Chapter 9 Mastering the COVID-19 Pandemic Crisis: From Anxiety to Hope



Andreas M. Krafft, JohnBosco Chika Chukwuorji, Rajneesh Choubisa, Stella Comte, Fabien Fenouillet, Valle Flores-Lucas, Tharina Guse, Elżbieta Kasprzak, Charles Martin-Krumm, Helena Agueda Marujo, Chitra Nair, Mark Sinclair, Alena Slezackova, Patryk Stecz, and Olga Varsos

A. M. Krafft (⊠)

Institute of Systemic Management and Public Governance, University of St. Gallen, St. Gallen, Switzerland

e-mail: andreas.krafft@unisg.ch

J. C. Chukwuorji

Department of Psychology, University of Nigeria, Nsukka, Nigeria

R. Choubisa

Department of Humanities and Social Sciences, Birla Institute of Technology and Science, (BITS) Pilani, Pilani, India

S. Comte

Department of Psychology, University of Cagliari, Cagliari, Italy

F. Fenouillet

Interdisciplinary Laboratory in Neuroscience, Physiology and Psychology: Learning, Physical Activity and Health, Université Paris Nanterre, Nanterre, France

V. Flores-Lucas

Department of Psychology, University of Valladolid, Valladolid, Spain

T Guse

Department of Psychology, University of Pretoria, Pretoria, South Africa

E. Kasprzak

Department of Work and Organisational Psychology, Institute of Psychology, Kazimierz Wielki University of Bydgoszcz, Bydgoszcz, Poland

C. Martin-Krumm

Vulnerability, Capability, and Recovery Laboratory, Ecole de Psychologues Praticiens de Paris, Paris, France

H. A. Marujo

Instituto Superior de Ciências Sociais e Politicas, University of Lisbon, Lisbon, Portugal

C Nair

K. N. M. Government Arts and Science College Kanjiramkulam, University of Kerala, Thiruvananthapuram, India

© The Author(s) 2023

Abstract This chapter presents selected results of the Hope Barometer survey during the pandemic years of 2020 and 2021. Against the background of the intense feelings of stress and anxiety in these times of crisis, we first review current theories on psychological stress and coping, present results of our empirical studies during the pandemic and then focus on the role and importance of hope in relation to positive coping styles, well-being, and stress-related personal growth. A central aim of our research is to investigate the role of culture in the perception of stress and hope (as the counterpart of anxiety) and in the choice of different coping strategies, as evident in their relationship to experiences of well-being and personal growth. We compared the results of 11 countries with cross-sectional data collected in November 2019 (N = 9092), November 2020 (N = 9536) and November 2021 (N = 9093). After reporting general findings, we engage in an analysis of the most striking differences between the countries. Our results revealed that a majority of the participants experienced moderate stress levels, but with significant differences between the samples and notable changes between 2020 and 2021. Most people, especially in more collectivistic countries such as Nigeria, South Africa, India, and Portugal, remained hopeful, applied positive coping strategies, and enjoyed moderate to high levels of well-being and personal growth. Our findings highlight the importance of emotion-focused, social, and religious coping sources, besides problem-focused coping, for mastering the crisis, which are predominant in collectivistic societies.

9.1 Introduction

During the years 2020 and 2021, the worldwide COVID-19 pandemic has transformed many aspects of society resulting not only in a global health but also in an economic, social, and political crisis with profound implications for people's lives. In order to reduce the number of infections, governments around the globe have implemented several measures, such as general lockdowns, reducing economic and social activities to a minimum, temporary closing of education and cultural institutions, restricting mobility, confining people to stay at home and to work remotely, imposing social distancing to avoid close contact and determining other

M. Sinclair

Mentor Education, Windsor, VIC, Australia

A. Slezackova

Department of Medical Psychology and Psychosomatics, Faculty of Medicine, Masaryk University, Brno, Czech Republic

P. Stecz

Department of Clinical Psychology and Psychopathology, Institute of Psychology, University of Łódź, Łódź, Poland

O. Varsos

Centre for Positive Change, Melbourne, VIC, Australia

far-reaching safety procedures and limitations to public life. The threat to one's physical health combined with experiences of social isolation, economic hardships and uncertainty about the future have provoked many kinds of fears as well as feelings of anxiety and helplessness but have also inspired new energies and hopes.

Many studies in several countries have already investigated the negative and in some cases traumatic consequences of the pandemic crisis on the mental health of the population such as psychological distress, fear, anxiety, depression, burn-out, and further stress-related disorders (Alshehri et al., 2020; Boyraz & Legros, 2020; Bridgland et al., 2021; Brooks et al., 2020; Cooke et al., 2020; Horn et al., 2020; Husky et al., 2020; Lakhan et al., 2020; Maia & Dias, 2020; Rehman et al., 2021; Roy et al., 2020; Taylor et al., 2020a, 2020b; Torales et al., 2020; Tsamakis et al., 2020; Usher et al., 2020; Wu et al., 2020). Beyond the obvious burdens on the physical and mental health of the population, one main question has been how people reacted to the threats, challenges and uncertainties and what they did in order to cope with stressful situations and mitigate their negative effects (Agha, 2021; Ahuja, 2021; Bhattacharjee & Ghosh, 2021; Budimir et al., 2021; Engelbrecht et al., 2021; Garbóczy et al., 2021; Guszkowska & Dąbrowska-Zimakowska, 2022; Kar et al., 2021; Minahan et al., 2021; Morales-Rodríguez, 2021; Polizzi et al., 2020; Rogowska et al., 2021; Szkody et al., 2021).

From another line of research, several authors have highlighted the importance of hope in seemingly hopeless situations, especially when uncertainty regarding the future is high and perceived personal control is low (Averill et al., 1990; Bruininks & Malle, 2005; Scioli & Biller, 2009; Tennen et al., 2002; Tong et al., 2010). Erikson (1959) has recognized that hope emerges out of fear and anxiety, and understood it as the first and fundamental human virtue necessary for our psychosocial development. Hope is not only the counterpart of fear and anxiety but also of despair, cynicism, apathy, helplessness, and dejection (Govier, 2011; Marcel, 1951).

Several authors have underlined the role of (individualistic and collectivistic) cultures in the perception of stress and in the appraisal and choice of diverse coping strategies (Aldwin, 2004; Chun et al., 2006; Heppner et al., 2006; Hu et al., 2018). Furthermore, Averill et al. (1990) as well as Averill and Sundararajan (2005) investigated the nature and role of hope across individualistic and collectivistic cultures, concluding that people in different countries differ not only with regard to the kind of targets they hope for, but also with regard to the actions performed in order to fulfill them.

Most of the current psychological research during the pandemic was centered on the study of stress, anxiety, coping strategies, and their positive and negative outcomes related to mental disorders. The focus of the Hope Barometer during these crisis years was to investigate the phenomenon of hope in relation to perceived stress, coping styles, stress-related growth, and well-being across countries. Based on Lazarus' (1966, 1990) transactional and dynamic theory of stress and coping as well as contemporary research findings demonstrating the predominance of posttraumatic growth after stressful experiences (Armeli et al., 2001; Linley et al., 2008; Tedeschi & Calhoun, 2004), the aim of this chapter is to explore the role of hope in mastering stressful situations and the way people in different countries not

only coped with, but also experienced personal growth as a consequence of the COVID-19 pandemic. In our study we therefore assessed the levels and changes of people's perceived stress, hope, and well-being in relation to specific coping strategies and their association with areas of personal growth.

9.2 Theoretical Background

9.2.1 Psychological Stress: Between Anxiety and Hope

Recent studies during the COVID-19-pandemic in several countries revealed that the sources and levels of stress varied significantly between different population groups. The most important sources of stress were the fear of becoming infected, worries related to the financial and economic consequences of the lockdowns, being isolated from family and friends, the daily bad and fake news in the mass media, and the general uncertainty about the future (Agha, 2021; Taylor et al., 2020a). Most studies showed that the levels of stress were more pronounced among young people and individuals with lower financial and social resources (Bhattacharjee & Ghosh, 2021; Kar et al., 2021; Maia & Dias, 2020; Rehman et al., 2021). Some studies also found substantial changes between the first and the second waves of COVID-19. Not only did levels of perceived stress increase and levels of life-satisfaction decrease, but significant changes in coping styles also occurred (Rogowska et al., 2021).

The effect of the COVID-19 pandemic on people's well-being can be understood using Lazarus' theory of stress and coping (Lazarus, 1966; Lazarus & Folkman, 1984). Basically, psychological stress is conceptualized as a prominently subjective phenomenon. Lazarus' transactional model is focused on the relationship between the person and the environment. A person starts to feel stressed once he or she perceives that external or even internal demands exceed personal resources to manage them. The subjective appraisal of the stressors and the available resources and strategies to cope with them are key elements. This means that psychological stress relates to the significance of a certain stressor as appraised by the individual.

People can differ greatly in the perception of stressors depending on their life situation, social relationships, character traits, and past experiences. Moreover, stress is not a simple phenomenon, but it is a complex and multifaceted one. Psychologically speaking, individual perception of stress is linked to three essential experiences (Cohen et al., 1983):

- 1. Unpredictability: The less one can assess and predict future events, the more uncertain and subsequently stressed one will feel.
- 2. Uncontrollability: When situations get out of control or people have the impression that they cannot sufficiently handle essential aspects in life, this in turn increases the feeling of stress because one feels at the mercy of external conditions.
- 3. Overload: Increasing demands as well as new and constantly changing situations can result in personal overload.

The appraisal process of the relationship between the individual and the environment is by and large influenced by basic beliefs as well as by positive and negative emotions and consists of two interrelated phases called primary and secondary appraisal (Lazarus, 1990, 1993). During the primary appraisal the individual can perceive the stressor as harming, threatening, or challenging, depending not only on the objective facts but also on his or her personal beliefs, attitudes, and characteristics. Whereas harm refers to the perception of damage or loss, threat is the anticipation of a possible future harm. Experiencing a stressor as harming or threatening is associated with negative emotions such as anxiety, sadness, anger, or frustration that may block mental processes, impairing well-being and possibly creating psychological problems.

Interpreting stressors as challenges, instead, is associated with feelings of hope, defined as "fearing the worst but wanting better" (Lazarus, 1993, p. 13). A hopeful attitude is motivating, mobilizing, and expansive and it is the central attitude to overcoming obstacles. Whether a stressor is interpreted as threatening or challenging is also influenced by secondary appraisal, which is the process of assessing what can be done to manage the situation based on one's resources to cope with the stressors. This secondary appraisal has an impact on the primary appraisal of the stressors and determines the concrete reactions to it.

The perception of stress and the reaction to it are basically a dynamic process. The interplay between first and secondary appraisal and the subsequent coping activities are constantly changing (Lazarus, 1990). The way people cope with a stressful situation will affect the way they appraise it and vice-versa. Changes take place in people's emotions, beliefs, motivation, coping responses, and outcomes. For example, at the beginning of the pandemic in 2020 many people felt vulnerable and overwhelmed. After several months, people learned to adapt to the circumstances and rearranged their lives. Original fears could be converted in manageable challenges and hopes. Other people, instead, might have downplayed the severity of the pandemic, believing everything would be fine again after few weeks or months. After a year these people could have felt disappointed and frustrated. Furthermore, the quick availability of vaccines changed the appraisal of the situation, but the appearance of new variants of the virus aggravated the conditions again (Bhattacharjee & Ghosh, 2021; Guszkowska & Dąbrowska-Zimakowska, 2022; Rogowska et al., 2021).

All these experiences and responses are part of a constantly changing appraisal and coping process that is very subjective and emotional in nature and gives rise to a back and forth between anxiety and hope. Therefore, Lazarus (1993, p. 10) comes to the following conclusion: "Knowing, for example, that in a given encounter (or as a consistent pattern across encounters) the individual feels angry, anxious, guilty, sad, happy, or hopeful tells us much more than knowing merely that he/she is harmed, threatened, or challenged." Most people are able to learn new strategies to manage a stressful situation and to modify their behavior to deal with changing conditions. Whereas almost all research during 2020 and 2021 focused on stress and related negative emotions such as anxiety, fear, anger, and depression, only a few studies

(e.g., Gallagher et al., 2021; Hu et al., 2021) investigated the role of hope and positive growth during the pandemic.

9.2.2 Coping Strategies and the Experience of Hope

Whether a stressful situation is assessed as threatening or challenging and therefore faced with fear or hope can be determined by the kind of coping activities and strategies people choose to master it. Based on the work of Lazarus and Folkman (1984), coping activities have been classified into three categories: problem-focused, emotion-focused, and dysfunctional coping. People are either able to influence the circumstances which they are confronting or they can alter the way in which they interpret these circumstances. This means that coping can and must take place not only in deeds but also (and primarily) in thoughts and feelings (Lazarus, 1966),

In many situations, people can do something to improve the current conditions, for themselves, for their families, at work, etc. Problem-focused coping is about confronting a stressful situation, taking it as a challenge and changing something for the better (solving problems, finding new solutions, etc.). However, in order to be able to understand unfavorable circumstances as challenges instead of as threats, we firstly have to change the way we interpret what is happening. This secondary appraisal based on an emotion-focused coping approach makes external conditions look much more benign and tractable in the first place and reduce their frightening character (Lazarus, 1993). This makes it possible to convert apparently insurmountable threats into manageable challenges by simultaneously engaging in an emotional shift from anxiety to hope. The unfavorable alternative, characterized by help- and hopelessness, is to feel overwhelmed by the threats, which usually leads people to deal with them in an inappropriate way, such as denying or distancing oneself from reality, refraining from any constructive response, or even engaging in harmful reactions like substance abuse and aggressive behavior (Carver et al., 1989).

Carver and his colleagues identified and defined four problem-focused, five emotion-focused, and five dysfunctional coping strategies (Carver, 1997; Carver et al., 1989), which can be associated with the perception of hope:

Category I: Problem-focused coping strategies

- 1. *Active coping*: Concrete measures are taken to change the situation or mitigate the negative effects of a situation. Active coping contains the hope for improvement.
- 2. *Planning*: As long as no concrete measures can be taken, possible strategies for action and future steps can be envisioned and planned. Planning is an expression of hope in terms of engagement and patience.
- 3. *Self-direction*: Focusing on things that one can influence (e.g., one's own tasks in the family or at work). This does not solve the problem immediately, but the focus is directed to what is currently feasible to do. Self-direction demonstrates the will to refrain from giving up and to remain hopeful, waiting for future opportunities.

4. *Instrumental support*: Seeking specific support from other people. This can be of a material nature (e.g., receiving financial aid) or relate to active help in accomplishing concrete tasks (e.g., caring for children). Instrumental support is a source of hope.

