

ORIGINAL ARTICLE

Basic psychological need frustration and coping styles

Maciej Barański ^{A,B,C,D,E,F}, Marta Rokosz ^{B,C,D,E,F}, Ryszard Poprawa ^{A,B,C,D,E,F}

Institute of Psychology, University of Wrocław, Wrocław, Poland

BACKGROUND

The basic psychological need theory assumes that there are three universal psychological needs: autonomy, competence, and relatedness. Their satisfaction is a source of well-being and development. Their frustration results in malaise and the need to cope with actions reducing unpleasant tension, substituting or compensating for deficits. This study aimed to define the relationship between basic psychological need frustration and coping styles with the mediating role of stress. It was predicted that with stronger frustration, there would be stronger perceived stress and the tendency to develop an escape-avoidance coping style.

PARTICIPANTS AND PROCEDURE

The study included 626 participants (42.65% women) aged 18-40 ($M = 22.22 \pm 4.29$). We used the following measures: PSS-10, COPE, and BPNS&FS. Exploratory factor analysis of COPE, correlations, and path analyses were performed.

RESULTS

Exploratory factor analysis of the COPE results distinguished four coping styles: 1) problem-focused, 2) emotion-focused, 3) meaning-focused, and 4) escape-avoidance. Need frustration was positively associated with perceived stress and the escape-avoidance style. We found both direct and indirect – through perceived stress – effects of need frustration on coping styles, especially the escape-avoidance coping style.

CONCLUSIONS

Frustration of basic psychological needs – autonomy, competence, and relatedness – can lead directly and through perceived stress to the formation of an escape-avoidance coping style.

KEY WORDS

basic psychological need theory; frustration; stress; coping styles

CORRESPONDING AUTHOR – Maciej Barański, Institute of Psychology, University of Wrocław, 1 Dawida Str., 50-529 Wrocław, Poland, e-mail: maciej.baranski@uwr.edu.pl

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BACKGROUND

Psychological well-being and development largely depend on whether the basic psychological needs are fulfilled. They are described in the basic psychological need theory (BPNT), which is one of the sub-theories of the self-determination theory (Deci & Ryan, 2000). This theory defines needs as “innate psychological nutrients that are essential for ongoing psychological growth, integrity, and well-being” (Deci & Ryan, 2000, p. 229). It distinguishes three basic and universal psychological needs: *autonomy*, that is, perceiving oneself as the source of one’s behavior; *competence*, the sense of personal effectiveness in interactions with the environment; and *relatedness*, striving to create and maintain close relationships with others (Chen et al., 2015; Ryan & Deci, 2000; Vansteenkiste et al., 2020).

Meeting these needs depends on the environment, as it may favor their satisfaction or frustration. Importantly, the lack of need satisfaction does not equal their frustration, as their relationship is asymmetrical. Frustration always indicates a lack of satisfaction, but insufficient satisfaction does not necessarily mean frustration. Frustration, which equals active deprivation and blocking the possibility of need satisfaction, brings faster and more severe negative consequences for the individual. If it is chronic, it can be a source of maladjustment and psychopathology (Chen et al., 2015; Vansteenkiste & Ryan, 2013; Vansteenkiste et al., 2020).

NEED FRUSTRATION

Frustration of autonomy is related to the experience of pressure and internal conflicts resulting from the inability to make independent decisions. Competence frustration is accompanied by a feeling of helplessness, failure, and ineffectiveness. In turn, the frustration of relatedness is a sense of alienation, exclusion, and loneliness. Need frustration motivates people to cope with it, sometimes in maladaptive ways. They look for need substitutes or form compensatory behaviors: release self-control, develop rigid behavior patterns, or oppositional defiance (Vansteenkiste & Ryan, 2013; Vansteenkiste et al., 2020). When needs are not satisfied and in particular are frustrated, it is associated with the occurrence of, among other consequences, depressive symptoms (Chen et al., 2015; Levine et al., 2021), psychological pain and alcoholism (Tabiś et al., 2021), nicotine use (Williams et al., 2009), symptoms of eating disorders (Verstuyf et al., 2013), problematic Internet use (Wong et al., 2015), or problematic video gaming (Mills et al., 2018).

