in his previous practice. However, with the age limit, we wanted to achieve findings among really early-career project managers, who are generally just starting their careers in management. The reason is, apart from the fact that the issue of early-career project managers, their well-being, and life satisfaction has not yet been researched, which we confirm above, but above all, the fact that the authors of the paper hold high academic positions at universities providing education in the field of management, which educate managers and project managers, and therefore it is also in their interest to analyze this "young" group of respondents in order to identify the need for innovations in the content of study programs corresponding to the current reality of practice.

3-4- Data Collection Methods

3-4-1- Operationalization of Concepts

The indicator of psychological well-being is the summation index of positive relationships with others, the summation index of self-acceptance; another indicator of psychological well-being is the summation index of independence, the summation index of personal growth, the summation index of coping with the environment, and the summation index of the meaning of life in the Psychological Well-Being Scale questionnaire [65].
The indicator of life satisfaction is the summation index of life satisfaction in the Satisfaction with Life Scale (SWLS) questionnaire [53].

3-4-2- Hypotheses

In our research, we formulated several hypotheses.

- **H1:** There is a correlation between the summation index of positive relationships with others and the summation index of life satisfaction.
- **H2:** There is a correlation between the summation index of self-acceptance and the summation index of life satisfaction.
- **H3:** There is a correlation between the summation index of independence and the summation index of life satisfaction.
- **H4:** There is a correlation between the summation index of personality growth and the summation index of life satisfaction.
- **H5:** There is a correlation between the summation index of coping with the environment and the summation index of life satisfaction.
- **H6:** There is a correlation between the summation index of the meaning of life and the summation index of life satisfaction.

3-4-3- Sociodemographic characteristics

In the research, we investigated sociodemographic characteristics: age and gender.

3-5- Psychological Well-being Scale

Psychological well-being was analyzed using the Psychological Well-Being Scale described in Keyes [40]. It is a scale consisting of 18 items with six indicators or six subscales:

- Positive relationships with others,
- Self-acceptance,
- Independence,
- Personal growth,
- Coping with the environment,
- Meaning of life.

Participants had the opportunity to answer the items using a Likert scale on a scale from 1 to 7, where 1=strongly disagree, 2=disagree, 3=rather disagree, 4=can’t decide, 5=rather agree, 6=agree, 7=strongly agree. The theoretical range of the scale is a total score of minimum 18, maximum 126, while the higher the score, the higher the level of psychological well-being.

The scale of psychological well-being was published in several versions; the original version contains 20 items. For example, the dimension of positive relationships with others contains an item that expresses whether other people would describe the participant as giving and helpful, the dimension of self-acceptance is expressed, for example, by an item where a person states whether he likes most of his qualities, the dimension of independence contains an item that expresses whether others can influence a person, the personality growth dimension is expressed, for example, by an item where a person indicates whether it is important for him to have new experiences, the mastering the environment dimension contains, for example, an item in which a person expresses whether he has control over the situations in which he finds himself, the meaning of life dimension is expressed, for example, by an item in which a person states that he has done everything he should have done in life.

In the original study with 20 items [65], Ryff (1989) reports the value of Cronbach’s alpha coefficient for the self-acceptance indicator \( \alpha = .93 \); for positive relationships with others \( \alpha = .91 \); for independence \( \alpha = .86 \); for coping with the environment \( \alpha = .90 \); for the meaning of life \( \alpha = .90 \); and for personality growth \( \alpha = .87 \). The test-retest reliability value in the original study [65] for self-acceptance was \( r = .85 \); for positive relationships with others \( r = .83 \); for autonomy \( r = .88 \); for managing the environment \( r = .81 \); for the meaning of life \( r = .82 \) and for personal growth \( r = .81 \).