Category II: Emotion-focused coping strategies

- 1. *Acceptance*: Reality is accepted as it is but without capitulating to it. This could be a precondition for active and constructive coping. The opposite of acceptance is denial. Hope always recognizes reality, instead of escaping from it.
- 2. *Positive reframing*: A positive reassessment of the situation takes place without denying the negative aspects. For example, not only the problems but also the opportunities are seen in the situation. Positive reframing turns anxiety into hope.
- 3. *Emotional support*: The other form of social support is aimed at personal moral and emotional encouragement. In difficult situations people need a sympathetic ear, understanding and human closeness. Emotional support is an extraordinary hope booster.
- 4. *Religion*: For many people, belief in God or a Higher Power and involvement in a religious community are valuable resources for coping with a crisis. Thus, for many individuals, religious faith is a foundation of hope.
- 5. *Humor*: One takes the situation with a pinch of cheerful serenity. However, the humor must be healthy and not fatalistic. Humor can be an expression of hopeful serenity and calm.

Category III: Dysfunctional coping strategies

- 1. *Denial*: Sometimes looking away can have a positive effect, for example, by making one worry less about the future. However, denying a reality often only creates additional problems, especially if nothing is done to improve the situation. Denial is based on fear rather than on hope.
- 2. *Venting*: Negative feelings are allowed and expressed openly. Such a reaction can be temporarily useful if it leads to feeling relieved. In the longer term, however, the negative consequences are usually greater. Venting is associated with negative feelings instead with hope.
- 3. *Disengagement*: Disengagement is exactly the opposite of commitment and an expression of a lack of courage and help. This occurs when individuals refrain from any attempt to change something or to achieve certain goals. Disengagement is a manifestation of help- and hopelessness.
- 4. *Self-blame*: In some situations, people may tend to look for the causes of their problems only within themselves and therefore feel guilty. Especially when self-esteem is low, people tend to blame themselves ("If only I hadn't . . .", etc.). Self-blame impairs self-confidence and hope.
- 5. Substance abuse: In the event of anxiety, worry, loss of control, and excessive demands, people sometimes resort to excessive consumption of alcohol and harmful substances. This only worsens the situation (their own health, social relationships, etc.). Substance abuse is a consequence of overwhelming help- and hopelessness.

Several studies during the pandemic have shown the predominance of emotion- and problem-focused coping strategies to overcome anxiety and to re-establish wellbeing as well as the negative effects of dysfunctional coping styles (Agha, 2021; Ahuja, 2021; Bhattacharjee & Ghosh, 2021; Budimir et al., 2021; Garbóczy et al., 2021; Guszkowska & Dabrowska-Zimakowska, 2022; Kar et al., 2021; Mahamid & Bdier, 2021; Minahan et al., 2021; Morales-Rodríguez, 2021; Rogowska et al., 2021). In a study among participants from 20 countries, Kar et al. (2021) reported that "hoping for the best" was the most frequently adopted strategy to cope with anxiety and that dysfunctional reactions such as "avoiding thinking about it" and "struggling to cope" were related to significantly higher levels of anxiety and depression. Similarly, in a representative study in Austria, the authors disclosed that positive thinking, active stress coping, and social support were positively related to psychological life quality, well-being, and negatively predicted perceived stress, depression, and anxiety (Budimir et al., 2021). The combination of emotion- and problem-focused coping styles reveal that hope and a positive attitude must not be confounded with wishful thinking. Garbóczy et al. (2021) similarly indicated that whereas a positive attitude was associated with lower levels of psychological stress, wishful thinking, to the contrary, was related with higher levels of stress and anxiety. Furthermore, in line with Lazarus' transactional model of stress, some studies have evidenced a shift in coping styles during 2020 and 2021. In Poland for example, Rogowska et al. (2021) observed that during this period problem-oriented strategies decreased and emotion-focused behaviors slightly increased.

9.2.3 The Role of Culture

The role of culture as a significant factor in relation to the perception of stress and the adoption of different coping styles has received increased attention among researchers. Tseng (2001), for example, has highlighted that culture has a broad impact on stress in multiple dimensions, since "... culture influences the occurrence of stress, modifies the perception or appraisal of the stress, is involved in the selection of a coping style, and has an impact on the supporting resources available to the subject" (p. 125). Culturally anchored values, beliefs, norms, and habits can influence how people deal with stressful situations, but certain social expectations and norms can also be reasons causing distress in the individual. The prescription of roles and duties together with the pressure to perform or the expectation to behave in a certain manner could increase the demands on the individual, exacerbating instead of alleviating the perception of stress (Chun et al., 2006; Moos, 1984, 2002).

On the other hand, people socialized within a certain culture could have the propensity to appraise a stressful situation in a specific way by attributing the same meaning to it and to choose similar coping patterns, which consist of generally accepted and expected attitudes and behaviors in dealing with the stressors (Tseng, 2001). Cross-cultural literature on stress and coping has identified several cultural factors that seem to influence the appraisal and the coping styles in different societies

and social groups such as the type of self-construal, the kinds of control, attribution styles as well as coping goals, and motivations (Aldwin, 2004; Chun et al., 2006; Heppner et al., 2006; Hu et al., 2018; Kuo et al., 2006). Basically, all these authors recognize fundamental differences in how people growing up and living in individualistic and collectivistic cultures perceive and cope with stress. However, it is important to be aware of both the more generalizable psychological universals at an individual level as well as culture specific patterns at the social level (Heppner et al., 2006).

According to Markus and Kitayama (1991, 2003), Shulruf et al. (2007, 2011) as well as Triandis (1996, 2001), people from individualistic and collectivistic cultures differ with regard to their independent vs. interdependent self-construals, the internal or external control locus, a primary vs. a secondary control target (on the environment or on oneself), as well as regarding the type of individual or social goals they engage in. Reverting to the person-environment transactional stress model of Lazarus and Folkman (1984), sociocultural groups can develop different beliefs regarding the origin and meaning of stressors and the appropriate means to cope with them (Aldwin, 2004). For example, whereas people from individualistic cultures may attribute causes of events to themselves or to other individuals (i.e., looking for and blaming the culprit), individuals from collectivistic cultures may have the tendency to attribute the origin of events to general and impersonal circumstances (such as fate, destiny, providence, etc.). Furthermore, Chun et al. (2006) hypothesized that individualistic cultures would be more prone to interpret stressful situations as challenges, and that collectivistic cultures would tend to understand them as threats in order to avoid possible harm and losses. This would imply that, based on primary appraisal and assuming all other parameters are equal, people from collectivistic cultures would display higher levels of stress than people from individualistic cultures.

However, people also differ with regard to the secondary appraisal which takes into account the resources available in order to cope with the stressors. Individuals from individualistic cultures seem to have a stronger focus on the internal locus of control such as self-confidence, individual capabilities, etc., developing coping strategies centering on one's own needs and directed to change the external environment to promote positive outcomes (especially for oneself). Alternately, people from collectivistic cultures prefer to focus on external coping sources like social support and religious faith, by simultaneously emphasizing the secondary control of their internal cognitive and emotional states in order to adapt to the external circumstances and avoid harm to themselves and others (Chun et al., 2006; Yeh et al., 2006). Consequently, in individualistic cultures people would be more oriented to engage in problem-focused coping activities (e.g., active coping and striving), and in collectivistic cultures individuals would favor more passive and emotion-focused coping strategies (e.g., family support, emotional backing, and religious practices) with the goal to preserve social cohesion and harmony (Hu et al., 2018). However, we must keep in mind that at the level of the individual person, individualistic and collectivistic characteristics may coexist and vary in degree due

to different socialization and acculturation experiences and personality traits (Kuo et al., 2006).

In summary, cultural values, beliefs, norms and habits can influence levels of stress, anxiety, hope, and well-being of the population in several ways: Specifically, this can occur by posing certain stressors on the individual (pressures and expectations), by influencing the appraisal of a given stressful situation (as threat or challenge), by focusing on the available (individual or social) resources, and by motivating the adoption of certain (problem- or emotion-focused) coping strategies. Beyond these socio-psychological mechanisms, we also have to be aware of the role and impact of institutions such as the economic, the political, the education, and the health system, charity organizations, neighborhood associations, and social groups, etc. (Aldwin, 2004), which can provide resources to alleviate existing burdens or vice-versa make a sad situation even worse (due to mismanagement, corruption, lack of funds, etc.).

9.2.4 Posttraumatic Growth and Hope

The pandemic has occasioned widespread emotional distress in almost all people, sectors, and communities of society. Most psychological studies performed during the pandemic have centered on mental health risks and the appearance of posttraumatic stress disorders such as long-lasting anxiety, sadness, depression, and related physical dysfunctions such as fatigue, headaches, and insomnia, which have been well documented (e.g., Boyraz & Legros, 2020; Casagrande et al., 2020; Kar et al., 2021; Liu et al., 2020; Minahan et al., 2021).

From a positive psychological perspective, one major question is how people could find new meaning out of this crisis situation and possibly experience positive changes and personal growth (Linley & Joseph, 2011). For example, beyond the uncertainty due to changes at work and the worries about the future, many people reported positive experiences such as having enjoyed spending more time with their family and children, having had more time to pursue other activities or hobbies, and having performed more physical activity during the lockdowns (de Quervain et al., 2020). The Swiss Household Panel reported shifts in people's mindsets during and after the pandemic (Tillmann et al., 2021). For many people, the world after the pandemic is no longer the same. Other things became much more important than before. Many people desire a different life and do not want to go back to the previous ways of living. Some people have rearranged their lives, changing their jobs, or even starting their own businesses, and others have become more spiritual. Especially people who were negatively affected by the pandemic and lost their jobs have developed a different idea of a good life.

All these experiences show that life crises can offer new possibilities for positive personal change and growth. Psychological research has referred to these phenomena using different terms such as stress-related or posttraumatic growth (Armeli et al., 2001). The most common term coined by Calhoun and Tedeschi is that of

posttraumatic growth (PTG), which is defined as the "experience of positive change that occurs as a result of the struggle with highly challenging life crises" (Tedeschi & Calhoun, 2004, p. 1). This means that "posttraumatic growth describes the experience of individuals whose development, at least in some areas, has surpassed what was present before the struggle with crises occurred. The individual has not only survived, but has experienced changes that are viewed as important, and that go beyond what was the previous status quo. Posttraumatic growth is not simply a return to baseline—it is an experience of improvement that for some persons is deeply profound" (p. 4).

Tedeschi and Calhoun (1995) identified five main areas of growth after a stressful or traumatic situation:

- 1. Appreciation of life and new life philosophy: People look at life with different eyes. They develop a new mindfulness and perceive each day more consciously. They realize how precious life is, feeling gratitude for many small and big things in life. Life is taken with greater ease and they enjoy every moment appreciating what they have.
- Personal strength and self-awareness: People feel stronger and more confident because they know they can handle difficult situations. They feel more experienced and may also feel that they have grown personally and became better persons.
- 3. *New possibilities and priorities*: People realize what is really important and valuable to them. They develop new interests and set new priorities. Sometimes, life takes on a new direction. New paths and perspectives open up and people want to do more good in life and change things in a positive way.
- 4. *Relationships with other people*: Individuals recognize how important and valuable social relationships are. Relationships with family members and friends become deeper and more intimate. The person is able to form closer and more empathetic relationships with others. He or she feels more sensitivity and compassion for others and is increasingly willing to give and accept help.
- 5. *Religiosity and Spirituality*: People's religious faith and spirituality are strengthened. They develop more interest in and understanding of spiritual matters and a greater engagement with existential questions take place.

Previous research on stress-related and posttraumatic growth revealed that the experiences of positive effects after traumatic experiences are by far more numerous than the cases of post-traumatic stress disorders (Tedeschi & Calhoun, 2004). However, the negative and positive effects after a crisis experience coexist and are emotional in nature. The direct impact of a negative life event is primarily negative, leading to uncertainty, distress, and anxiety. The secondary effect is related to a person's response to the event (Armeli et al., 2001). How the individual assesses and copes with the initial negative experience is crucial in determining whether a positive turn may occur or not. Positive reframing, the support of others, and an active engagement in dealing with the negative situation have proven to be particularly effective in fostering personal development and growth (Collins et al., 1990).

Considering that PTG has a strong emotional component, one central aim in our research was to assess the relationship between PTG and hope. Fredrickson (2013) highlighted the transformative character of hope as one of the ten most frequently experienced positive emotions in daily life, which has the effect of fostering personal growth. Hope, as a positive emotion broadens the mindset, the scope of attention, and the thought and action repertoire, nurturing psychological, social, and even physical resources to cope with adversity. The second important effect of hope as a positive emotion is that it transforms the individual for the better. While certain emotions such as experiencing a good mood and pleasure nourish hedonic happiness, hope can be considered part of the eudaimonic domain of flourishing, connected to inner personal growth, meaning in life, and relations with others (Cohn & Fredrickson, 2009). Similarly, Joseph and Linley (2005) also claimed that posttraumatic growth can be related to an increase in eudaimonic instead of hedonic well-being, since eudaimonic or psychological well-being is strongly connected with existential life challenges. Furthermore, because of the broadening and growth effect, hopeful people tend to display more altruistic and generative behavior by helping others, taking a long-term view of things, instead of satisfying short-term needs, thinking beyond the struggles of the present moment, and adopting moral values such as friendship, gratitude, generativity, selflessness, kindness, and inclusiveness towards strangers (Cohn & Fredrickson, 2006).

Tedeschi and Calhoun (2004) have explicitly pointed out that traumatic events such as an earthquake or a financial crisis can also affect entire countries and societies and that these collective experiences can trigger social change for the better or the worse. Crises can generate a cultural, political, and economic shift with far reaching social consequences. Existing values and behaviors (e.g., travel and consumption habits) can be questioned and transformed by creating new ideas about what is good for society and which measures have to be taken in order to improve the general quality of life and the natural environment.

Whether the pandemic has generated a positive effect on the population, changing or developing a society for the better has not been examined yet and has still to be investigated. Furthermore, previous research has shown that the relationship between posttraumatic growth, perceived distress, and well-being is not always clear. PTG is sometimes, but not always, related to lower perceived stress and higher levels of well-being (Tedeschi & Calhoun, 2004). In our study, based on data collected in November 2021 and including samples from 11 countries, we assessed the degree of growth experienced by people in the five domains of PTG and examined the results in relation with reported levels of perceived hope, stress, as well as hedonic, psychological, and social well-being.

9.3 The Current Study

9.3.1 General Aim

The general aim of our study was to investigate the levels of perceived stress and hope during the pandemic years of 2020 and 2021 reported by participants in 11 countries. We also examined how they coped with the stressful situations, to what extent they experienced personal growth until the end of 2021, and how these phenomena relate to each other and with levels of well-being. Doing so, we intended to assess three novel aspects related to the phenomena of stress, coping, personal growth, hope, and well-being in the context of a global crisis situation: (1) The role of hope in relation to the appraisal of stress, coping strategies, and possible positive outcomes in terms of stress-related growth; (2) The temporal development of these psychological states across the two years of the pandemic (from the end of 2019 until the end of 2021); and (3) The similarities and differences between samples from 11 countries with very different cultural backgrounds.