COPING WITH STRESS

Stress coping strategies include cognitive efforts such as changing the meaning of the situation and behav-

ioral efforts such as taking action (Folkman & Moskowitz, 2007; Lazarus & Folkman, 1984a). People possess a repertoire of different coping strategies, focused on the problem, emotions, or avoidance (Endler & Parker, 1990). Their flexible use, appropriate to the context of the stress transaction, is beneficial and adaptive (Folkman & Lazarus, 1980; Frey et al., 2021; Lazarus & Folkman, 1984b; Taylor & Stanton, 2007). Individuals also develop a relatively persistent tendency to rely on a specific repertoire of strategies, which makes up their coping style (Carver & Scheier, 1994; Endler & Parker, 1990; Heszen, 2013).

The coping style may favor the well-being and adaptation of the individual (Akhtar & Kroener-Herwig, 2019) or not, especially when it is escape-avoidant (Akhtar et al., 2019; Taylor & Stanton, 2007). Avoidant coping involves passively avoiding stressful situations. It is characterized by anticipation of negative consequences and reducing their likelihood. Escape coping is a more active form of coping and involves taking action to extricate oneself from stressors (Haskell et al., 2020). The long-term use exclusively of escape-avoidance strategies, with a deficit of adequate resources, leads to the development of its harmful, habitual use. The repertoire of strategies narrows, leading to non-constructive coping, for example through excessive use of alcohol (Poprawa, 2011), problematic Internet use (Poprawa et al., 2019; Wong et al., 2015), or video games and behavior online (Melodia et al., 2022; Schneider et al., 2017). The escape-avoidance coping style is based on strategies of denial, the abandonment of necessary actions distracting oneself from the problem and difficulties, and the use of psychoactive substances (Heszen, 2013; Juczynski & Ogińska-Bulik, 2009; Poprawa, 2011). Occasional use of such strategies, especially in the context of strong and uncontrolled emotions, does not pose a threat to the individual (Lazarus & Folkman, 1984b; Waugh et al., 2020). However, the consolidation of the escape-avoidance coping style is generally associated with increased stress and poorer adaptation outcomes (Taylor & Stanton, 2007).

NEED FRUSTRATION, STRESS AND COPING

Frustration of basic psychological needs is associated with an increase in perceived stress and its negative consequences, such as sleep problems (Campbell et al., 2018; Li et al., 2019; Ren & Jiang, 2019). Stress is formed when we perceive an imbalance between our coping resources and the requirements we want to meet (Lazarus & Folkman, 1984a). Need satisfaction is a coping resource, and frustration is a deficit that increases stress and worsens coping capabilities (Vansteenkiste & Ryan, 2013).

Ntoumanis et al. (2009) propose an integrated description of the coping process, based on the degree of

satisfaction and frustration of basic needs. The fulfillment of needs, influenced by environmental impacts, affects motivational regulation and the cognitive appraisal of stress demands on coping resources. Need satisfaction and frustration contribute to the individual's choice of coping strategies. Frustrated individuals who are control-motivated, as compared to autonomy-oriented, exhibit more escape (such as the use of psychoactive substances), distracting (e.g. watching television, playing computer games), and compulsive behaviors. They are also characterized by greater cognitive and emotional defensiveness (Hodgins & Knee, 2002). Such individuals are less effective in stressful situations (Weinstein & Ryan, 2011). They often assess stressful situations in terms of threats, rather than challenges (Quested et al., 2011; Yeung et al., 2016), exhibit fewer positive emotions (Tong et al., 2009), and are more likely to cope avoidantly than actively. (Knee & Zuckerman, 1998). Frustrated individuals are more likely to look for compensation and substitution (Vansteenkiste & Ryan, 2013), such as escaping to the Internet (Gu, 2022), and to both externalize and internalize their problems (Rodríguez-Meirinhos et al., 2020).