In our research, we used the shortest version of the questionnaire, which contains a total of 18 items, where each of the dimensions, or each indicator, is loaded with three items [60].
The reason for choosing the given tool is not only its high validity demonstrated, for example in Burns and Machin [66] or Sasaki et al. [67], but above all the fact that extensive research was conducted in the Czech Republic focused on quality of life indicators in the Czech Republic [68] and PWBS is not only in this research but in the context of other psychological studies and research often used. The validity of this tool for the Czech Republic was verified in research [68]. Therefore, we did not take into account the possibility of using another tool to determine the psychological well-being of respondents.

3-6- Satisfaction with Life Scale

We used the Satisfaction with Life Scale described by Diener et al. [49] to measure the life satisfaction.

The Satisfaction with Life Scale is made up of five items, to which the participants answer using a seven-point Likert scale, where they indicate how much they agree with the item, 1=strongly disagree, 2=disagree, 3=rather disagree, 4=can’t decide, 5=rather agree, 6=agree, 7=strongly agree.

The theoretical range of the scale is a minimum total score of 5 and a maximum of 35, while the higher the score, the higher the level of life satisfaction. In the original study [49] the value of test-retest reliability was r=0.82 and the value of internal consistency was Cronbach's alpha α=0.87.

The validity of the instrument used in our research was sufficiently demonstrated, for example in [69-71]. The reason for the application of this tool is its confirmed validity for the conditions of the Czech Republic, which is confirmed by, for example, [72-74]. Therefore, we did not consider the application of another research tool.

3-7- Methodology Process Flowchart Satisfaction with Life Scale

The flowchart of the research methodology that was used to achieve the study's aims is shown in Figure 1.

![Figure 1. Methodology process workflow flowchart](image)

4- Results

4-1- Psychological Well Being

In the Psychological Well-Being Scale, 43.2% of participants stated that they rather agree that they like most of their personality traits and abilities; only 1.1% of participants strongly disagreed with this statement. The most prominent indicator in the subscale of positive relationships with others was the item expressing a feeling of frustration from maintaining close relationships, where 43.2% of participants strongly agreed with this item.

In the self-acceptance subscale, the most significant indicator was the item in which 43.2% of the participants stated that they rather agree that they like most of their personality traits. However, 30.7% of the participants also said that they would rather agree that they are disappointed in several ways with what they have achieved in their lives so far. A significant indicator in the independence subscale was the item that expressed that a person trusts his opinions even when they differ from the opinions of other people, and 38.6% of participants strongly agreed with this item.

Within the subscale of personal growth, 61.4% of participants strongly agreed with the item that expresses that it is important to have new experiences, thanks to which a person thinks about himself and the world around him. The value of the Cronbach's alpha coefficient of internal consistency for the Psychological Well-Being Scale questionnaire was α=0.78, on the basis of which it can be considered reliable. In the subscales of positive relationships with others, self-acceptance, and coping with the environment, there was no outlier or extreme value. There was one outlier in the independence subscale, where the participant scored lower than the rest of the research group; the same situation is replicated in the personal growth and meaning of life subscale.

In the subscale of positive relationships with others and self-acceptance, the data distribution was non-Gaussian, left-skewed, and platykurtic, as can be seen in Figures 2 and 3. The independence subscale also did not have a normal data distribution (Figure 4). The other subscales show signs of a normal data distribution.
Figure 2. Histogram of positive relationships with others subscale

Figure 3. Histogram of self-acceptance subscale
The statistical description of the individual dimensions of the psychological well-being scale questionnaire is shown in Table 1. The theoretical minimum that the participants could achieve in each subscale of the questionnaire is 3, and the theoretical maximum in each subscale of the questionnaire is 21. The empirical minimum that the participants achieved in the subscale of positive relations with others is 6, and the empirical maximum in this subscale is 21. For the subscale, self-acceptance has an empirical minimum of 3 and an empirical maximum of 21. In the independence subscale, the empirical minimum is 5, and the empirical maximum is 21. The empirical minimum in the personal growth subscale is 9, and the empirical maximum is 21. In the coping with the environment subscale, the empirical minimum is 5, and the empirical maximum is 21. The meaning of life subscale also has an empirical minimum of 5 and an empirical maximum of 2.