9.3.2 Objectives

Our study had six objectives:

- 1. To compare levels of hope and hedonic psychological and social well-being for the eleven samples at three time points (at the end of 2019, 2020, and 2021) as well as levels of perceived stress at the end of 2020 and 2021 to find general trends and differences between samples.
- 2. To assess levels of problem-focused, emotion-focused, and dysfunctional coping styles across the samples both in 2020 and in 2021 and to identify similarities and individual patterns between the samples.
- 3. To examine associations between coping styles and levels of hope, perceived stress, and general well-being across countries in 2020 and 2021.
- 4. To investigate levels of posttraumatic growth in five areas at the end of 2021 and distinguish universal from sample specific patterns.
- 5. To evaluate associations between the five areas of posttraumatic growth and coping strategies employed in 2021 in the different samples.
- 6. To explore the relationships between posttraumatic growth, perceived hope, perceived stress, and hedonic, psychological, and social well-being across the eleven investigated countries at the end of 2021.

Basically, we expected the following:

- 1. Countries with higher levels of hope will display significant lower levels of distress and higher levels of well-being.
- 2. Problem-focused and emotion-focused coping strategies will be predominant vis-á-vis dysfunctional coping activities but significant differences between

- samples, especially with regard to the intensity of emotion-focused coping activities, will emerge (e.g., emotional support and religious practices).
- 3. In more collectivistic countries emotion-focused strategies such as social support and religious practices will be more strongly associated with hope, stress, and well-being than in individualistic countries.
- 4. Because of its strong emotional basis, post-traumatic growth will be stronger in collectivistic countries than in individualistic countries.
- Socially and religious oriented coping strategies will have positive effects on the social and religious dimensions of growth and be more pronounced in predominantly collectivistic countries.
- 6. Dimensions of posttraumatic growth will be more positively associated with psychological and social well-being than with hedonic well-being.

9.3.3 Procedure and Participant Samples

Data collection took place through announcements in online newspapers, social media, and e-mails in three cross-sectional waves in November 2019 (N=9092), November 2020 (N=9536) and November 2021 (N=9093). No incentives were offered. We selected 11 countries which participated to the Hope Barometer survey during all three years, resulting in a total of 33 samples. People younger than 18 were excluded from the analysis. The questionnaire was delivered in English (Australia, Northern and Southern India, Nigeria, and South Africa), Spanish (Spain), Czech (Czech Republic), Italian (Italy and Southern Switzerland), Polish (Poland), Portuguese (Portugal), Malayalam (Southern India), French (France and West Switzerland), and German (Center and East Switzerland). The demographic structure of the samples is exhibited in Appendix 9.1.

According to the ranking delivered by Hofstede, Portugal, and Nigeria, and to a large extent also India, are the three countries amongst our samples with the highest levels of collectivistic values. These countries are characterized by interdependence, strong bonds to family members and extended relationships, and a strong commitment and responsibility towards social groups. Australia, Italy, France, and Switzerland are characterized as individualistic, where predominant values are independence and individual performance with the prevalence of an internal locus of control vis-à-vis an external locus of control. In these countries people look after themselves and their immediate families. South Africa, Spain, Czechia, and Poland have an intermediate position between individualism and collectivism. South Africa has unique features due to multi-ethnic constitution of its society. Research studies which assessed the level of individualism-collectivism in South Africa revealed that Black, native language speaking people and individuals with lower education tend to be more collectivistic than White, English-speaking people and persons with a higher education, who are more individualistic (Chipp et al., 2013; Eaton & Louw, 2000). Our samples of 2019 and 2020 contain around two thirds of white and one third of black, Colored and Indian people. The sample of 2021 is more balanced including around 50% White and 50% Black, Colored, and Indian people.

9.3.4 Measures

Perceived Hope

The general level of perceived hope was assessed with the Perceived Hope Scale (PHS) (Krafft et al., 2019, 2021; Marujo et al., 2021; Slezackova et al., 2020). The PHS consists of six items to measure the level of hope as perceived by people, free from any preconceptions regarding the nature and quality of hope. The PHS is especially suitable to assess the level of general hope in different cultures since it avoids any bias regarding potential sources, roots, dimensions, and elements of hope. The items of the PHS evaluate the degree of hope in general ("I feel hopeful"), in one's life ("I am hopeful with regard to my life") and especially in difficult situations ("Even in difficult times I am able to remain hopeful"). Further items assess the belief in the possibility of fulfillment of one's hopes ("My hopes are usually fulfilled"), the quality of hope with regard to one's quality of life ("Hope improves the quality of my life"), and the intensity of hope vis-à-vis the feeling of anxiety ("In my life hope outweighs anxiety"). The six positively worded items were rated on a 6-point Likert scale from 0 (strongly disagree) to 5 (strongly agree). In the current study the six items achieved a high internal consistency in all 33 samples (3 x 11) with Cronbach alpha values between $\alpha = 0.80$ and 0.92.

Perceived Stress

The level of distress was evaluated using the Perceived Stress Scale (PSS) (Cohen et al., 1983). The PSS measures the extent to which critical life situations are rated as more or less stressful, unpredictable, uncontrollable, and overloading. The six negatively and four positively expressed items are formulated in such a way that they are of a general nature and therefore relatively free of specific life situations. The PSS is particularly well suited for determining chronic stress under long-lasting life circumstances as well as subjective expectations regarding future events or developments. The ten questions of the PSS, rated on a five-point-scale from 0 (never) to 4 (often), were focused on the respondents' feelings and thoughts during the current year (2020 and 2021 respectively). The scale revealed good reliability coefficients throughout all 33 samples between $\alpha=0.76$ and 0.91.

Hedonic, Psychological and Social Well-being

Well-being was assessed with the Mental Health Continuum Short Form (MHC-SF) developed by Keyes (2002). The MHC-SF consists of 14 positively worded items, with three items representing hedonic well-being (happy, interested in life, and satisfied), six items evaluating psychological well-being (functioning well in one's personal life) and five items describing social well-being (the relationship between oneself and the larger community/society). Participants were asked to rate how often in the past month they felt in a specific manner. Items were rated on a six-point scale

from 1 (never) to 6 (every day). Reliability coefficients were good, achieving levels between $\alpha=0.86$ and 0.95 for the general score, between $\alpha=0.78$ and 0.92 for hedonic well-being, between $\alpha=0.79$ and 0.90 for psychological well-being, and between $\alpha=0.74$ and 0.89 for social well-being.

Coping Strategies

To measure coping strategies, we used the Brief COPE (Carver, 1997) which comprises 28 items to assess 14 different coping styles represented by two items each. Four coping styles describe problem-focused strategies, five are defined as emotion-focused strategies, and the other five describe dysfunctional strategies (see the descriptions of the 14 coping styles in a previous section). Participants rated how often in the current year they used each strategy in dealing with stressful situations occasioned by the pandemic on a 4-point scale (1 = not at all to 4 = a lot). Most Cronbach alpha reliability scores were acceptable to good at around 0.70.

Posttraumatic Growth

In November 2021 we implemented the short form of the Posttraumatic Growth Inventory (PTGI-SF) (Cann et al., 2010) which comprises 10 items with two items associated to each of the five sub-scales respectively (see the descriptions of the five domains in a previous section). The items were rated on a scale from 0 (*I did not experience this change as a result of the pandemic*) to 5 (*I experienced this change to a very great degree as a result of the pandemic*). The instruction given was "Please indicate for each of the statements below the degree to which your life has changed as a result of the COVID-19 pandemic". Cronbach alpha reliability scores were good to high with a mean level of 0.76.

9.3.5 Data Analysis

Using multi-group confirmatory factor analysis (MGCFA) we first wanted to demonstrate measurement invariance of the Perceived Hope Scale across all 3 x 11 samples in 2019, 2020, and 2021 respectively. The fit of the general model by means of maximum likelihood estimation was evaluated using the comparative fit index (CFI), the Tucker-Lewis index (TLI) (study criterion \geq 0.95 as ideal and \geq 0.90 as the minimum acceptable level), the root mean square error of approximation (RMSEA) and the standardized root mean residual SRMR (study criterion \leq 0.08) (Hu & Bentler, 1999). The test for measurement invariance was performed in four steps, from configurational invariance (equal form), to metric invariance (equal loadings), to scalar invariance (equal intercepts), and finally to strict invariance (equal residuals). The recommended criteria to demonstrate invariance are changes in CFI and TLI between comparison and nested models of \geq -0.010, a change in RMSEA of \leq 0.015 and a variation in SRMR of \leq 0.030 (for loading invariance) and \leq 0.010 (for intercept invariance) (Chen, 2007).

In accordance with the six above mentioned objectives, we computed mean values and standard deviations for all variables and performed analyses of variance

(ANOVA) across all samples. Afterwards, partial bivariate Pearson correlations controlled for gender, age, marital status, education, main activity, and professional status, were calculated for every sample between the following variables: (1) the 14 coping strategies and hope, stress, and well-being in 2020 and 2021, (2) the 14 coping styles and the five domains of posttraumatic growth in 2021, and (3) the five domains of posttraumatic growth and hope, stress, and well-being in 2021. All statistical analyses were performed with IBM SPSS and AMOS version 27.0.

9.3.6 Results

9.3.6.1 Group Invariance of the PHS

In order to be able to compare mean values of the PHS and relate them to the other variables, we tested group invariance using all the investigated samples in 2019, 2020, and 2021. Table 9.1 contains the results of all three MGCFA including the fit indices for the general samples followed by the four models to test different types of invariance. The overall fit indices for the total samples revealed that the one-factor model achieved good model fit (CFI and TLI > 0.95 in 2019, 2020 and CFI > 0.90

Table 9.1 Multigroup Confirmatory Factor Analysis and Group Invariance for the Perceived Hope Scale 2019–2021

	X^2	df	CFI	TLI	RMSEA	SRMR
Total sample 2019 (11 groups, $N = 9092$)	402.20	9	0.986	0.977	0.070	0.020
Country invariance						
Configurational Invariance (equal form)	4200.54	261	0.856	0.909	0.041	0.057
Metric Invariance (equal loadings)	4210.66	266	0.856	0.910	0.040	0.057
Scalar Invariance (equal intercepts)	4233.58	272	0.855	0.912	0.040	0.057
Full uniqueness (measurement residuals)	4251.93	279	0.855	0.914	0.040	0.057
Total sample 2020 (11 groups, $N = 9536$)	386.07	9	0.987	0.978	0.066	0.020
Country invariance						
Configurational Invariance (equal form)	1976.53	261	0.940	0.962	0.026	0.087
Metric Invariance (equal loadings)	1992.89	266	0.940	0.963	0.026	0.086
Scalar Invariance (equal intercepts)	2075.57	272	0.937	0.962	0.026	0.086
Full uniqueness (measurement residuals)	2082.99	279	0.937	0.963	0.026	0.085
Total sample 2021 (11 groups, $N = 9093$)	323.09	9	0.989	0.982	0.063	0.017
Country invariance						
Configurational Invariance (equal form)	2297.56	261	0.932	0.957	0.029	0.046
Metric Invariance (equal loadings)	2311.47	266	0.932	0.958	0.029	0.046
Scalar Invariance (equal intercepts)	2391.85	272	0.930	0.957	0.029	0.046
Full uniqueness (measurement residuals)	2412.46	279	0.929	0.958	0.029	0.046

Note: CFI Comparative fit index, TLI Tucker-Lewis index, RMSEA Root mean square error of approximation, SRMR Standardized root mean residual

and TLI > 0.95 in 2021, RMSEA and SRMR ≤ 0.08) (Hu & Bentler, 1999). Furthermore, the model fit of the individual samples also revealed adequate results. The equal form used as baseline model provided a good fit to the data, suggesting reasonable support for configurational invariance across the groups, with exception of the CFI in 2019. According to Marsh (1994) and Marsh et al. (1996) the TLI could be considered as more appropriate than the CFI, because it also takes into account the model complexity. Furthermore, all indices comparing the nested models with the baseline model were under the threshold values recommended by the literature (Chen, 2007, CFI and TLI > -0.01, RMSEA and SRMR < 0.015) (Marsh, 1994). This means that the PHS demonstrated strong measurement invariance and that it is possible to compare the PHS scores between the national samples. The perceived hope construct measured with the PHS seemed to be conceptualized in a similar way across cultures and was suitable to be examined in relationship to other constructs.

9.3.6.2 Perceived Hope, Perceived Stress, and Well-being 2019-2021

We started our analysis by comparing mean values of perceived hope, perceived stress, and well-being between 2019 and 2021 and between all country samples (see Table 9.2).

Perceived Hope 2019-2021

The first remarkable result is that in 2020 and 2021 people in all countries experienced moderate to high levels of hope clearly above the center of the scale (M > 3.0). This means that during the pandemic, and despite the cumbersome times, most people could remain hopeful for the future.

The highest levels of hope during all three years were reported by people in Nigeria, Australia, and South Africa. Participants in India reported high levels of hope in 2019 and 2020, but moderate levels of hope in 2021. In Portugal, people showed higher levels of hope in 2019 and 2021 but moderate levels of hope in 2020. The lowest levels of perceived hope were reported by participants in Spain, Poland, France, and Switzerland (especially in the French and Italian regions). Participants from Italy and Czechia were in between and displayed moderate levels of hope.

Regarding the development of the levels of hope between 2019 and 2020, people in Czechia, France, Poland, Switzerland, and South Africa recorded an increase or constant level of hope in 2020 but a clear decline in 2021. In contrast, people in Portugal and Spain reported a marked drop of hope in 2020 but an upsurge in 2021. Whereas in Australia and Italy the levels of hope remained almost constant from 2019 to 2021, people in Nigeria and India demonstrated a negative trend.