AIM OF STUDY

The study was based on Lazarus and Folkman's (1984a) stress theory, basic psychological need theory (Ryan & Deci, 2017; Vansteenkiste & Ryan, 2013; Vansteenkiste et al., 2020), and the model proposed by Ntoumanis et al. (2009). It aimed to examine the relationship between need frustration of autonomy, competence, and relatedness, with stress and coping styles. It was predicted that need frustration would positively correlate with perceived stress, as well as the escape-avoidance style. It was also predicted that perceived stress would play a mediating role in the relationship between need frustration and coping styles.

PARTICIPANTS AND PROCEDURE

PARTICIPANTS

The sample contained 626 participants, including 42.65% women. The subjects' ages ranged from 18 to 40 years ($M = 22.22 \pm 4.29$). Most had secondary education (75.04%) and were single (46.88%) or in an informal relationship (45.44%).

PROCEDURE

The research was carried out with a paper-pencil method. Participants were recruited using snowball

sampling by trained psychology students. The research was completely voluntary and anonymous. All procedures performed in this study were approved by the Research Ethics Committee of the Institute of Psychology, University of Wrocław (approval number of research project 2022/DEROP) and in accordance with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

MEASURES

Basic Psychological Need Satisfaction and Frustration Scale. The frustration of basic psychological needs was examined using the Basic Psychological Need Satisfaction and Frustration Scale (BPNS&FS) by Chen et al. (2015) in the Polish adaptation of Tabiś et al. (2021). This method includes 6 subscales that measure the satisfaction and frustration of the needs of autonomy, competence, and relatedness. In this study, only the frustration subscales were used. Answers are given on a scale from 1 (*definitely not*) to 5 (*definitely yes*). The score is the sum of the answers within a given subscale. In the tested sample, Cronbach's α for the subscales used ranged from .73 to .79.

Perceived Stress Scale. Perceived stress was measured using the Perceived Stress Scale (PSS-10) by Cohen et al. (1983) in the Polish adaptation of Juczyński and Ogińska-Bulik (2009). This method refers to the cognitive-transactional understanding of stress and measures its generalized perception. The individual statements of the questionnaire refer to the assessment of life requirements as uncontrollable, unpredictable, or overloading. The questionnaire consists of ten questions on the frequency of cognitive and emotional stress responses during the prior month, with a response scale from 0 (*never*) to 4 (*very often*). In the tested sample, Cronbach's α was .88.

Coping Orientation to Problems Experienced. The Polish version of the Coping Orientation to Problems Experienced (COPE), by Carver et al. (1989) and adapted by Juczyński and Ogińska-Bulik (2009), was used to examine stress coping strategies. We used the instructions meant for measuring dispositional coping. The questionnaire measures preferences in terms of 15 coping strategies in stressful situations. The respondent assesses the statements on a four-point scale from 1 (*I rarely do this*) to 4 (*I almost always do this*).

Certain COPE item-total correlations of items with a given subscale were low ($r < .30$) or negative (for example, in the active coping subscale, item 47 correlated with $r = -.11$, and in the suppression of competing activities subscale, item 15 correlated with $r = .28$); therefore we removed the weakest and inadequate correlating items from all 15 scales. Thus each of the subscales eventually included three and not four items. Exploratory factor analysis was car-

ried out on the subscale results, which allowed for the categorization of strategies into coping styles. The above-mentioned procedures led to the specification of factors not present in the initial version (see Juczyński & Ogińska-Bulik, 2009), but they were theoretically sensible (see Table 1). Cronbach's α for the subscales ranged from .43 to .95.

All measurements were included as one survey, with appropriate instructions, a consent request, and a section on personal information.