Table 1. Descriptive statistics of the subscales of the psychological well-being scale questionnaire

<table>
<thead>
<tr>
<th></th>
<th>Positive relations</th>
<th>Self-acceptance</th>
<th>Independence</th>
<th>Personal growth</th>
<th>Coping with the environment</th>
<th>Meaning of life</th>
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</thead>
<tbody>
<tr>
<td>E</td>
<td>14.6</td>
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<td>15.5</td>
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<td>13.3</td>
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<tr>
<td>Median</td>
<td>15</td>
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<td>16</td>
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<td>14</td>
<td>15</td>
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<td>Modus</td>
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<td>16</td>
<td>16</td>
<td>21</td>
<td>16</td>
<td>15</td>
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<tr>
<td>Standard deviation</td>
<td>3.67</td>
<td>3.94</td>
<td>3.72</td>
<td>3.04</td>
<td>3.71</td>
<td>3.39</td>
</tr>
<tr>
<td>Variance</td>
<td>13.49</td>
<td>15.56</td>
<td>13.82</td>
<td>9.26</td>
<td>13.75</td>
<td>11.50</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-0.42</td>
<td>0.11</td>
<td>0.23</td>
<td>-0.02</td>
<td>-0.70</td>
<td>-0.09</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.44</td>
<td>-0.79</td>
<td>-0.60</td>
<td>-0.84</td>
<td>-0.23</td>
<td>-0.26</td>
</tr>
<tr>
<td>Minimum</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>9</td>
<td>5</td>
<td>5</td>
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<tr>
<td>Maximum</td>
<td>21</td>
<td>21</td>
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<td>21</td>
<td>21</td>
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<tr>
<td>Variability</td>
<td>15</td>
<td>18</td>
<td>16</td>
<td>12</td>
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<td>Percentiles</td>
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<td>25</td>
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<td>20</td>
<td>16</td>
<td>18</td>
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<tr>
<td>IQR</td>
<td>5.25</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>5.25</td>
<td>5</td>
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</tbody>
</table>
The correlation between the subscale positive relationships with others and self-acceptance is positive, moderately strong, and statistically significant \((rs=0.45; p<0.01)\). Between positive relationships with others and independence, there is a positive, weak, and statistically significant relationship \((rs=0.24; p<0.05)\). The correlation between personal growth and positive relationships with others is positive, moderately strong, and statistically significant \((rs=0.37; p<0.01)\). Between coping with the environment and positive relationships with others, there is a positive, moderately strong, and statistically significant correlation \((rs=0.44; p<0.01)\). There is a positive, negligible relationship between positive relationships with others and the meaning of life, which is not statistically significant \((rs=0.07)\).

There is a positive, weak, and statistically significant relationship between self-acceptance and independence \((rs=0.28; p<0.01)\) and a strong and statistically significant positive relationship between self-acceptance and personal growth \((rs=0.50; p<0.01)\). There is a positive, strong, and statistically significant relationship between self-acceptance and coping with the environment \((rs=0.54; p<0.01)\). The correlation between self-acceptance and meaning of life is a positive, weak, and statistically significant relationship \((rs=0.23; p<0.05)\).

The correlation between independence and personal growth is positive and weak \((rs=0.20)\), there is a positive weak relationship between independence and coping with the environment \((rs=0.12)\), we also found a positive and weak relationship between independence \((rs=0.20)\). There is a positive, moderately strong, and statistically significant relationship between personal growth and coping with the environment \((rs=0.43; p<0.01)\); there is a positive, weak, and statistically significant relationship between personal growth and the meaning of life \((rs=0.27; p<0.05)\). There is a positive, weak, and statistically significant relationship between coping with the environment and the meaning of life \((rs=0.30; p<0.01)\).