Perceived Stress 2020-2021

The slight but evident ups and downs in levels of hope could be related to the experience and appraisal of distress. Based on previous studies, stress levels can be divided into three ranges (Cohen et al., 1997): (1) low stress levels are expressed by mean values between 0 and 1.3 with "normal" levels around 1.3-1.4; (2) moderate

Table 9.2 Mean values, standard deviations and ANOVA for Perceived Hope, Well-being and Perceived Stress

		Perceived	l Hope	Well-beir	ng	Perceived	Stress
		M	SD	M	SD	M	SD
Australia	2021	3.66	0.91	4.24	1.11	1.80	0.63
	2020	3.72	0.91	4.40	0.96	1.69	0.62
	2019	3.71	0.88	4.42	1.01		
Czech Republic	2021	3.31	0.97	3.68	1.07	1.86	0.60
	2020	3.47	0.99	3.86	0.93	2.05	0.64
	2019	3.41	0.97	3.82	0.97		
France	2021	3.07	1.10	3.75	0.95	1.99	0.67
	2020	3.43	1.05	3.91	0.87	1.94	0.68
	2019	3.22	1.00	3.96	0.78		
India	2021	3.39	0.87	4.17	1.05	2.03	0.50
	2020	3.54	0.81	3.95	0.99	2.13	0.54
	2019	3.69	0.82	4.16	1.01		
Italy	2021	3.53	0.99	3.99	1.00	1.95	0.60
	2020	3.49	0.98	3.86	0.96	1.98	0.56
	2019	3.43	1.11	3.93	0.91		
Nigeria	2021	4.13	0.63	4.56	0.84	1.90	0.59
	2020	4.20	0.61	4.48	0.72	1.87	0.48
	2019	4.21	0.61	4.51	0.80		
Poland	2021	3.17	1.03	3.50	1.16	2.00	0.76
	2020	3.39	1.04	3.64	1.08	1.98	0.72
	2019	3.26	0.99	3.67	1.07		
Portugal	2021	3.63	0.94	4.04	0.97	1.92	0.62
	2020	3.43	0.95	3.88	0.90	2.08	0.64
	2019	3.50	1.00	4.19	0.96		
South Africa	2021	3.58	0.99	4.16	1.13	1.94	0.48
	2020	3.70	0.86	4.24	0.81	1.97	0.60
	2019	3.65	0.98	4.21	1.07		
Spain	2021	3.32	0.93	3.98	1.03	2.03	0.67
	2020	3.10	0.96	4.17	0.90	2.28	0.58
	2019	3.28	0.95	4.12	0.96		
Switzerland	2021	3.28	1.09	3.80	1.04	1.93	0.70
	2020	3.39	1.00	3.84	1.00	1.91	0.66
	2019	3.24	1.08	3.88	1.05		
ANOVA F/Eta ²	2021	36.77*	0.052	22.83*	0.028	3.96*	0.006
	2020	15.03*	0.016	17.02*	0.018	14.11*	0.015
	2019	74.40*	0.076	44.48*	0.047		

Notes. *P < 0.001

stress levels are characterized by mean values between 1.4 and 2.6, slightly impairing satisfaction and well-being; (3) high stress levels are revealed by values between 2.7 and 4.0. In this case, the perception of stress might have a strong impact on satisfaction and personal well-being.

The first key finding in Table 9.2 is that stress levels in all samples appear to be within the moderate range but with significant differences between samples especially in 2021. During 2020 and 2021, the vast majority of people experienced a level of stress that was significantly above the "normal" level. In 2020 people in Spain, Portugal, India, and Czechia reported the highest and people in Australia, Nigeria, and Switzerland the lowest levels of stress, with people in Poland, South Africa, Italy, and France in the middle between both extremes. From 2020 to 2021, the levels of stress remained almost constant in Italy, Nigeria, Poland, and South Africa. People in Australia, France, and Switzerland experienced a slight increase and people in Spain, Portugal, Czechia, and India a slight reduction in the perception of stress.

Well-being 2019-2020

The levels of well-being are moderate to high in all samples, in some samples close to and in others clearly above the center or the scale (M>3.5). In general terms, people in Nigeria, Australia, South Africa, India, and Portugal reported the highest levels of well-being and people in Poland and Czechia the lowest. A negative trend in the levels of well-being especially during 2021 could be observed in Australia, Czechia, France, Poland, Spain, and Switzerland. Participants in India, Italy, Nigeria, and Portugal experienced a decline in well-being decline during 2020 but an upturn in 2021, almost regaining the levels of 2019. Therefore, at the end of 2021, people in Nigeria, Australia, India, South Africa, and Portugal reported significant higher levels of well-being than people in Poland, Italy, Czechia, Switzerland, and France.

9.3.6.3 Coping Styles 2020-2021

The next analysis examined the coping styles that participants in the various countries employed in order to deal with the stressful experiences in 2020 and 2021. Tables 9.3, 9.4 and 9.5. present the levels of coping styles in 2020 and 2021, classified in the three categories emotion-focused (Table 9.3), problem-focused (Table 9.4), and dysfunctional coping (Table 9.5). Across all countries, the positive coping styles received much more adherence than the dysfunctional reactions. In general terms, the principal coping styles were acceptance, positive reframing, active coping, self-direction, and planning. In comparison to the other countries, participants in South Africa, Czechia, Poland, India, and Spain asked for more emotional support in 2020, and people in Poland, South Africa, and India also in 2021. The lowest levels of emotional support were reported in Australia, Switzerland, and France, and also in Spain in 2021 (mainly individualistic countries). Instrumental social support was especially important for people in India, Nigeria,

Table 9.3 Mean values and Standard Deviations of Emotion-Focused Coping Styles 2020-2021

Australia 2 Czech Republic 2		•)	Positive Keframing	ramıng	Emotional Support	Support	Religion		Humor	
	Years	M	as	М	SD	M	SD	М	as	M	SD
	2021	3.18	0.82	2.68	0.94	2.20	06.0	1.94	1.05	2.28	0.95
	2020	3.26	69.0	2.69	0.84	2.19	0.88	1.83	0.97	2.04	0.85
(4)	2021	2.94	0.77	2.55	0.81	2.37	98.0	1.60	0.85	2.37	0.93
	2020	3.33	0.64	2.72	0.85	2.65	98.0	1.78	0.90	2.65	0.93
France 2	2021	3.12	0.70	2.82	08.0	2.29	0.82	1.69	0.88	2.02	0.80
164	2020	3.12	92.0	2.93	0.77	2.27	0.84	1.83	0.93	2.17	0.84
India 2	2021	2.87	0.79	2.68	0.79	2.49	0.83	2.27	0.94	2.13	0.85
164	2020	3.01	0.74	2.82	92.0	2.55	0.77	2.25	0.99	2.32	0.96
Israel 2	2021	3.23	0.62	3.03	0.70	2.57	0.83	1.82	0.90	2.73	0.89
164	2020	3.17	0.59	3.05	69.0	2.55	0.84	1.81	0.93	2.87	0.88
Italy	2021	3.26	0.63	2.73	0.71	2.26	0.82	1.95	98.0	2.24	0.99
(7	2020	3.16	0.64	2.67	0.79	2.31	0.80	1.85	0.91	2.32	0.90
Nigeria 2	2021	2.77	0.84	2.75	0.82	2.33	0.90	2.81	0.93	1.90	98.0
(7	2020	2.84	92.0	2.72	0.81	2.34	0.82	2.98	0.91	1.85	0.85
Poland 2	2021	3.38	0.59	2.68	0.84	2.71	0.87	1.56	0.83	2.06	99.0
(7	2020	3.28	0.62	2.75	08.0	2.56	0.84	1.72	0.88	1.98	0.61
Portugal 2	2021	3.25	69.0	2.98	0.81	2.33	0.95	2.22	1.10	2.46	0.92
(7	2020	3.26	0.71	2.78	0.84	2.38	0.92	1.93	1.01	2.45	96.0
South Africa 2	2021	3.13	0.74	2.89	0.81	2.45	0.95	2.86	1.06	2.19	0.95
(7	2020	3.43	0.55	2.87	0.73	2.77	0.91	2.56	1.20	2.04	0.90
Spain 2	2021	3.18	99.0	2.31	0.70	2.21	0.87	1.59	0.79	2.07	0.92
(7	2020	3.17	0.61	2.83	0.72	2.50	98.0	1.46	89.0	2.08	1.00
Switzerland 2	2021	2.94	0.88	2.61	0.88	1.88	0.77	1.60	0.88	2.14	0.89
(4	2020	2.94	0.82	2.69	0.83	2.01	0.82	1.60	0.88	2.08	98.0

(continued)

Table 9.3 (continued)

		Acceptance		Positive Reframing	uming	Emotional Support	pport	Religion		Humor	
	Years	М	SD	M	SD	M	as	M	QS	M	QS
ANOVA F/Eta ²	2021	19.44*	0.022	23.04*	.027	85.03*	.091	135.09*	.138	18.82*	0.022
	2020	26.77*	0.027	4.15*	.040	57.10*	.057	*66.79	.067	25.61*	0.026

Table 9.4 Mean values and Standard Deviations of Problem-Focused Coping Styles 2020–2021

Instrumental

		Active C	Coping	Self-dire	ection	Planning	g	Instrumer Support	ıtal
	Years	M	SD	M	SD	M	SD	M	SD
Australia	2021	3.05	0.82	2.46	0.92	2.86	0.82	2.01	0.83
	2020	2.97	0.77	2.43	0.82	2.79	0.92	2.01	0.83
Czech	2021	2.52	0.75	2.62	0.86	2.54	0.82	2.15	0.76
Republic	2020	2.46	0.74	2.81	0.86	2.48	0.82	2.23	0.82
France	2021	2.37	0.82	2.61	0.75	2.36	0.83	2.18	0.78
	2020	2.52	0.78	2.66	0.77	2.49	0.88	2.22	0.79
India	2021	2.76	0.69	2.66	0.74	2.76	0.73	2.48	0.78
	2020	2.73	0.72	2.74	0.72	2.93	0.75	2.51	0.79
Israel	2021	2.97	0.61	2.90	0.74	2.96	0.65	2.43	0.77
	2020	2.64	0.75	2.93	0.69	2.82	0.75	2.33	0.83
Italy	2021	2.78	0.66	2.46	0.77	2.99	0.70	2.18	0.78
	2020	2.70	0.66	2.50	0.73	2.88	0.69	2.18	0.75
Nigeria	2021	2.95	0.88	2.48	0.86	2.89	0.88	2.42	0.90
	2020	3.00	0.85	2.49	0.82	2.99	0.84	2.48	0.82
Poland	2021	2.44	0.86	2.57	0.90	2.73	0.89	2.51	0.89
	2020	2.40	0.85	2.48	0.83	2.77	0.84	2.36	0.79
Portugal	2021	2.85	0.81	2.66	0.89	2.98	0.71	2.20	0.90
	2020	2.69	0.77	2.68	0.85	2.91	0.76	2.14	0.89
South Africa	2021	3.11	0.75	2.81	0.81	3.09	0.78	2.39	0.96
	2020	2.98	0.76	2.72	0.71	2.90	0.74	2.42	0.93
Spain	2021	2.70	0.68	2.42	0.82	2.42	0.72	2.08	0.84
	2020	2.75	0.70	2.83	0.72	2.31	0.75	2.33	0.84
Switzerland	2021	2.45	0.82	2.41	0.85	2.51	0.83	1.69	0.75
	2020	2.47	0.80	2.51	0.80	2.50	0.81	1.75	0.75
ANOVA F/	2021	58.52*	0.065	23.45*	0.027	53.29*	0.059	123.80*	0.128
Eta ²	2020	28.00*	0.029	10.82*	0.011	38.19*	0.039	89.42*	0.086

Notes. *P < 0.001

South Africa, and Poland (mainly collectivistic countries) and the least important for people in Australia and Switzerland (mainly individualistic countries). Religious coping was particularly high in Nigeria, South Africa, India, and Portugal (mainly collectivistic countries), and the least important in Switzerland and Spain (mainly individualistic countries).

Comparing changes in coping styles by country between 2020 and 2021, the following patterns were the most remarkable: Levels of disengagement rose in Australia, Czechia, France, Italy, South Africa, and Switzerland, probably denoting a certain fatigue with the burdens imposed by the longer than expected lasting pandemic. At the same time, the levels of acceptance declined in Australia, Czechia, India, Nigeria, and South Africa, and a further decline took place in positive reframing in Czechia, France, India, Poland, Spain, and Switzerland. Emotional and instrumental social support declined in Czechia, Spain, and Switzerland but

Table 9.5 Mean Values and Standard Deviations of Dysfunctional Coping Styles 2020-2021

		Denial		Venting		Disengagement	ment	Self-blame		Substance Abuse	pase
	Years	M	SD	M	SD	M	SD	M	SD	M	SD
Australia	2021	1.44	69.0	1.97	08.0	1.52	89.0	1.64	0.82	1.47	0.78
	2020	1.34	0.62	1.90	0.73	1.39	0.65	1.63	08.0	1.45	0.72
Czech Republic	2021	2.10	69.0	2.21	0.78	1.82	19.0	2.16	0.77	1.39	69.0
	2020	1.68	0.70	2.33	0.77	1.57	0.61	2.06	92.0	1.31	0.57
France	2021	1.37	0.58	2.51	0.78	1.78	0.71	1.63	0.72	1.36	0.67
	2020	1.43	0.64	2.52	0.72	1.67	19.0	1.57	0.67	1.39	99.0
India	2021	1.86	0.83	2.16	0.76	1.78	0.78	2.12	0.84	1.33	0.70
	2020	1.85	98.0	2.23	0.74	2.01	0.87	2.19	0.95	1.31	69.0
Israel	2021	1.51	99.0	2.52	89.0	1.59	0.65	1.86	0.70	1.18	0.53
	2020	1.51	0.63	2.50	69.0	1.73	0.64	1.81	0.72	1.34	0.71
Italy	2021	1.38	0.65	2.38	0.65	1.32	0.50	1.69	0.63	1.17	0.45
	2020	1.35	0.62	2.36	0.65	1.25	0.50	1.63	0.64	1.20	0.50
Nigeria	2021	2.03	1.00	2.15	08.0	1.60	0.77	1.69	0.88	1.48	0.90
	2020	1.91	0.91	2.17	0.75	1.66	0.73	1.72	0.83	1.35	69.0
Poland	2021	1.31	0.53	2.40	0.72	1.66	0.63	1.74	0.84	1.36	99.0
	2020	1.40	0.63	2.40	99.0	1.60	0.64	1.61	0.67	1.44	0.73
Portugal	2021	1.33	0.58	2.42	0.84	1.37	0.65	1.67	0.72	1.19	0.53
	2020	1.27	0.56	2.37	0.82	1.42	99.0	1.56	69.0	1.18	0.51
South Africa	2021	1.92	0.95	2.32	0.82	1.74	0.84	2.08	86.0	1.61	0.94
	2020	1.35	0.64	2.22	0.67	1.33	0.54	1.78	0.78	1.39	0.73
Spain	2021	1.56	0.72	2.28	0.73	1.62	0.59	1.74	0.83	1.23	0.54
	2020	1.71	0.82	2.21	0.70	1.66	0.59	1.85	0.85	1.28	0.59

Switzerland	2021	1.53	92.0	1.97	0.76	1.83	0.78	1.42	0.65	1.35	0.70
	2020	1.54	0.73	2.02	0.76	1.71	0.72	1.45	0.65	1.35	0.67
ANOVA F/Eta ²	2021	64.57*	0.071	51.34*	0.057	26.66*	0.031	121.24*	0.125	13.42*	0.016
	2020	24.77*	0.025	36.60*	0.037	37.64*	0.038	58.52*	0.058	*90.7	0.007

Notes *P < 0.001

increased in Poland. Moreover, the levels of religious coping intensified in Italy, Portugal, South Africa, and Spain and slightly diminished in Czechia, France, Nigeria, and Poland.

9.3.6.4 Correlations Between Coping Styles and Perceived Hope, Perceived Stress, and Well-being

In this section we evaluate the partial bivariate Pearson correlation coefficients of each individual sample in 2020 and 2021 between the 14 coping styles, on the one hand, and the levels of perceived hope, perceived stress, and well-being, on the other. Our aim is to highlight the most striking results, identifying similarities, and differences between samples.