DATA ANALYSIS

Statistical analyses were performed using the IBM SPSS program and the AMOS v.25 add-on. Exploratory factor analysis for the COPE questionnaire was performed using principal component analysis with Varimax rotation. The Kaiser criterion was used to determine the number of factors measured by COPE. The reliability of all the measures used was assessed using the Cronbach's α internal consistency index. Pearson's r correlation coefficient was used to analyze the covariance of the studied variables.

To verify the entire theoretical model, structural equation modeling was performed using the generalized least squares method with the bootstrap procedure (2000 draws). Because coping styles are related to each other (Carver et al., 1989), residuals of styles were correlated. Several goodness of fit indices were used. The χ^2 test of the significance of differences between the theoretical model with empirical data should give a statistically insignificant result ($p > .05$). This index often gives statistically significant results in large self-report samples, so it is assumed that its disadvantages are eliminated with a relative chi-square index (χ^2/df), which should be lower than 3.0 (Carmines & McIver, 1983). RMSEA should be less than .05 (Browne & Cudeck, 1993), while the GFI, AGFI, NFI and CFI indicators should assume values greater than .90 (Schreiber et al., 2006; Szymańska, 2016).

To check for common method bias, resulting from gathering all data using the same method (Fuller et al., 2016), we applied a post hoc factor analysis with Harman's single factor score. The total variance for a single factor was 14.92%, which is less than 50%, suggesting that the common method variance did not affect the data (Fuller et al., 2016).

RESULTS

COPE FACTOR ANALYSIS

Because we used the abbreviated version of the COPE Inventory, we conducted an exploratory factor analysis, as did the authors of the Polish adaptation

(see Juczyński & Ogińska-Bulik, 2009). A five-factor solution was obtained, which explained a total of 65% of the variance in the coping strategy measurement. The obtained factor structure of the COPE inventory is presented in Table 1.

The first factor was loaded by the following strategies: active coping, planning, suppression of competing activities, and restraint. Based on the content analysis, the factor was named problem-focused coping style. This style includes strategies that allow the individual to actively and attentively deal with the problem, such as setting aside other less important actions, preparing for action, then finally taking immediate steps to resolve difficulties.

The scales of use of instrumental and emotional social support and focus on and venting of emotions loaded the second factor. It was called an emotion-focused coping style. Individuals using this style are focused on dealing with negative emotions resulting from difficult situations. They concentrate on emotional states and seek understanding and compassion, as well as advice and support from others.

The third factor, called meaning-focused coping style, included the following strategies: positive reinterpretation and growth, acceptance, and humor. Such forms of coping include cognitive efforts that aim to change the meaning of a situation, the benefits of a given experience, accepting it, or psychologically distancing from it. Depending on the circumstances in which they are used, these strategies allow one to change approach to the problem or deal with difficult emotions.

Denial, mental disengagement, behavioral disengagement, and substance use loaded the fourth factor, called escape-avoidance coping style. The use of these strategies brings immediate and temporary relief to the individual, but it does not solve the problem that they have faced.

The fifth factor loaded only one strategy – religious coping. In further analyses, this factor was not taken into account. The other coping strategies mentioned are further interpreted as stress coping styles, i.e. sets of strategies with similar characteristics and functions (see Carver et al., 1989; Heszen, 2013; Juczyński & Ogińska-Bulik, 2009).

CORRELATION ANALYSIS

Frustration of all needs positively correlated at a moderate to high level with perceived stress ($.35 \leq r \leq .53$, $p < .001$). In terms of coping styles, the strongest covariation coefficients appeared between need frustration and escape-avoidance style ($.32 \leq r \leq .44$, $p < .001$). Problem-focused style weakly negatively correlated with competence frustration ($r = -.21$, $p < .001$) and marginally with relatedness frustration ($r = -.09$, $p = .027$). Emotion-focused style also weakly but posi-

Table 1*COPE questionnaire factor analysis results and reliability of subscales (Cronbach's α)*