### 4.2 Satisfaction with Life

The most prominent indicator in the Satisfaction with Life Scale questionnaire is the item that expresses satisfaction with one's life, where 44.3% of participants agree with this statement. The second most prominent indicator is the item that contains the statement that the participant's living conditions are excellent, with which 37.5% of participants agreed. A strong disagreement with the statement that the participant would not change anything in his life if he could live it over again was expressed by 21.6% of the participants. 19.3% of participants disagreed with the fact that the participant's life almost completely matches his ideal.

The value of Cronbach's alpha, which expresses the internal consistency of the Satisfaction with Life Scale questionnaire, acquired a value of \(\alpha=0.75\), meaning that the Satisfaction with Life Scale questionnaire proved reliable. In the satisfaction with life scale, one outlier in one participant had a lower score than the rest of the participants in the research file. The data in the Satisfaction with Life Scale questionnaire were distributed normally; respectively, they had a Gaussian distribution. The normal distribution of the data was also confirmed by the Shapiro-Wilk normality test, where the value of \(W=0.98; p=0.12\), as can be seen in Table 2.

<table>
<thead>
<tr>
<th>Table 2. Results of the Shapiro-Wilk normality test</th>
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<tr>
<td><strong>Statistic</strong></td>
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<td>GPA</td>
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<tr>
<td>PWB_subscale1</td>
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<td>PWB_subscale2</td>
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<td>PWB_subscale3</td>
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<td>PWB_subscale4</td>
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<td>PWB_subscale5</td>
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<td>PWB_subscale6</td>
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<td>SWLS_total</td>
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</tbody>
</table>

The statistical description of the Satisfaction with Life Scale questionnaire is shown in Table 3. The theoretical minimum that the participants could get in the questionnaire is 5; the theoretical maximum has a value of 35. In the Satisfaction with Life Scale questionnaire, the participants achieved an empirical minimum of 6; the empirical maximum was 33. The average value in this questionnaire was \(M=22.20\) (\(SD=5.59\)).
and the meaning of life subscale. The Spearman correlation coefficient is used for these types of data, but if the p-value is greater than 0.05, we will determine the Pearson correlation coefficient. If the p-value is less than 0.05, then the data do not have a normal distribution, and we will determine the Spearman correlation coefficient.

Before performing the correlation analyses, we first used the Shapiro-Wilk normality test to determine whether the data are normally distributed in order to know which correlation coefficient to use and whether we would determine the value of the Spearman (rs) or Pearson (r) correlation coefficient. In Table 4, we present the p values, where we followed the rule: if p>0.05, then the data do not have a normal distribution, and we will determine the Spearman correlation coefficient; if p<0.05, then we will determine the Pearson correlation coefficient.

Table 4. Correlation matrix of psychological well-being and satisfaction with life subscales