Correlations between Coping Styles and Perceived Hope 2020-2021

A central question of our study concerns the extent to which the different coping styles are associated with the general level of perceived hope (see Table 9.6). In almost all samples the highest correlation coefficients with perceived hope were, first, positive reframing, second, acceptance, active coping, and religious coping, and third, planning. Negative correlation coefficients were found for the relationships between perceived hope and the dysfunctional coping styles of disengagement and self-blame. Furthermore, perceived hope was barely or even not at all associated with humor, self-direction, denial, and venting.

Emotional and instrumental social support displayed low to moderate correlation coefficients with perceived hope, particularly in Poland, South Africa, Czechia, India, and Italy (in 2020). Interestingly, in the Portuguese sample the association between hope and social support was not significant. In a separate analysis, not reported here, we detected that this is due to the significant associations between hope and the demographic variables, especially with age and the main activity participants were involved in. Correlation coefficients between perceived hope and religious coping were notably strong in samples from South Africa, Portugal, Poland, Nigeria, France, and Australia, of moderate size also in India, Italy, and Switzerland and not significant at all in Spain.

Interestingly, in some cases the results varied from one year to the other. The reason may be grounded in individual differences between the samples of 2020 and 2021, but could also correspond to changes in general conditions and experiences. For example, in Czechia, India, and Italy, the association between social support (emotional and instrumental) and hope was stronger in 2020 than in 2021, but in South Africa and Nigeria the coefficient was stronger in 2021 than in 2020. In some countries, like Czechia, France, India, Italy, South Africa, and Spain, the negative relationship between self-blame and perceived hope was more accentuated in 2020 than in 2021, but in other countries like Australia, Poland, and Portugal, it was the other way around.

Table 9.6 Partial Bivariate Pearson Correlations of Coping Styles with Perceived Hope 2020-2021

	Australia		Czech Republic	blic	France		India		Italy	
Years	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
Acceptance	0.152*	0.025	0.082	0.197**	0.374**	0.226**	0.131*	0.275**	0.231**	0.154*
Positive Reframing	0.295**	0.449**	0.420**	0.405	0.506**	0.369**	0.301**	0.274**	0.447**	0.302**
Emotional Support	0.071	0.164	0.254***	0.156**	0.101	090.0	0.209**	0.115*	0.192**	0.142
Religion	0.218**	0.286**	0.224**	0.077	0.328**	0.241**	0.142*	0.160**	0.215**	0.158*
Humor	0.175*	0.121	0.100	0.147**	0.249**	0.175**	$ -0.142^{*}$	0.057	0.042	0.225**
Active Coping	0.177*	0.351**	0.284**	0.210**	0.403**	0.261**	0.258**	0.304**	0.298**	0.373**
Self-direction	0.056	0.010	-0.008	0.001	0.081	0.050	0.111	0.173**	0.037	-0.041
Planning	0.049	0.124	0.126^{*}	0.052	0.355**	0.302**	0.243**	0.271**	0.333**	0.297**
Instrumental Support	-0.054	0.207*	0.175**	0.095	0.113	0.116*	0.187**	0.093*	0.204**	0.118
Denial	0.080	0.135	$ -0.159^{*}$	$ -0.171^{**}$	-0.036	-0.005	-0.086	-0.015	-0.021	0.016
Venting	-0.098	0.078	0.086	0.022	0.154^{*}	0.200^{**}	0.022	-0.021	0.179**	0.075
Disengagement	-0.169^{*}	-0.210^{*}	-0.202^{**}	-0.237^{**}	-0.212^{**}	$ -0.236^{**}$	-0.112	$ -0.201^{**}$	-0.169^{**}	-0.218**
Selfblame	$ -0.279^{**} $	$ -0.336^{**}$	-0.329**	-0.272	-0.240**	-0.191^{**}	$ -0.198^{**} $	890.0-	-0.181^{**}	-0.124
Substance Abuse	-0.166^{*}	$ -0.190^{*}$	-0.111	-0.189**	$ -0.231^{**}$	$ -0.167^{**} $	-0.131		-0.104^{*}	$ -0.176^* $

(continued)

Table 9.6 (continued)

	Australia	alia		Czech Republic	lic	France		India			Italy	
Years	2020	2021		2020	2021	2020	2021	2020		2021	2020	2021
	Nigeria		Poland		Portugal		South Africa	, g	Spain		Switzerland	
Years	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
Acceptance	0.233**	0.029	0.252**	0.135	0.292**	0.235**	0.279**	0.309**	0.111	0.236**	0.268**	0.217**
Positive	0.345**	0.237*	0.407	0.459**	0.393**	0.424**	0.369**	0.432**	0.338**	0.364**	0.439**	0.390**
Reframing												
Emotional	0.104	0.184*	0.305**	0.352**	0.035	0.028	0.169	0.308**	-0.054	0.041	0.068	0.136**
Support												
Religion	0.300**	0.207*	0.242**	0.322**	0.309**	0.326^{**}	0.499**	0.398**	0.179	0.094	0.170**	0.167**
Humor	-0.035	0.101	0.057	0.071	0.008	0.115*	0.036	*060.0	0.102	0.029	0.202**	0.188**
Active Coping	0.179*	0.119	0.163*	0.201*	0.238**	0.218**	0.189^{*}	0.412**	0.098	0.237**	0.219**	0.223**
Self-direction	0.143	0.040	-0.042	-0.082	-0.039	.860.0	-0.144	0.075	0.047	0.009	0.082**	680.0
Planning	0.230**	0.019	0.209**	0.369**	0.238**	0.269**	-0.018	0.266**	0.088	0.221**	0.183**	0.152**
Instrumental	0.090	0.254**	0.263**	0.284**	0.107	0.042	-0.023	0.248**	-0.062	-0.016	0.004	0.067**
Support												
Denial	-0.012	0.071	-0.082	-0.075	-0.048	0.002	090.0	-0.018	-0.031	$ -0.115^*$	$ -0.091^{**}$	-0.084
Venting	0.057	0.056	-0.022	-0.071	-0.038	0.037	-0.185^{*}	-0.037	-0.143	0.032	$ -0.054^{**}$	-0.031^{*}
Disengagement	-0.152	-0.188*	-0.423**	-0.547**	-0.195^{*}	-0.291^{**}	-0.228**	-0.256^{**}	-0.123	-0.135^{*}	-0.157	-0.159**
Selfblame	-0.144	-0.123	-0.205**	-0.276^{**}	-0.253^{**}	-0.319**	-0.429**	-0.269^{**}	-0.476	-0.279^{**}	-0.199	-0.171
Substance Abuse	$ -0.206^{*}$	0.048	-0.177	-0.152	-0.168^{*}	-0.158^{**}	-0.215^{*}	-0.178^{**}	-0.337	$ -0.115^{*}$	$ -0.182^{**}$	-0.203^{**}

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Correlations Between Coping Styles and Perceived Stress 2020-2021

According to Lazarus' (1990, 1993) stress theory, the availability of coping resources might affect the secondary appraisal of the stressful situation. Emotion- and problem focused coping styles might have a favorable effect in reducing the level of distress, while dysfunctional coping strategies would have a detrimental effect in exacerbating the level of stress even more. Over almost all investigated samples, the strongest positive associations with perceived stress emerged with dysfunctional reactions, especially with disengagement, self-blame, and in some countries, also substance abuse, denial, and venting (see Table 9.7). Furthermore, whereas the emotion-focused coping styles of acceptance and positive reframing displayed moderate associations with perceived stress in most countries, problem-focused coping activities were only slightly or not at all associated with stress.

Social support (emotional and instrumental) and religiosity showed almost no association with perceived stress. Religious coping was significantly related to lower levels of perceived stress only in South Africa. In Portugal and Spain, emotional and instrumental support were even associated with higher levels of perceived stress, which could simply mean that people with higher levels of stress reached out to obtain more social support. Similarly, in some countries (e.g., Spain), self-direction was associated with higher levels of stress. A noteworthy case is that of Nigeria, where emotion- and problem-focused coping styles did not correspond with a reduction of stress in 2020 and even showed positive correlation with stress in 2021. Nigerian people with higher levels of stress used different coping styles, but these attitudes and activities apparently did not help in appraising the stressor more positively and in reducing the level of stress.

Correlations Between Coping Styles and Well-being 2020-2021

Beyond the question of whether the awareness regarding the availability of different coping styles can reduce the levels of stress, a further enquiry concerns the association of coping styles with the general level of well-being (see Table 9.8). It is worth mentioning, that the correlation coefficients between perceived hope and well-being yielded moderate to high values of between r = 0.40 and r = 0.60 (p < 0.001). Similarly to hope, well-being correlated most strongly with positive reframing, active coping, acceptance, and planning, but in some countries also with emotional and instrumental support and religious coping. Again, self-blame and disengagement showed the most negative associations with well-being. The strongest association between emotional and instrumental support and well-being could be found in samples from Poland, South Africa, India, Italy, and Czechia. Correlation coefficients in samples from Australia, Spain, Switzerland, Nigeria, Portugal, and France were less pronounced. The association of religious coping with well-being was especially strong in South Africa, Portugal, Poland, India, France, and Nigeria and the lowest in Spain, Czechia, Italy, and Switzerland. Humor and self-direction only displayed low or no association with well-being. One interesting result was that even though instrumental support had little association with perceived hope and stress, it was positively associated with well-being in Czechia, France, India, Italy, Poland, Portugal, and South Africa.

Table 9.7 Partial Bivariate Pearson Correlations of Coping Styles with Well-being 2020-2021

)					
	Australia		Czech Republic.	olic.	France		India		Italy	
Years	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
Acceptance	0.245**	0.134	0.105	0.132**	0.389**	0.235**	0.186**	0.241**	0.262**	0.186^{*}
Positive Reframing	0.252**	0.400**	0.355**	0.352**	0.486**	0.378**	0.329**	0.293**	0.358**	0.262**
Emotional Support	0.134	0.184*	0.248**	0.264**	0.143*	0.171**	0.291**	0.279**	0.276**	0.242**
Religion	0.106	0.257**	0.166**	0.092*	0.252**	0.219**	0.225**	0.221**	0.159**	0.128
Humor	0.165*	0.168	0.019	0.104*	0.213**	0.263**	0.051	0.043	0.090	0.127
Active Coping	0.275**	0.452**	0.261**	0.281**	0.428**	0.249**	0.311**	0.322**	0.329**	0.277**
Self-direction	0.071	-0.103	-0.041	-0.010	0.065	0.107*	0.159**	0.130**	-0.030	-0.023
Planning	0.082	0.180*	0.146*	0.155**	0.427**	0.271**	0.157*	0.274**	0.343**	0.283**
Instrumental Support	0.034	0.211*	0.283**	0.189**	0.209**	0.202**	0.273**	0.282**	0.264**	0.210**
Denial	-0.030	0.079	-0.080	-0.109^{*}	-0.090	-0.037	0.048	0.034	-0.087	-0.061
Venting	-0.120	-0.063	090.0	0.035	0.166*	0.274**	0.057	0.022	0.157**	0.113
Disengagement	-0.185^{**}	-0.344	-0.237	-0.154^{**}	-0.199^{**}	-0.197^{**}	-0.056	-0.171**	-0.119^{*}	-0.168^{*}
Selfblame	-0.298**	-0.419**	-0.256**	-0.182**	-0.293**	-0.242**	-0.210**	-0.220**	-0.184**	-0.185^{*}
Substance Abuse	-0.136	-0.242**	-0.112	-0.114*	-0.119	-0.180**	0.036	090.0	-0.163**	-0.201^{**}

	Nigeria		Poland		Portugal		South Africa	ża.	Spain		Switzerland	
Years	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
Acceptance	0.032	0.012	0.277**	0.181*	0.453**	0.238**	0.358**	0.251**	0.126	0.317**	0.269**	0.229**
Positive	0.291	0.243**	0.355**	0.514**	0.374**	0.444	0.427**	0.379**	0.153	0.414**	0.404**	0.397**
Reframing												
Emotional	0.116	0.181*	0.303**	0.381**	0.092	0.055	0.212*	0.320^{**}	-0.165	0.113*	0.131**	0.177**
Support												
Religion	0.210*	0.169*	0.195**	0.216**	0.246**	0.257**	0.339**	0.328**	0.103	9/0.0	0.132**	0.133**
Humor	0.001	0.104	0.210**	0.137	0.094	0.170**	0.016	0.103^{*}	-0.051	0.087	0.191**	0.210**
Active Coping	0.195*	0.048	0.286**	0.308**	0.285**	0.273**	0.376**	0.367**	0.218^{*}	0.250**	0.251**	0.258**
Self-direction	0.127	900.0	-0.004	-0.137	0.112	0.123**	-0.190^{*}	0.007	-0.009	0.035	0.096	0.087
Planning	0.101	900.0-	0.344**	0.422**	0.377**	0.314**	0.145	0.196**	0.155	0.311**	0.200^{**}	0.181**
Instrumental	0.093	0.204*	0.229**	0.300**	0.196*	.000	0.159	0.244**	-0.166	0.100	0.068**	0.103**
Support												
Denial	0.070	900.0	-0.142^{*}	-0.113	-0.047	-0.046	0.023	0.030	-0.067	-0.072	-0.114^{**}	-0.088
Venting	-0.176^{*}	-0.013	0.010	-0.046	0.031	*060.0	-0.162	-0.067	-0.113	-0.004	-0.028^{*}	0.018
Disengagement	-0.238**	-0.003	-0.321**	-0.445**	-0.150	-0.252^{**}	-0.308**	-0.257^{**}	-0.212^{*}	-0.090	-0.188^{**}	-0.184**
Selfblame	-0.404	-0.275**	-0.164*	-0.206^{*}	-0.164	-0.352^{**}	-0.399**	-0.319**	-0.514^{**}	-0.220^{**}	-0.205^{**}	-0.183**
Substance Abuse	-0.125	-0.021	-0.112	-0.092	-0.185^{*}	-0.193	-0.168	-0.164**	-0.364**	-0.070	-0.198^{**}	-0.213**

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Table 9.8 Partial Bivariate Pearson Correlations of Coping Styles with Perceived Stress 2020-2021

			,							
	Australia		Czech Republic	olic	France		India		Italy	
Years	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
Acceptance	-0.172^{*}	-0.012	-0.185**	-0.190**	-0.320^{**}	-0.230^{**}	0.079	-0.046	-0.315**	-0.341**
Positive Reframing	-0.083	-0.226**	-0.288**	-0.296	-0.403**	-0.225**	-0.176**	-0.145**	-0.312**	-0.251**
Emotional Support	0.175*	0.106	0.017	-0.053	0.073	0.057	0.012	-0.010	-0.110*	0.028
Religion	0.020	-0.031	-0.086	0.070	-0.154^{*}	-0.063	-0.053	-0.023	0.005	0.027
Humor	-0.064	-0.141	-0.001	-0.124	-0.219^{**}	-0.184^{**}	0.100	0.084	-0.026	-0.139
Active Coping	-0.074	-0.335**	-0.055	-0.093*	-0.254**	-0.100*	-0.081	-0.188**	-0.252**	-0.164*
Self-direction	0.091	0.239**	0.196**	0.115*	0.080	-0.020	0.059	0.228**	0.097	0.175*
Planning	0.121	-0.039	0.115	0.023	-0.228**	-0.104^{*}	0.042	-0.071	-0.253**	-0.204**
Instrumental Support	0.272**	0.161	0.000	0.038	0.036	0.024	-0.090	0.036	-0.037	0.082
Denial	0.173*	0.123	0.242**	0.312**	0.177**	0.160**	0.073	0.196**	0.155**	0.247**
Venting	0.402**	0.260**	0.192**	0.127**	-0.029	-0.098*	0.199**	0.232**	090.0	0.176*
Disengagement	0.285**	0.485**	0.201**	0.293**	0.290**	0.224**	0.226**	0.281**	0.253**	0.280**
Selfblame	0.380**	0.490**	0.358**	0.343**	0.368**	0.331**	0.341**	0.408**	0.287**	0.368**
Substance Abuse	0.219**	0.351**	0.217**	0.209**	0.288**	0.241**	-0.011	0.125**	0.167**	0.211**