Subscales	α	Factors				
		1	2	3	4	5
		Problem-focused coping style	Emotion-focused coping style	Meaning-focused coping style	Escape-avoidance coping style	Religious coping
1. Active coping	.66	.75				
2. Planning	.78	.82				
3. Use of instrumental social support	.84		.85			
4. Use of emotional social support	.90		.92			
5. Suppression of competing activities	.74	.82				
6. Religious coping	.94					.67
7. Positive reinterpretation and growth	.70			.52		
8. Restraint	.53	.53				
9. Acceptance	.70		.59			
10. Focus on and venting of emotions	.80		.76			
11. Denial	.59				.79	
12. Mental disengagement	.43				.61	
13. Behavioral disengagement	.77				.72	
14. Substance use	.95				.51	
15. Humor	.88			.80		
Explained variance		2.57	2.37	1.43	2.12	1.18
Proportion		.17	.16	.10	.14	.08

Note. COPE – Coping Orientation to Problems Experienced.

tively correlated with competence frustration ($r = .12$, $p = .004$). Low negative correlations were also found between meaning-focused style and frustration of each need: autonomy ($r = -.12$, $p = .004$), competence ($r = -.10$, $p = .014$), and relatedness ($r = -.10$, $p = .015$).

Perceived stress, apart from the need frustration correlation, was also related to coping styles: negatively with meaning-focused style ($r = -.29$, $p < .001$) and problem-focused style ($r = -.18$, $p < .001$), but positively and most strongly with escape-avoidance ($r = .42$, $p < .001$) and emotion-focused style ($r = .32$, $p < .001$). The exact correlation results are presented in Table 2.

PATH ANALYSIS

Structural equation modeling was performed to test the relationship between the frustration of needs, perceived stress, and coping styles. Figure 1 presents a model showing the relationship between need

frustration and coping styles with perceived stress as a mediator. This model obtained very good data fit quality parameters: $\chi^2(8) = 9.82$; $p = .278$; $\chi^2/df = 1.23$; GFI = .996; AGFI = .982; NFI = .978; CFI = .996; RMSEA = .019 (90% CI [.000-.053]). The most explained coping styles in the model were escape-avoidance ($R^2 = .26$) and emotion-focused styles ($R^2 = .13$). The least were meaning-focused ($R^2 = .08$) and problem-focused style ($R^2 = .06$). Perceived stress ($R^2 = .32$) played the role of a mediator. Detailed results of standardized total and indirect effects are presented in Table 3. The values and significance of the direct pathways are shown in Figure 1.

In the analyzed model, frustration of autonomy, competence and relatedness were moderately positively related to each other ($.41 \leq r \leq .48$, $p < .001$). Autonomy frustration directly positively determined perceived stress ($\beta = .22$, $p < .001$), escape-avoidance style ($\beta = .11$, $p = .008$) and problem-focused style ($\beta = .09$, $p = .032$). Indirectly – through perceived stress – it was weakly related to emotion-focused

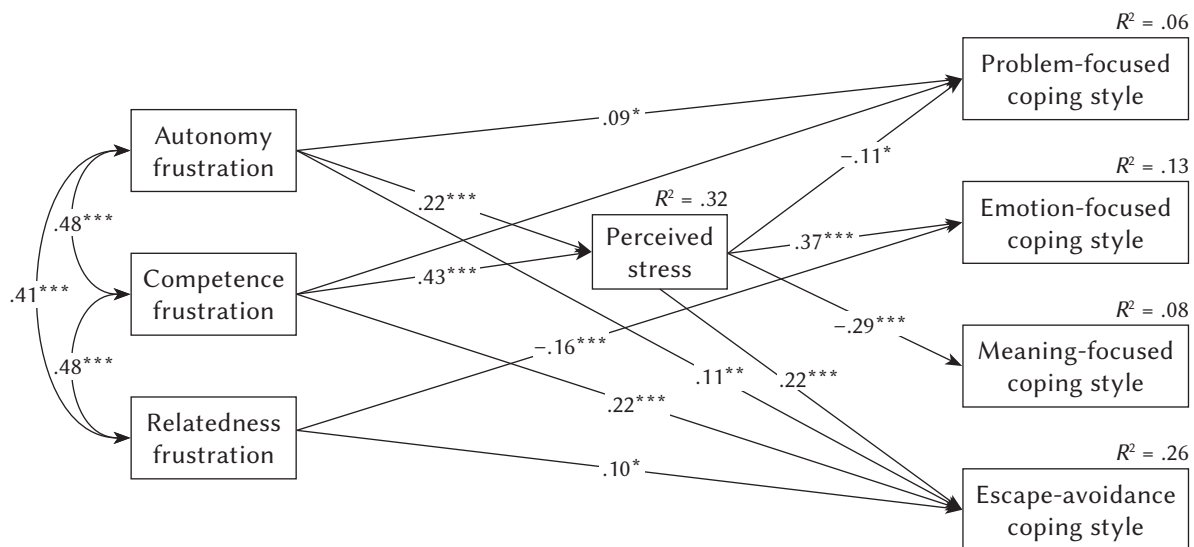
Table 2*Descriptive statistics, reliability (Cronbach's α), and correlations of the studied variables*