<table>
<thead>
<tr>
<th></th>
<th>PWB1</th>
<th>PWB2</th>
<th>PWB3</th>
<th>PWB4</th>
<th>PWB5</th>
<th>PWB6</th>
<th>SWLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation Coefficient</td>
<td>1.000</td>
<td>0.448**</td>
<td>0.242*</td>
<td>0.369**</td>
<td>0.442**</td>
<td>0.072</td>
<td>0.359**</td>
</tr>
<tr>
<td>(2-tailed)</td>
<td>Sig.</td>
<td>0.000</td>
<td>0.023</td>
<td>0.000</td>
<td>0.000</td>
<td>0.508</td>
<td>0.001</td>
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</tr>
<tr>
<td>Correlation Coefficient</td>
<td>0.448**</td>
<td>1.000</td>
<td>0.278**</td>
<td>0.501**</td>
<td>0.543**</td>
<td>0.231</td>
<td>0.664**</td>
</tr>
<tr>
<td>(2-tailed)</td>
<td>Sig.</td>
<td>0.000</td>
<td>0.009</td>
<td>0.000</td>
<td>0.000</td>
<td>0.031</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
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</tr>
<tr>
<td>Correlation Coefficient</td>
<td>0.242*</td>
<td>0.278**</td>
<td>1.000</td>
<td>0.207</td>
<td>0.120</td>
<td>0.197</td>
<td>0.306**</td>
</tr>
<tr>
<td>(2-tailed)</td>
<td>Sig.</td>
<td>0.023</td>
<td>0.009</td>
<td>0.053</td>
<td>0.266</td>
<td>0.066</td>
<td>0.004</td>
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</tr>
<tr>
<td>Correlation Coefficient</td>
<td>0.369**</td>
<td>0.501**</td>
<td>0.207</td>
<td>1.000</td>
<td>0.430**</td>
<td>0.268</td>
<td>0.260**</td>
</tr>
<tr>
<td>(2-tailed)</td>
<td>Sig.</td>
<td>0.000</td>
<td>0.000</td>
<td>0.053</td>
<td>0.000</td>
<td>0.012</td>
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<tr>
<td>Correlation Coefficient</td>
<td>0.442**</td>
<td>0.543**</td>
<td>0.120</td>
<td>0.430**</td>
<td>1.000</td>
<td>0.300**</td>
<td>0.445**</td>
</tr>
<tr>
<td>(2-tailed)</td>
<td>Sig.</td>
<td>0.000</td>
<td>0.000</td>
<td>0.266</td>
<td>0.000</td>
<td>0.004</td>
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<tr>
<td>Correlation Coefficient</td>
<td>0.072</td>
<td>0.231</td>
<td>0.197</td>
<td>0.268</td>
<td>0.300**</td>
<td>1.000</td>
<td>0.049</td>
</tr>
<tr>
<td>(2-tailed)</td>
<td>Sig.</td>
<td>0.058</td>
<td>0.031</td>
<td>0.066</td>
<td>0.012</td>
<td>0.005</td>
<td>0.652</td>
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<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
</tr>
<tr>
<td>Correlation Coefficient</td>
<td>0.359**</td>
<td>0.664**</td>
<td>0.306**</td>
<td>0.260**</td>
<td>0.437**</td>
<td>0.065</td>
<td>1.000</td>
</tr>
<tr>
<td>(2-tailed)</td>
<td>Sig.</td>
<td>0.001</td>
<td>0.000</td>
<td>0.004</td>
<td>0.014</td>
<td>0.000</td>
<td>0.546</td>
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</tbody>
</table>

*p<0.05; **p<0.01.

Likewise, for correlations where one variable has a normal data distribution, and the other does not, we determined the Spearman correlation coefficient. The p-values were higher than 0.05 for the coping with the environment subscale and the meaning of life subscale in the Psychological Well-Being Scale questionnaire and Satisfaction with Life Scale.
There is a positive, moderately strong, and statistically significant relationship between positive relationships with others and life satisfaction ($r=0.36$; $p<0.01$); we found a positive, strong, and statistically significant relationship between self-acceptance and life satisfaction ($r=0.66$; $p<0.01$).

Independence correlated positively with life satisfaction when it was a moderately strong, statistically significant relationship ($r=0.30$; $p<0.01$). We found a positive, weak, and statistically significant relationship between personal growth and life satisfaction ($r=0.26$; $p<0.05$), we found a moderately strong, positive, and statistically significant relationship between coping with the environment and life satisfaction ($r=0.45$; $p<0.01$). We found a positive, negligible relationship between the meaning of life and life satisfaction ($r=0.05$).

5.1-Assumption Evaluation

We assumed that there is a relationship between psychological well-being, respectively, between its particular subscales (positive relationships with others, self-acceptance, independence, personal growth, coping with the environment, meaning of life) and life satisfaction. This assumption was confirmed, while the strongest relationship was a positive and strong relationship between self-acceptance and life satisfaction. Based on the results, it can be said that early-career project managers who like most of their personality traits are satisfied with their lives. It can also be argued that if project managers perceive their own control over the situations in which they find themselves, then they feel that their way of life matches their ideal. If project managers feel that they manage their daily responsibilities well, they express greater satisfaction with their lives.