	Nigeria		Poland		Portugal		South Africa	'n	Spain		Switzerland	
Years	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
Acceptance	0.045	0.187*	-0.334**	-0.271**	-0.251^{**}	-0.192^{**}	-0.235^{**}	-0.200**	0.015	-0.305^{**}	-0.338**	-0.297**
Positive Reframing	-0.199*	0.166*	-0.249**	-0.368**	-0.255^{**}	-0.320^{**}	-0.193*	-0.273**	-0.022	-0.201**	-0.357^{**}	-0.325^{**}
Emotional Support	0.057	0.061	-0.007	-0.271	0.186^{*}	0.189**	0.091	-0.132^{**}	0.274**	0.182**	0.142**	0.100**
Religion	-0.077	0.092	-0.074	-0.112	0.002	-0.042	-0.200^{*}	-0.169^{**}	-0.157	0.049	0.018	0.048**
Humor	0.021	0.028	-0.030	-0.052	0.045	-0.067	-0.029	0.040	-0.001	-0.075	-0.181**	-0.223^{**}
Active Coping	-0.091	0.209*	-0.040	-0.224**	-0.012	-0.085	-0.084	-0.236**	0.023	-0.092	-0.092^{**}	-0.073**
Self-direction	0.105	0.433**	0.217**	890.0	0.099	0.012	0.143	0.218**	0.238*	0.245**	0.098**	0.1111**
Planning	890.0	0.234*	-0.221**	-0.332**	-0.087	-0.101*	0.245**	-0.080	-0.036	-0.126^{*}	-0.004	0.058**
Instrumental	0.089	0.007	-0.045	-0.180^{*}	0.116	0.175**	0.241**	-0.029	0.252**	0.218**	0.153**	0.121**
Support												
Denial	0.056	0.174	0.268**	0.165	0.291**	0.170**	0.209^{*}	0.164**	0.184	0.254**	0.281**	0.261**
Venting	0.264**	0.321**		0.142	0.242**		0.365**	0.229**	0.343**		0.186**	0.189**
Disengagement	0.225**	0.261**	0.445**	0.460**	0.215**	0.350**	0.377***	0.385^{**}	0.279**	0.257**	0.232**	0.221***
Selfblame	0.416**	0.325**	0.292**	0.303^{**}	0.405**	0.452**	0.534**	0.449**	0.521**	0.455**	0.312**	0.288**
Substance Abuse	0.146	146 0.111	0.172**	0.001	0.293**	0.259**	0.335**	0.321**	0.099	0.155**	0.278**	0.262**

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

9.3.6.5 Posttraumatic Growth 2021

One of the objectives of the current study was to investigate possible fields of personal growth as a positive consequence of having dealt successfully with the pandemic crisis. Table 9.9 presents the mean values and standard deviations of the five areas of posttraumatic growth at the end of 2021 per country. In almost all samples, the most pronounced growth was reported in the areas of appreciation of life and personal strength and the least in the field of spiritual change (with exception of Nigeria).

Comparing the countries with each other yielded interesting results. Whereas participants in Nigeria, South Africa, Portugal, and in some areas, also India, registered the highest scores in almost all categories (above the center of the scale M=2.5), participants in Switzerland and Poland achieved the lowest results (below M=2.5). Spiritual change was especially pronounced in Nigeria, South Africa, and (to a lesser extent) Portugal and extremely low in Poland, Switzerland, France, Czechia, and Spain, with India, Australia, and Italy in between. People in Nigeria, South Africa, Portugal, and India reported significantly greater growth in the domain of interpersonal relationships than participants in Switzerland, Poland, France, and Czechia. Moreover, people in Nigeria, South Africa, Portugal, and Australia more often experienced the appearance of new possibilities than people in Switzerland, Poland, Czechia, and France.

9.3.6.6 Correlations between Coping Styles and Posttraumatic Growth

In this section we examine which coping styles displayed a significant correlation with the level of personal growth in the five domains and whether there are certain common and some country specific findings worth to be highlighted (see Appendix 9.2). Generally, positive reframing and active coping were the two coping strategies exhibiting significant correlation coefficients with nearly all growth domains in almost all countries. This was followed by social support (emotional and instrumental) and planning. Acceptance, humor, self-direction, and the dysfunctional coping activities were the least associated with personal growth.

Religious coping showed a positive relationship with many domains of personal growth, especially in Australia, Italy, Nigeria, Portugal, South Africa, and to a lesser degree also in Switzerland. In all countries, people who were high in religious coping did also experience high levels of positive spiritual change. Receiving emotional and instrumental support displayed strong positive correlations with most areas of growth in Nigeria and South Africa and in many other countries it was especially related to enhanced interpersonal relationships. Interestingly, in some countries denial and venting displayed significant positive associations with some or even many areas of personal growth (e.g., denial in Australia). This could be interpreted as a sign of relief at the end of 2021 as some countries returned to a certain normality.

Table 9.9 Mean Values and Standard Deviations of Posttraumatic Growth Domains

Appreciation of Life Personal Strength New	Appreciation of Life	Life	Personal Strength	th	New Possibilities	ss	Relating to others	ırs	Spiritual Change	"
	M	SD	M	SD	M	SD	M	SD	M	SD
Australia	2.85	1.52	2.66	1.60	2.47	1.61	2.41	1.62	1.62	1.70
Czech Republic	2.55	1.43	2.34	1.43	1.92	1.33	2.00	1.30	1.02	1.32
France	2.49	1.34	2.25	1.38	2.02	1.38	1.84	1.37	96.0	1.24
India	2.50	1.50	2.64	1.57	2.33	1.50	2.62	1.50	1.78	1.51
Italy	2.77	1.34	3.15	1.15	2.26	1.26	2.41	1.38	1.57	1.42
Nigeria	3.33	1.17	3.93	0.91	3.61	1.04	3.50	1.12	3.61	1.32
Poland	1.98	1.54	1.83	1.58	1.58	1.46	1.66	1.57	98.0	1.24
Portugal	2.94	1.35	2.88	1.39	2.65	1.43	2.64	1.41	1.91	1.61
South Africa	3.29	1.43	3.32	1.54	2.95	1.54	2.96	1.57	2.79	1.81
Spain	3.01	1.36	2.67	1.36	2.36	1.31	2.47	1.40	1.08	1.19
Switzerland	2.40	1.47	2.36	1.51	1.64	1.39	1.67	1.43	0.92	1.30
ANOVA										
F	28.17		40.36		75.95		73.74		125.36	
Sig.	p < 0.001		p < 0.001		p < 0.001		p < 0.001		p < 0.001	
Eta ²	0.040		0.056		0.101		0.098		0.156	

9.3.6.7 Correlations between Posttraumatic Growth and Perceived Hope, Stress, and Well-being

An unresolved issue discussed in the literature is whether posttraumatic growth is associated with lower levels of stress and higher levels of well-being (hedonic or psychological) (Tedeschi & Calhoun, 2004). Our final analysis in this chapter aimed to assess the relationships between the five areas of posttraumatic growth, on the one hand, and perceived hope, stress, and the three domains of hedonic, psychological, and social well-being, on the other, among the 11 samples (see Appendix 9.3). We will report the most general and noteworthy findings.

In most countries, the areas of personal growth were positively related to perceived hope, hedonic, psychological, and social well-being but slightly or moderately negatively correlated with perceived stress. This means that, at least in our samples, until the end of 2021, people with higher levels of stress experienced lower degrees of personal growth. Another noteworthy finding was that in many countries, appreciation of life was only slightly, or not at all, associated with hope and well-being. Spiritual change and changes in interpersonal relationships were mainly positively associated with hope and social well-being. In South Africa, spiritual change was moderately correlated not only with perceived hope and social well-being, but also with psychological and hedonic well-being. The Indian sample displayed the lowest correlation coefficients and in the Italian sample personal strengths were strongly related to hope and well-being.

9.4 Findings and Discussion

Many psychological studies between 2020 and 2021 focused on studying the negative effects of the worldwide COVID-19 pandemic crisis on mental health, with special emphasis on the perceived levels of distress, uncertainty, fear, anxiety, and depression. Furthermore, several studies have shown the importance of cultural characteristics in the perception of stress and the coping styles chosen to deal with it. From a positive psychological standpoint, the aim of the Hope Barometer survey of 2020 and 2021 was to investigate the levels of perceived stress in relation to a hopeful attitude towards the future as reported by people in 11 countries. Hope has been characterized as a positive emotion that helps people to cope with stressful situations, enhancing well-being and fostering personal growth.

This section commences with the presentation of the general findings of our study with regard to common patterns about the levels of perceived hope, stress, well-being, coping styles and personal growth, and the associations between them. Afterwards we analyze the sample specific results in order to find individual patterns that could reveal meaningful differences between countries. One main research question was whether people in collectivistic countries experienced and dealt with the pandemic crisis differently than people in more individualistic countries.

9.4.1 General Findings

During 2020 and 2021 most people in our study reported moderate to high levels of hope and at the same time moderate but clearly above the "normal" perceived levels of stress characterized by feelings of unpredictability, uncontrollability, and overload. Moreover, despite the burdens of the crisis, people reported moderate to high levels of well-being, in some countries below the levels of 2019, but in other countries with a loss in 2020 and a clear recovery in 2021. In general, over-all samples, people were able to display positive coping styles such as accepting the new reality by simultaneously adopting a positive stance and actively coping with the challenging situation.

Hope and well-being of the participants in our study were primarily related to the possibility of reframing the negative events in a positive way, to the capacity of accepting and actively coping with everyday challenges, but also to finding relief and comfort in religious faith and practices. In some countries, levels of well-being were positively related to the availability of social support. To the contrary, disengaging from any effort to positively deal with the current situation and blaming oneself were the reactions most negatively related with hope and well-being.

Higher levels of perceived stress were primarily related to dysfunctional coping styles such as disengagement, self-blame, and denial. Acceptance and positive reframing showed a much stronger association with lower levels of perceived stress than the problem-focused styles, revealing the importance of emotion-focused coping styles. However, social support and religious coping, were either weakly or even not significantly related to lower levels of perceived stress, although showing significant positive associations with perceived hope and well-being.

Most of the participants in our samples reported moderate levels of posttraumatic growth, especially with regard to the appreciation of life and the awareness of personal strengths, but much less in relation to the spiritual dimension. Personal growth correlated positively with positive reframing and active coping and also with social support. In some countries, personal growth was also related to religious coping. Furthermore, personal growth was positively associated with perceived hope and well-being, but not or only marginally with a reduction of perceived stress. Positive changes in spiritual awareness and relating to others were significantly associated with higher levels of perceived hope and social well-being. Besides these outcomes, we did not find any further clear pattern regarding the association of personal growth and the individual dimensions of hedonic, psychological, and social well-being.

To summarize, the results of our study confirm the findings of other authors and reveal new aspects that have not been investigated before. The COVID-19 pandemic intensified the level of stress as already reported in other studies (e.g., Alshehri et al., 2020; Bridgland et al., 2021; Horn et al., 2020; Maia & Dias, 2020) affecting the mental health of the population. However, most people could remain hopeful and face the threats and challenges in a positive way. In line with previous research and our own assumptions, emotion-focused coping styles such as acceptance and

364 A. M. Krafft et al.

	Норе	Well-being	Stress
Higher	Nigeria, Australia, South Africa, India, Portugal	Nigeria, Australia, South Africa, India, Portugal	Spain, Portugal, India, Czechia
Moderate	Czechia, Italy	Italy, France, Spain	South Africa, Italy, France
Lower	Spain, Poland, France, Switzerland	Poland, Czechia, Switzerland	Nigeria, Australia, Poland, Switzerland
Increase 2020-21	Italy, Portugal		Switzerland, Australia, France
Decrease 2020-21	France, India, Czechia	Australia, Czechia, France, Poland, Spain and Switzerland	Spain, Portugal, Czechia, India

Table 9.10 Relative Levels of Hope, Well-being, and Stress across Countries

positive reframing and religious faith were especially important in order to remain hopeful and preserve well-being (see also Agha, 2021; Guszkowska & Dąbrowska-Zimakowska, 2022; Kar et al., 2021; Rogowska et al., 2021). Supporting the results of Ahuja (2021) and Szkody et al. (2021), the value of social support and religious coping seems to be less related to reducing the levels of stress as to fostering the feelings of hope and well-being. Furthermore, personal growth occurred across the samples of our study, and was especially related to hope and well-being but not with a reduction of perceived stress. However, our findings could not confirm that posttraumatic growth would be associated with an increase in psychological well-being as opposed to subjective well-being, proposed by claims of Joseph and Linley (2005).

9.4.2 Country Specific Findings

Beyond these general findings, some noteworthy results specific to individual countries emerged from our study, confirming the importance of cultural values and norms with regard to the perception of stress and hope and the choice of particular coping styles.

An overview of the levels of hope, well-being, and perceived stress across countries are presented in Table 9.10. The first remarkable results are that participants in Nigeria, Australia, South Africa, India, and Portugal reported the highest levels of hope and well-being. On the other hand, people in Spain, Poland, France, and Switzerland displayed the lowest hope scores and samples from in Poland and Czechia the lowest levels of well-being. Furthermore, people in Australia, Czechia, France, Poland, Spain, and Switzerland experienced a clear decline in well-being during 2020-2021. With regard to the perceived burdens of the pandemic, people in Spain, Portugal, India, and Czechia experienced high levels of stress, while those from Nigeria, Australia and Switzerland reported lower levels of stress. However,

whereas in Switzerland, Australia and France levels of stress increased from 2020 to 2021, in Spain, Portugal, Czech, and India, it decreased.

Portugal and Switzerland are two exemplary cases showing opposite characteristics. Compared to the other countries, participants in Portugal demonstrated high levels of hope and well-being but also experienced high levels of stress. Interestingly, levels of hope increased during this period and the level of stress decreased. On the other hand, people in Switzerland perceived relatively lower levels of stress but also reported lower levels of hope and well-being. Additionally, levels of stress increased and well-being declined.