Variables	1.	2.	3.	4.	5.	6.	7.	8.
1. Autonomy frustration	–							
2. Competence frustration	.48***	–						
3. Relatedness frustration	.40***	.47***	–					
4. Perceived stress	.42***	.53***	.35***	–				
5. Problem-focused coping style	–.06	–.21***	–.09*	–.18***	–			
6. Emotion-focused coping style	.05	.12**	–.02	.32***	.19***	–		
7. Meaning-focused coping style	–.12**	–.10*	–.10*	–.29***	.21***	–.01	–	
8. Escape-avoidance coping style	.35***	.44***	.32***	.42***	–.31***	.11**	.03	–
<i>M</i>	10.46	9.70	7.61	18.52	31.84	23.42	22.42	21.33
<i>SD</i>	3.29	3.66	3.20	6.49	5.84	6.81	4.62	5.86
α	.73	.78	.79	.88	.74	.83	.46	.64

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Figure 1

Path model of autonomy, competence, and relatedness need frustration relationships with perceived stress and coping styles (direct effects)



Note. Residuals of styles and their correlations were not shown in the figure for the sake of simplicity; * $p < .05$, ** $p < .01$, *** $p < .001$.

($\beta = .08, p < .001$), meaning-focused ($\beta = -.06, p < .001$), escape-avoidance ($\beta = .05, p < .001$) and problem-focused styles ($\beta = -.02, p = .036$). Competence frustration directly positively determined perceived stress ($\beta = .43, p < .001$) and escape-avoidance style ($\beta = .22, p < .001$), but negatively determined problem-focused style ($\beta = -.20, p < .001$). Moreover, indirectly - through perceived stress - it was positively associated with emotion-focused style ($\beta = .16, p < .001$) and escape-avoidance style ($\beta = .10, p < .001$), but

negatively with meaning-focused ($\beta = -.12, p < .001$) and problem-focused styles ($\beta = -.05, p = .036$). Relatedness frustration determined directly and positively escape-avoidance style ($\beta = .10, p = .026$) and negatively emotion-focused style ($\beta = -.16, p < .001$). Perceived stress was positively related to emotion-focused ($\beta = .37, p < .001$) and escape-avoidance styles ($\beta = .22, p < .001$), and negatively with meaning-focused ($\beta = -.29, p < .001$) and problem-focused styles ($\beta = -.11, p = .036$).