The results of our research coincide with the results of research by Mehmood and Shaukat [64], where they also found that self-esteem as a component of psychological well-being is strongly related to life satisfaction. We, therefore, conclude that early-career project managers with a higher level of self-esteem and a low level of depression had higher life satisfaction. Based on the results, the authors of the research claim that high self-esteem is a strong predictor of life satisfaction among young people, especially among women, on whom research by Mehmood and Shaukat in [64] was focused.

As mentioned in the paper's introduction, the correlation between well-being and life satisfaction among young managers and project managers has not been thoroughly examined. Existing studies, such as Lee et al. [75] and Yahyağil [76], are not recent and do not fully address the correlation between the individual components of well-being, as analyzed in our research, and life satisfaction. Other studies explore various components of well-being and life satisfaction [77-79]. Below, essential findings of other authors are presented, with whom our research aligns, confirming our findings to some extent. The aim is to compare results of research focused on young people.

Tankha [80] revealed that both well-being and job satisfaction in young professionals have a linearly significant relationship. This is further complemented by Haratsis et al. [81], who tested the cross-temporal relationships between sources of assimilation and adjustment and two well-being outcomes (satisfaction with career progress and life satisfaction) and assessed whether these relationships were mediated by self-perceptions (perceived goal attainability and optimism). The results of the study indicated that both assimilation and accommodation were related to better life satisfaction in young adults, but assimilation was more adaptive in the career field. Ciairano et al. [82] investigated (in 95 Italians aged 19-29, of both genders, and who were all facing the transition to job), the relationships between job precariousness, life satisfaction, and the perception that reality is comprehensible, manageable, and meaningful. The findings showed that young adults with a higher level of education perceive less life satisfaction and higher manageability, and youths with a precarious job perceive reality as less controllable, manageable, and meaningful; manageability is positively related to satisfaction with close relationships, and meaningfulness is positively related with life satisfaction in general; meaningfulness also buffers the effect of job precariousness on satisfaction for close relationships; among precarious workers, there is a curvilinear relationship with life satisfaction: youths with intermediate meaningfulness also show higher life satisfaction with respect to both low and high meaningfulness.

The goal of Cobos-Sanchiz et al. [83] was to understand the importance of work-related events and changes in the psychological distress and life satisfaction of young workers in Spain. A transversal study was carried out on a sample comprising 509 men and 396 women aged between 26 and 35 years old. The results showed that there were no differences between men and women in the number of work-related events and changes experienced in the last 12 months, nor in terms of job satisfaction. The results from the multiple regression analysis showed that a greater number of work-related events and changes experienced during the last 12 months were associated with increased psychological distress and reduced life satisfaction among men, but this was not the case for women. Although job satisfaction was independent from men's and women's psychological distress when self-esteem and social support were included in the regression equation, greater job satisfaction was associated with greater life satisfaction for both men and women. It concludes that work-related events and job satisfaction are important for the health and well-being of young people, even though a larger number of work-related events and changes are associated with increased psychological distress and reduced life satisfaction for men only.
Garcia & Archer [84] investigated the differences in life satisfaction and psychological well-being among adolescents (N = 141). The relationship between psychological well-being's self-acceptance sub-scale and life satisfaction was also investigated. The affective temperaments (AFTs) model was the framework for the research. The AFTs were developed through self-reported affect, generating four temperaments: self-actualizing, high affective, low affective, and self-destructive. Self-destructive reported lower life satisfaction and psychological well-being than the other three temperaments. Moreover, psychological well-being, in particular the subscale of self-acceptance, was related to life satisfaction for all temperaments. The role of positive emotions and self-acceptance among youth is discussed.