Theoretically, we assumed that people in countries with higher levels of hope will display lower levels of distress and higher levels of well-being. This assumption was only partly supported. Participants in Australia and Nigeria reported higher levels of hope and well-being and lower levels of distress. However, those in Portugal and India reported higher levels of hope and well-being but also higher levels of stress. This suggests that people can remain hopeful despite higher levels of stress, but also that lower levels of stress do not always result in higher levels of hope and well-being.

We then examined possible differences in coping styles preferred by participants from different countries. Beyond the common patterns presented in the previous section, noteworthy differences appeared regarding social support, religious coping, and some individual trends also emerged. People in Poland, South Africa, India, and to a lesser extent also in Czechia and Spain, reported higher levels of emotional and instrumental support and people in Nigeria only instrumental support. Similarly, the association of social support and hope and well-being was the highest in the South African, Polish, Czech, and Indian samples. On the other hand, levels of social support and also the association of social support with well-being were the lowest in Australia, Switzerland, France, and Spain. Interestingly, in 2021 people in Czechia and Switzerland reported lower levels of social support and also declining levels of positive reframing (as in Australia, Poland, and Spain), and a rise in disengagement (as in Australia, France, and Italy).

Higher levels of religious coping were expressed by participants from Nigeria, South Africa, India, and Portugal and lower levels by those from Spain, Switzerland, Poland, and France. Furthermore, religious coping showed stronger correlations with hope and well-being in South Africa, Nigeria, Portugal, Poland, and India. In South Africa, higher levels of religious coping were even significantly associated with lower levels of perceived stress. In Spain, Czechia, and Switzerland, the correlation coefficients between religious coping and hope and well-being were the lowest. Thus, our theoretical assumption that people from more collectivistic countries would demonstrate higher levels of social support and religious coping, as proposed by authors such as Chun et al. (2006) and Hu et al. (2018), was largely confirmed, especially regarding to the importance of religious coping. However, social support and religious coping were barely associated with lower levels of stress. To the contrary, in Spain, Portugal, and Nigeria, higher levels of social support were associated with higher levels of stress.

Finally, we assessed the differences in the levels of posttraumatic growth between the 11 investigated samples as a secondary effect of successfully dealing with the A. M. Krafft et al.

pandemic. Because of its strong emotional basis, we expected that posttraumatic growth would be more pronounced in collectivistic countries, compared to individualistic countries. This assumption was largely confirmed. Participants from Nigeria, South Africa, Portugal, and India reported significantly higher levels of personal growth, especially in the social and spiritual domains, than those from Switzerland, Poland, France, and Czechia. Moreover, people in Nigeria, South Africa and Portugal scored much higher in the specific domain of the appearance of new possibilities than people in Switzerland, Poland, Czechia, and France. Remarkably, in the Nigerian and South African samples, all posttraumatic growth domains were positively associated with social and religious coping styles, supporting our assumption.

To summarize, levels of hope and well-being during 2020-2021 were moderate to high despite the moderately high levels of distress, especially among people in more collectivistic countries such as Nigeria, South Africa, India, and Portugal, but also in the largely individualistic Australia. People in the collectivistic countries of Nigeria, South Africa, India, and Portugal exposed much more emotional coping strategies such as religious coping and social support than people in individualistic countries such as Australia, Switzerland, France, Spain, and Czechia. Furthermore, in most of the collectivistic countries, social support and religious coping presented stronger positive correlations with hope and well-being than the samples from the individualistic countries. Moreover, people in Nigeria, South Africa, Portugal, and India reported the highest levels of personal growth, especially in the social and religious dimension. In Nigeria and South Africa, higher levels of social support and religious coping corresponded with higher levels in almost all dimensions of personal growth.

9.5 Limitations

Due to the cross-sectional design of our study and the convenient collection of data from people active in online platforms and social media, a number of limitations need to be addressed. First of all, our samples are not representative of the demographic structure of the investigated countries and show significant differences in the number and the demographic characteristics of their participants. Moreover, the online survey makes the participation of socio-economic groups with limited or no internet access, especially in economically less developed regions, difficult or even impossible. Therefore, the comparison of results from one year to the other must be interpreted with care, since the effects could be attributed, at least in part, to differences in the composition of the samples. Furthermore, we are not able to infer causal relationships and assume that the diverse variables are reciprocally interrelated. For example, questions of whether hopeful people were able to cope with stress more effectively, or whether the level of hope was a consequence of successfully coping with stress must be answered using a longitudinal study design.

We are moreover aware that the point of time to assess the long-term effects of the pandemic in terms of PTG may be too early, that the positive effects reported by people could be to a certain extent of illusory nature and that the self-report measures along with the cross-sectional design of our study could be important limitations that

have to be taken into account when interpreting the results. We know and understand the concerns addressed by authors that consider self-report measures of personal growth to be, to a certain extent, misleading (Boals & Schuler, 2018; Jayawickreme & Blackie, 2014; Maercker & Zoellner, 2004; Nolen-Hoeksema & Davis, 2004). On the one hand we used a scale which only assesses positive changes, and on the other hand people tend to answer growth questions tinted by their own desires and illusions.

9.6 Conclusions

Our study during 2020 and 2021 was centered on the question of how people in different countries perceived and dealt with the COVID-19 pandemic crisis. The focus was not to investigate the negative effects of the crisis, such as anxiety and depression, but on positive coping strategies, hope for the future, well-being, and personal growth. Besides the stress and burdens to physical and mental health resulting from the pandemic, our study demonstrates that most people around the world were able to remain hopeful, to positively cope with the emerging challenges and that they furthermore experienced personal growth in some areas. Particularly, people from more collectivistic countries have benefited from social support and religious coping strategies, also showing higher levels of hope, well-being, and personal growth, despite experiencing higher levels of stress in some cases.

Our findings contribute to support the argument that in every crisis there are as many opportunities as threats, and that we can face such crises either with anxiety or hope. The question is not whether the crisis is good or bad. What is important is our personal attitude towards what is happening and the way we behave in the face of it. We always have a choice: we can make a difficult situation even worse by adopting a negative attitude, or we can look the unpleasant facts in the eyes and let something good come out of them. It depends on the individual to see the situation from a new perspective and, within the scope of one's own possibilities, to change something for the better. Crises can be understood as life tests that can trigger positive turns and lead to personal growth.

However, this does not mean that we always have to master life crises alone and by our own efforts. Events often take us to the limits of our own possibilities and capabilities. They teach us to turn to other people and even to a transcendent Higher Power, to trust them, and to accept help from them. This is the great power of hope. By being aware of the problems and difficulties of our times and accepting them as a challenge, we can believe in a good future. Simultaneously, we can have trust that due to our own personal strengths, in conjunction with other people, we will be able to solve the problems and overcome the difficulties so that our most ardent wishes and desires can be fulfilled. The current study has shown that people all over the world are capable of doing so.

Appendices

Appendix 9.1

Appendix 9.1.1: Demographic Structure of the Samples 2019

Number of participants, mean age and standard deviation and GDP per capita

	Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
z	474	469	94	1092	272	999	481	507	574	529	3935
%	5.2%	5.2%	1.0%	12.0%	3.0%	7.3%	5.3%	5.6%	6.3%	5.8%	43.3%
Mage	47.53	32.75	28.22	31.15	41.86	32.26	31.58	36.45	39.27	35.19	15.22
SD_{age}	13.05	15.54	13.61	12.60	13.78	8.47	10.82	14.74	14.85	46.82	15.67

Gender

		Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
Male	u	232	132	15	529	75	434	140	124	252	116	1797
	%	48.9%	28.1%	15.0%	48.4%	27.6%	65.3%	29.1%	24.5%	43.9%	21.9%	45.7%
Female	n	242	337	79	563	197	231	341	383	322	413	2138
	%	51.1%	71.9%	84.0%	51.6%	72.4%	34.7%	70.9%	75.5%	56.1%	78.1%	54.3%

Marital Status

		Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
Still living with my parents	п	20	136	37	469	45	112	85	142	106	206	231
	%	4.2%	29.0%	39.4%	42.9%	16.5%	16.8%	17.7%	28.0%	18.5%	38.9%	5.9%
Single, unmarried	п	41	29	21	140	36	295	71	84	82	29	589
												н

(continued)

		Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
	%	8.6%	14.3%	22.3%	12.8%	13.2%	44.4%	14.8%	16.6%	14.3%	12.7%	15.0%
Living in a partnership but in	п	16	44	6	6	33	11	43	17	14	26	314
separate households	%	3.4%	9.4%	%9.6	0.8%	12.1%	1.7%	8.9%	3.4%	2.4%	4.9%	8.0%
Living together in a	u	54	70	8	18	09	4	101	65	92	58	719
partnership	%	11.4%	14.9%	8.5%	1.6%	22.1%	99.0	21.0%	12.8%	16.0%	11.0%	18.3%
Married	u	298	117	16	428	62	228	166	150	224	150	1531
	%	62.9%	24.9%	17.0%	39.2%	29.0%	34.3%	34.5%	29.6%	39.0%	28.4%	38.9%
Divorced / separated	п	42	27	3	16	16	11	14	46	43	21	459
	%	8.9%	5.8%	3.2%	1.5%	5.9%	1.7%	2.9%	9.1%	7.5%	4.0%	11.7%
Widowed	u	3	8	0	12	3	4	1	3	13	1	92
	%	%9.0	1.7%	0.0%	1.1%	1.1%	%9 .0	0.2%	%9.0	2.3%	0.2%	2.3%

	2	
•	Ŧ	
	ŧ	
	۲)
	-	•
•	C	7
г	т	7

		Australia	Czechia	France	India	Italia	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
Did not finish school	п	4	0	18	4	0	1	0	0	9	12	41
	%	0.8%	%0.0	19.1%	0.4%	0.0%	0.2%	0.0%	0.0%	1.0%	1.1%	1.0%
Primary school	п	0	16	1	36	18	0	4	1	4	61	190
	%	0.0%	3.4%	1.1%	3.3%	%9.9	0.0%	0.8%	0.2%	0.7%	5.9%	4.8%
Secondary school	п	54	287	9	214	54	23	185	147	211	361	1111
	%	11.4%	61.2%	6.4%	19.6%	19.9%	3.5%	38.5%	29.0%	32.1%	34.5%	28.2%
Professional training/Diploma	п	126	0	5	526	69	22	64	226	140	271	2146
	%	40.0%	%0.0	5.3%	48.2%	52.7%	3.3%	13.3%	44.6%	24.4%	25.9%	54.5%
University	п	131	166	64	312	131	619	228	124	212	349	447
	%	41.6%	35.4%	68.1%	28.6%	48.2%	93.1%	47.4%	24.5%	37.1%	%0.99	11.4%

	-	
	>	
•	₽	
	ಾ	
	$\stackrel{\smile}{}$	
	ಡ	
	_	
	▭	
•	$\overline{}$	
	ಡ	
L	⋍	
3	$\overline{}$	

		Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
In education or training	u	23	236	62	504	62	171	144	171	83	216	197
(student)	%	4.9%	50.3%	%0.99	46.2%	22.8%	25.7%	29.9%	33.7%	14.5%	40.8%	5.0%
Household/raising children	u	16	15	2	118	13	7	18	2	16	12	181
	%	3.4%	3.2%	2.1%	10.8%	4.8%	1.1%	3.7%	0.4%	2.8%	2.3%	4.6%
Part-time job	u	77	33	5	57	41	102	33	45	73	62	830
	%	16.2%	7.0%	5.3%	5.2%	15.1%	15.3%	%6.9	8.9%	12.7%	11.7%	21.1%
Fulltime job	u	312	155	21	352	126	276	269	260	293	202	1777
	%	65.8%	33.0%	22.3%	32.2%	46.3%	41.5%	55.9%	51.3%	51.0%	38.2%	45.2%
Unemployed	u	22	0	2	46	16	103	7	17	68	13	212
	%	4.6%	%0.0	2.1%	4.2%	5.9%	15.5%	1.5%	3.4%	11.8%	2.5%	5.4%
Retired	u	24	30	2	15	14	9	10	12	41	24	738
	%	5.1%	6.4%	2.1%	1.4%	5.1%	%6.0	2.1%	2.4%	7.1%	4.5%	18.8%

Professional status

		Australia	Australia Czechia France India Italy	France	India	Italy	Nigeria	Poland	Portugal	Nigeria Poland Portugal South Africa Spain	Spain	Switzerland
No position in an organization	u	47	154	24	224	69	101	32	111	127	136	657
(e.g., at school, housekeeping, unemployed, retired)	%	%6.6	32.8%	25.5%	20.5%	25.4%	20.5% 25.4% 15.2%	%1.9	21.9%	22.1%	25.7% 16.7%	16.7%
In education / training	u	23	91	43	466	34	159	147	89	06	86	168
	%	4.9%	19.4%	100	45.7%	12.5%	45.7% 12.5% 23.9%	30.6%	13.4%	15.7%	18.5%	4.3%
Employee	u	150	155	12	242 55 1	55	162	195	199	138	196	1705
	%	31.6%	33.0%	12.8%	22.2%	20.2%	24.4%	40.5%	39.3%	24.0%	37.1%	43.3%
Junior / Middle management	u	64	32	0	70	16	79	49	71	102	42	729

	L	Anetrolio	Ametrolia Czackia	Fronce	India	Trolly	Nigorio	Dolond	Dorthan	Dolond Dorthard Couth Africa Crain Cuitzarland	Croin	Cwitzerland
		Australia	CECUIIA	LIGHT	mara	ıtaıy	INIBOILA	I OIAIIU	I OI IUBAI	South Milea	эраш	3 witzellallu
	%	13.5%	%8.9	0.0%	6.4%	5.9%	11.9%	10.2%	14.0%	17.8%	7.9%	18.5%
Senior management / Board of n	u	49	9	∞	18	21	47	6	22	37	37	275
directors	%	10.3%	1.3%	8.5%	1.6%	7.7%	7.1%	1.9%	4.3%	6.4%	7.0%	7.0%
Entrepreneur / Business owner	u	141	31	7	39	77	117	49	36	80	20	401
	%	29.7%	%9.9	7.4%	3.6%	28.3%	28.3% 17.6%	10.2%	7.1%	13.9%	3.8%	10.2%

on	
.헏	1
믕	
Ñ.	