Table 3

Standardized total and indirect effects of need frustration on coping styles, with the mediating role of perceived stress

Predictors	Dependent variables	STE	SIE
Autonomy frustration	Perceived stress	.22**	
	Problem-focused coping style	.07	-.02*
	Emotion-focused coping style	.08**	.08**
	Meaning-focused coping style	-.06***	-.06***
	Escape-avoidance coping style	.16***	.05**
Competence frustration	Perceived stress	.43**	
	Problem-focused coping style	-.25**	-.05*
	Emotion-focused coping style	.16**	.16**
	Meaning-focused coping style	-.12**	-.12**
	Escape-avoidance coping style	.32**	.10**
Relatedness frustration	Emotion-focused coping style	-.16**	
	Escape-avoidance coping style	.10*	
Perceived stress	Problem-focused coping style	-.11*	
	Emotion-focused coping style	.37**	
	Meaning-focused coping style	-.29**	
	Escape-avoidance coping style	.22**	

Note. STE – standardized total effects; SIE – standardized indirect effects; * $p < .05$, ** $p < .01$, *** $p < .001$.

DISCUSSION

The study aimed to examine the relationship between the frustration of basic psychological needs – autonomy, competence, and relatedness (Ryan & Deci, 2017) – and stress and coping styles. Individuals whose needs were more frustrated experienced more stress, and coped by focusing on their own emotions and escaping from problems. The obtained results indicate both direct and indirect (through perceived stress) effects of need frustration on preferences in coping.

An exploratory factor analysis of the abbreviated version of the COPE Inventory was carried out. Previous studies using COPE or Brief COPE identified various factors of coping strategies depending on the group studied as well as the difference between religious coping and other strategies (Kallasmaa & Pulver, 2000; Kimemia et al., 2011; Litman, 2006; Pang et al., 2013). In our study we identified four coping factors, consisting of several strategies as well as a separate disposition factor for coping through turning to religion (see Table 1). The identified factors differed from those obtained by the authors of the Polish adaptation of this measure (Juczyński & Ogińska-Bulik, 2009). However, they are consistent with the results of other studies that indicate the preferences of problem-focused, emotion-focused, avoidance, and

meaning-focused coping (Cheng et al., 2023; Endler & Parker, 1990; Folkman & Moskowitz, 2007; Ziolkowska et al., 2020). As indicated by Folkman and Moskowitz (2007), the content of COPE items makes it possible to measure strategies focused on changing the meaning. The identified factors, referred to as coping styles, are sets of coping strategies that are at the disposal of an individual and are used habitually. These strategies are similar in terms of their characteristics and functions (Carver & Scheier, 1994; Carver et al., 1989; Heszen, 2013). Only the turning to religion strategy did not fit into any group, remaining a separate strategy. The authors were aware of the broad functionality of this strategy, but the COPE inventory treats such coping as a coherent and unitary action (Carver et al., 1989). Some authors, however, view religious coping as a distinct style rich in a variety of strategies (Pargament et al., 2000; Ziolkowska et al., 2020).

Need frustration, as expected, was associated with perceived stress and coping styles. The more frustrated were the needs, the higher was the stress perception, which is consistent with previous studies (Campbell et al., 2018; Neufeld et al., 2020). Need frustration favors a lower tendency to cope using problem-focused and meaning-focused styles but stronger preference for the escape-avoidance and emotion-fo-

cused styles (Ntoumanis et al., 2009). Importantly, the frustration of all needs correlated most strongly with escape-avoidance coping. Need satisfaction is the basis for the development and possession of resources that are important in coping processes, such as high self-esteem (Ümmet, 2015), well-being (Chen et al., 2015), autonomous motivation (Olafsen et al., 2017), or engagement (De Francisco et al., 2020). An individual whose needs are frustrated is not only deprived of such resources but also forced to use defensive strategies. If used chronically and inflexibly, they can hinder effective coping. As a consequence, they lead to adaptation problems (Vansteenkiste & Ryan, 2013).

The path analysis model (Figure 1) confirmed that basic need frustration is positively associated with the use of an escape-avoidance coping style. This relationship occurred directly, and in the case of autonomy and competence frustration, also indirectly through perceived stress. The stronger the frustration of these needs is, the stronger is the perceived stress, which transfers into escape-avoidance coping preference.