The purpose of Grant et al. [85] was to assess the relationship between life satisfaction and seven health behaviors in young adults and investigate the consistency of associations across regions. Life satisfaction was positively associated with not smoking, physical exercise, using sun protection, eating fruit, and limiting fat intake, but was not related to alcohol consumption or fiber intake after adjusting for age, gender, and data clustering. Results were consistent across regions for smoking and physical exercise, but differences were apparent for sun protection, fruit intake, and fat avoidance. Relationships between life satisfaction and health behaviors were independent of beliefs in the health benefits of behavior. The association between life satisfaction and health-promoting behavior is likely to be bidirectional but may partly account for the relationship between positive states and good health.

The goal of Çakar [86] was to examine the relationship between self-efficacy and life satisfaction in young adults. This study was a cross-sectional study with variables. Data were collected between March 2012 and April 2012 from young adults who were pursuing bachelor degrees and attending the Celal Bayar University Pedagogical Formation Program during the academic term 2011–2012. Participants consisted of 405 young adults who were selected by simple random sampling. The number of women was determined to be 224 (57%) and that of men to be 181 (44%). Their mean age was 26.4. Data were collected by the General Self-Efficacy Scale and the Satisfaction with Life Scale. The data was analyzed by ANOVA and regression analysis. It was determined that the self-efficacy of young adults significantly predicted their life satisfaction (48%, p = 0.05); also, self-efficacy and life satisfaction didn't significantly differ among the groups in accordance with the perceived level of income. Depending on the results of this study, raising the self-efficacy of young adults can help them achieve their developmental tasks, which is vital for their healthy development and life satisfaction. It can be examined through longitudinal studies of the relationship between self-efficacy and life satisfaction in young adulthood. Also, the factors that are effective in increasing life satisfaction can be determined through experimental studies to be performed with young adults.

In the context of the above, however, we claim that our findings are unique with respect to the surveyed file of respondents.

5-2- Research Limits

We perceive the low number of psychometric tools as a limit of our research since the Satisfaction with Life Scale consists of only 5 items, which do not cover all areas of a person's life in which they may experience life satisfaction or, conversely, a lack of it. We think that this fact could have had an impact on the final results of the research, and thus, the relationship between life satisfaction and psychological well-being could have been moderately strong. We can only guess whether the results would be the same if we used other questionnaires focused on other aspects of life in which satisfaction can be felt.

In future research, it would be interesting to focus on the relationships of these variables in connection with the type of project, the size and focus of the organization in which the project managers work, or their salary. However, it would clearly be beneficial to analyze the investigated parameters also in early-career project managers older than 30 years and then correlate the findings between the individual age groups of these managers.

6- Conclusion

A high level of well-being is important for early-career project managers and for other groups of stakeholders. Therefore, the reported data on the well-being of workers is often overestimated by the organization, including subjective and qualitative information. We found weak to strong relationships between the subscales of psychological well-being and life satisfaction, where, except for the meaning of life subscale, these relationships were statistically significant.

We consider the greatest contribution of our research to be the enrichment of knowledge in this area. We consider the verification of the psychometric tools that we used in the research, namely the Psychological Well-Being Scale and the Satisfaction with Life Scale, to be a methodological contribution. The practical implications cannot be named since we did not carry out practical but academic research. However, the results of our research can serve as a basis for developing suitable adaptation programs for early carrier project managers, where HR professionals can devote their attention to improving well-being and their life satisfaction and thus reduce the risk of burnout syndrome, which is a very common phenomenon not only for early carrier professions but also for project managers. A training intervention to improve early-career project managers' well-being shows marginal potential for success.
7- Declarations

7-1- Author Contributions

Conceptualization, D.P. and K.B.; methodology, D.P. and K.B.; investigation, D.P.; resources, K.B.; writing—original draft preparation, D.P. and K.B.; writing—review and editing, D.P. and K.B. All authors have read and agreed to the published version of the manuscript.

7-2- Data Availability Statement

The data presented in this study are available on request from the corresponding author.

7-3- Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

7-4- Acknowledgements

The authors gratefully acknowledge DTI University, Slovakia for supporting this work.

7-5- Institutional Review Board Statement

Not applicable.

7-6- Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

7-7- Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

8- References