Autonomy and competence frustration also had a positive effect on the emotion-focused style through perceived stress. Higher stress levels are associated with the use of emotion-focused strategies to cope (Crego et al., 2016). Emotion-focused coping usually appears in stressful situations deemed as unchangeable (Ben-Zur, 2020; Lazarus & Folkman, 1984a). This assessment of the situation may be a result of feeling helpless and a lack of agency resulting from need frustration (Vansteenkiste & Ryan, 2013). These results confirm that high levels of stress may lead an individual to use strategies aimed primarily at stress alleviation (Crego et al., 2016; Lazarus & Folkman, 1984a).

Relatedness frustration directly and negatively determined the preferences of the emotion-focused style. The more frustrated the need was, the weaker the application of the style became. Strategies for obtaining instrumental and emotional support, which significantly define this style (see Table 1), require access and the ability to seek help from other people (Carver et al., 1989). Due to a lack of belonging to a social network, which equates to relatedness frustration (Vansteenkiste et al., 2020), it is difficult to cope in this way.

In the analyzed model competence frustration had a significant negative direct effect on the problem-focused style. Autonomy frustration showed a positive direct association but a negative indirect association with this style. The total effect of autonomy frustration on problem-focused style was not significant, so it is hard to interpret these relations. According to the cognitive-transactional theory of Lazarus and Folkman (1984a), actions performed in a stressful situation depend on the appraisal of the individual's ability to cope. A person copes in a problem-focused way when, in their opinion, they possess sufficient resources to overcome the stressor. Similar conclusions

are suggested by studies on self-efficacy (Crego et al., 2016; Konaszewski et al., 2019).

Autonomy and competence frustration were indirectly associated with the meaning-focused style, through perceived stress. The stronger the frustration of these needs was, the stronger was the perceived stress; but the stronger the stress was, the lower was the tendency to use strategies aimed at changing the meaning of a stressful situation. This style includes both less and more constructive cognitive activities, such as the use of humor, accepting the situation, and positively reinterpreting and seeking benefits for one's development. In the classical theory of Lazarus and Folkman (1984a), such strategies are understood as emotion-focused. This style can also relate to the ideas of Folkman and Moskowitz (2007), which emphasized coping through a meaning-focused style. However, for the need frustration of competence and autonomy, increasing perceived stress, to trigger the tendency to constructively change the meaning of stressful transactions, specific conditions must exist. When an individual is ready to accept the situation and maintain distance from it (for example by using humor), then it becomes possible to re-evaluate its meanings (Folkman & Moskowitz, 2007).

The present study has some limitations that should be taken into account when drawing conclusions from the results. Firstly, the coefficients (β) of most paths are small and the coefficients of determination (R^2) of some dependent variables were low. Secondly, the sample was not representative of the population it came from. Thirdly, the internal consistency of some COPE Inventory scales was low. For this reason, future research should use other, more reliable methods to measure coping with stress. Finally, due to the cross-sectional nature of the research, it is not possible to conclude about causality between variables. Our hypotheses and interpretations were based on the relationships suggested in the literature (for example, Lazarus & Folkman, 1984a; Ntoumanis et al., 2009); however, there have been studies that showed different directions of dependence between needs and stress. Aldrup et al. (2017) inferred that it is the satisfaction of basic needs that can play the role of a mediator, and stress is a dependent variable. In the future, it is worth including in the analysis sociodemographic variables such as gender or marital status and performing longitudinal studies to verify the causality of the observed associations.

CONCLUSIONS

The present results are consistent with the predictions based on the classical theory of stress by Lazarus and Folkman (1984a) and the theory of basic psychological needs (Vansteenkiste & Ryan, 2013; Vansteenkiste et al., 2020). They show the signifi-

cant role of frustration of basic psychological needs in explaining human behavior in coping. The stress experienced by an individual is also significant, as it plays a mediating role in the relationship between the need frustration of autonomy and competence, and coping styles. The frustration of basic psychological needs increases the perceived stress and the tendency to use escape-avoidance coping. Explaining the formation conditions of this style can help in organizing effective psychological interventions for people who cope maladaptively.

DISCLOSURE

The authors declare no conflict of interest.

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