:										
Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
80	101	33	224	130	326	308	244	41	288	1100
16.9%	21.5%	35.1%	20.5%	47.8%	49.0%	64.0%	48.1%	7.1%	54.4%	28.0%
43	11	2	14	0	131	4	10	69	2	796
9.1%	2.3%	2.1%	1.3%	%0.0	19.7%	0.8%	2.0%	12.0%	0.4%	20.2%
99	26	0	25	2	155	11	5	265	1	138
13.9%	5.5%	%0.0	2.3%	0.7%	23.3%	2.3%	1.0%	46.2%	0.2%	3.5%
5	0	1	215	1	14	0	2	16	2	71
1.1%	%0.0	1.1%	19.7%	0.4%	2.1%	0.0%	0.4%	2.8%	0.4%	1.8%
17	1	3	0	1	0	0	0	5	0	11
3.6%	0.2%	3.2%	0.0%	0.4%	0.0%	0.0%	0.0%	%6.0	0.0%	0.3%
14	0	0	533	1	0	0	0	8	0	1
3.0%	%0.0	0.0%	48.8%	0.4%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%
6	5	1	0	6	0	2	3	1	0	27
1.9%	1.1%	1.1%	0.0%	3.3%	0.0%	0.4%	%9.0	0.2%	0.0%	0.7%
95	156	15	37	32	28	50	96	92	35	340
1811.1018. 11.17 614 61 618	% % % % % % % %		11 2.3% 2.6 26 0 0.0% 0 0.0% 0 0 0.0% 1.1% 1.1%	111 2 2.3% 2.1% 26 0 6 0.0% 1.1% 1 3 0.0% 1.1% 0.0% 0.0% 5 1 1.1% 1.1% 1.1% 1.1%	111 2 14 2.3% 2.1% 1.3% 26 0 25 0 2.5% 0.0% 2.3% 0 1 215 0 1.1% 19.7% 1 3 0 0 0.2% 3.2% 0.0% 0 0 533 0.0% 0.0% 48.8% 5 1 0 1.1% 1.1% 0.0% 1.56 15 37	111 2 14 0 2.3% 2.1% 1.3% 0.0% 26 0 25 2 0 2.5% 0.0% 2.3% 0.7% 0 1 215 1 1 1 3 0 1 1 0 0.2% 3.2% 0.0% 0.4% 0 0 533 1 0 5 1 0 9 1 1.1% 1.1% 0.0% 3.3% 1.1% 1.1% 0.0% 3.3% 1.56 15 37 32	111 2 14 0 131 2.3% 2.1% 1.3% 0.0% 19.7% 26 0 25 2 155 0 1 2.3% 0.7% 23.3% 0 1 215 1 14 0 1 215 1 14 1 3 0 1 0 0 0.2% 3.2% 0.0% 0.0% 0 0 533 1 0 5 1 0 9 0 1.1% 1.1% 0.0% 0 1.1% 1.1% 0.0% 0 5 1 0 9 0 1.1% 1.1% 0.0% 3.3% 0.0% 1.56 15 37 28 28	11 2 14 0 131 4 2.3% 2.1% 1.3% 0.0% 19.7% 0.8% 26 0 25 2 155 11 5.5% 0.0% 2.3% 0.7% 23.3% 2.3% 0 1 215 1 14 0 1 3 0 1 0 0 0 0.0% 1.1% 10.7% 0.4% 0.0% 0 0 0 23.3% 0 0 0 0 0 0 0 53.3 1 0 0 0 0 0 0 53.3 1 0 0 0 0 5 1 0 2 2 0 0 0 0 0 1.1% 0.0% 3.3% 0.0% 0.0% 0.4% 0 0 0 5 1 0 0	11 2 14 0 131 4 10 2.3% 2.1% 1.3% 0.0% 19.7% 0.8% 2.0% 26 0 25 2 155 11 5 0 1 2.3% 0.7% 23.3% 2.3% 1.0% 0 1 215 1 14 0 2 0 1 215 1 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	111 2 14 0 131 4 10 69 2.3% 2.1% 1.3% 0.0% 19.7% 0.8% 2.0% 12.0% 26 0 25 2 155 11 5 265 0 2.3% 0.0% 2.3% 1.0% 46.2% 265 0 1 215 1 14 0 2 16 0 0 1 0.0% 0.4% 0.4% 0.0% 0.4% 2.8% 0 0 1 0 0 0 0 5 8 0 0 0 0 0 0 0 0 8 0 0 0 0 0 0 0 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

		Australia	Australia Czechia France India	France	India	Italy	Nigeria	Poland	Portugal	Nigeria Poland Portugal South Africa Spain Switzerland	Spain	Switzerland
I am a spiritual person outside the traditional world religions	%	20.0%	33.3%	16.0% 3.4%	3.4%	11.8%	4.2%	10.4%	18.9%	16.0%	%9.9	8.6%
Without religion or confession	n	121	137	38	24	98	4	96	120	48	170	1352
	%	25.5%	29.2%	40.4%	2.2%		%9.0	20.0%	23.7%	8.4%	32.1%	34.4%
Something different	n	24	32	1	20	10	7	10	27	29	31	66
	%	5.1%	%8.9	1.1% 1.8%	1.8%	3.7%	1.1%	2.1%	5.3%	5.1%	5.9%	2.5%

Appendix 9.1.2: Demographic Structure of the Samples 2020

Number of participants, mean age and standard deviation and GDP per capita

I AMILIONI OI	tunner or participants, inc	nomi ago mia sminana dovianon ana opi poi capita	ינמוותמות מכי	Idilon and	ואט ואל ולול	2114					
	Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
z	210	257	235	272	406	149	227	267	133	112	8969
%	2.2%	2.7%	2.5%	2.9%	4.3%	1.6%	2.4%	5.9%	1.4%	1.2%	73.1%
$M_{\rm age}$	50.24	26.60	44.46	22.63	43.53	31.86	39.45	33.09	44.62	19.96	48.37
$\mathrm{SD}_{\mathrm{age}}$	13.23	10.33	13.48	8.87	13.82	7.82	11.61	14.97	16.62	3.51	21.20

Gender

		Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
Aale	п	125	57	45	163	106	87	50	139	34	16	2636
	%	59.5%	22.2%	19.1%	29.9%	26.1%	58.4%	22.0%	24.5%	25.6%	14.3%	37.8%
Female	п	85	200	190	109	300	62	177	428	66	96	4332
	%	40.5%	77.8%	%6.08	40.1%	73.9%	41.6%	78.0%	75.5%	74.4%	85.7%	62.2%

Marital Status

		Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
Still living with my parents	п	8	92	10	214	82	28	21	242	21	100	278
	%	3.8%	35.8%	4.3%	78.7%	20.2%	18.8%	9.3%	42.7%	15.8%	89.3%	4.0%
Single, unmarried	=	28	51	35	26	39	09	20	73	25	7	945
	%	13.3%	19.8%	14.9%	%9.6	%9.6	40.3%	8.8%	12.9%	18.8%	6.3%	13.6%
Living in a partnership but in	п	9	31	21	0	41	3	13	16	4	2	471
separate households	%	2.9%	12.1%	8.9%	0.0%	10.1%	2.0%	5.7%	2.8%	3.0%	1.8%	6.8%
Living together in a	п	26	50	62	2	77	0	32	89	5	2	1358
partnership	%	12.4%	19.5%	26.4%	0.7%	19.0%	0.0%	14.1%	12.0%	3.8%	1.8%	19.5%
Married	=	119	27	89	28	139	57	123	132	71	1	3118
	%	56.7%	10.5%	28.9%	10.3%	34.2%	38.3%	54.2%	23.3%	53.4%	%6.0	44.7%
Divorced / separated	п	20	5	33	0	24	0	16	31	4	0	626
	%	9.5%	1.9%	14.0%	0.0%	5.9%	0.0%	7.0%	5.5%	3.0%	0.0%	9.0%
Widowed	u	3	1	9	2	4	1	2	5	3	0	172
	%	1.4%	0.4%	2.6%	0.7%	1.0%	0.7%	%6.0	0.9%	2.3%	0.0%	2.5%

Education

		Australia	Australia Czechia France India	France	India	Italia	Nigeria	Poland	Portugal	Nigeria Poland Portugal South Africa Spain	Spain	Switzerland
Did not finish school	u	4	0	2	2	1	1	1	0	0	0	48
	%	1.9%	%0.0	%6.0	0.7%	0.2%	0.7%	0.4%	%0.0	%0.0	%0.0	0.7%
Primary school	u	1	-	1	0	15	0	2	0	0	0	251
	%	0.5%	0.4%	0.4%	0.0%	3.7%	%0.0	%6.0	0.0%	%0.0	%0.0	3.6%
Secondary school	u	12	147	9	95	91	3	37	192	15	51	1819
	%	5.7%	57.2%	2.6%	34.8%	34.8% 22.2% 2.0%		16.1%	33.7%	11.3%	45.5%	26.1%
Professional training/Diploma	п	38	0	73	8	0	9	20	18	10	9	3885

continued)

		Australia	Czechia	France	India	Italia	Nigeria	Poland	Portugal	Portugal South Africa	Spain	Switzerland
	%	18.1%	0.0%	31.0%	2.9%	0.0%	4.0%	8.7%	3.2%	7.5%	5.4%	55.8%
University	u	155	109	153	168	302	139	170	359	108	55	965
	%	73.8%	42.4%	65.1%	61.5%	73.8%	93.3%	73.9%	63.1%	81.2%	49.1%	13.8%

Main activity

		Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
In education or training	п	13	182	28	243	95	44	26	11	30	112	253
(student)	%	6.2%	70.8%	11.9%	89.3%	23.4%	29.5%	11.5%	6.7%	22.6%	100.0%	3.6%
Household/raising children	u	5	5	3	1	12	2	17	1	4	0	355
	%	2.4%	1.9%	1.3%	0.4%	3.0%	1.3%	7.5%	%9.0	3.0%	%0.0	5.1%
Part-time job	u	19	14	44	2	51	16	15	18	12	0	1722
	%	9.1%	5.4%	18.7%	0.7%	12.6%	10.7%	%9.9	10.9%	%0.6	%0.0	24.7%
Fulltime job	u	142	47	130	15	203	57	151	114	72	0	3174
	%	%6.79	18.3%	55.3%	5.5%	50.0%	38.3%	%5.99	69.1%	54.1%	%0.0	45.6%
Unemployed	u	18	9	15	7	26	28	7	7	1	0	306
	%	%9.8	2.3%	6.4%	2.6%	6.4%	18.8%	3.1%	4.2%	0.8%	%0.0	4.4%
Retired	u	12	3	15	4	19	2	11	14	14	0	1158
	%	5.7%	1.2%	6.4%	1.5%	4.7%	1.3%	4.8%	8.5%	10.5%	0.0%	16.6%

Professional status

		Australia	Australia Czechia France India Italy	France	India	Italy	Nigeria	Poland	Portugal	Nigeria Poland Portugal South Africa Spain Switzerland	Spain	Switzerland
No position in an organization	п	26	108	30	89	110	28	22	27	20	44	1182
(e.g. at school, housekeeping, unemployed, retired)	%	12.4%	42.0%	12.8%	25.0%	27.1%	12.8% 25.0% 27.1% 18.8% 9.7%	9.7%	16.4%	15.0%	39.3% 17.0%	17.0%
In education/training	u	8	69	28	185	57 39		31	11	34	59 266	266

		Australia	Czechia	France	India	Italy	Nigeria		Poland Portugal	South Africa	Spain	Switzerland
	%	3.8%	26.8%	11.9%	%0.89	14.0%	26.2%	13.7%	%1.9	25.6%	52.7%	3.8%
Employee	п	54	58	49	8	68	36	83	79	28	∞	2952
	%	25.8%	22.6%	20.9%	2.9%	21.9%	24.2%	36.6%	47.9%	21.1%	7.1%	42.4%
Junior / Middle management	п	32	6	62	9	18	14	36	22	19	1	1361
	%	15.3%	3.5%	26.4%	2.2%	4.4%	9.4%	15.9%	13.3%	14.3%	0.9%	19.5%
Senior management / Board of	n 28	28	1	33	5	31	7	15	8	13	0	439
directors	%	13.4%	0.4%	14.0%	1.8%	7.6%	4.7%	%9.9	4.8%	%8.6	0.0%	6.3%
Entrepreneur / Business owner	п	61	12	33	0	101	25	40	18	19	0	768
	%	29.2%	4.7%	14.0%	0.0%	24.9%	16.8%	17.6%	10.9%	14.3%	0.0%	11.0%

	Ē
	유
	헖
•	ō
¢	×

		Australia	Czechia	France	India	Italy	Nigeria		Portugal	Poland Portugal South Africa	Spain	Switzerland
Catholic	п	28	58	74	7	222	82	121	244	1	59	2025
	%	13.3%	22.6%	31.5%	2.6%	54.7%	55.0%	53.3%	43.0%	%8.0	52.7%	29.1%
Protestant	п	21	∞	4	9	1	34	3	11	29	0	1373
	%	10.0%	3.1%	1.7%	2.2%	0.2%	22.8%	1.3%	1.9%	21.8%	0.0%	19.7%
Another Christian church or	n	27	6	0	9	2	25	3	14	42	0	247
community	%	12.9%	3.5%	0.0%	2.2%	0.5%	16.8%	1.3%	2.5%	31.6%	%0.0	3.5%
Muslim	n	2	0	4	10	0	1	0	1	2	0	104
	%	1.0%	0.0%	1.7%	3.7%	0.0%	0.7%	0.0%	0.2%	1.5%	0.0%	1.5%
Jewish	n	9	0	1	0	0	0	0	1	2	0	21
	%	2.9%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.2%	1.5%	0.0%	0.3%

		Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
Hindu	п	12	0	2	198	0	1	0	0	3	0	6
	%	5.7%	0.0%	%6.0	72.8%	0.0%	0.7%	0.0%	%0.0	2.3%	0.0%	0.1%
Buddhist	u	4	3	0	0	10	0	2	3	3	0	42
	%	1.9%	1.2%	%0.0	0.0%	2.5%	0.0%	%6.0	0.5%	2.3%	0.0%	0.6%
I am a spiritual person outside	u	36	68	28	18	41	2	31	122	26	5	527
the traditional world religions	%	17.1%	34.6%	11.9%	%9.9	10.1%	1.3%	13.7%	21.5%	19.5%	4.5%	7.6%
Without religion or confession	n	65	92	110	17	104	1	09	171	15	43	2422
	%	31.0%	29.6%	46.8%	6.3%	25.6%	0.7%	26.4%	30.2%	11.3%	38.4%	34.8%
Something different	n	6	14	12	10	26	3	7	0	10	5	198
	%	4.3%	5.4%	5.1%	3.7%	6.4%	2.0%	3.1%	0.0%	7.5%	4.5%	2.8%

Appendix 9.1.3: Demographic Structure of the Samples 2021

Number of participants, mean age and standard deviation and GDP per capita

	Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
z	138	692	406	485	188	121	148	494	563	312	5546
%	1.5	7.4	4.4	5.2	2.0	1.3	1.6	5.3	6.0	3.4	59.6
Mage	49.30	45.24	37.96	22.12	47.73	33.07	31.16	43.68	38.87	42.24	48.75
SDage	11.45	16.75	15.44	21.99	12.34	808	12.46	15.63	14.52	16.87	14.52

Gender

		Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
Male	u	75	59	69	283	43	29	28	108	260	96	2391

		Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
	%	54.3%	30.6%	17.0%	58.4%	22.9%	55.4%	18.9%	21.9%	46.2%	30.8%	43.4%
Female	u	63	134	335	200	145	54	118	386	303	214	3118
	%	45.7%	69.4%	82.5%	41.2%	77.1%	44.6%	79.7%	78.1%	53.8%	%9.89	26.6%

Marital Status

		Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
Still living with my parents	u	4	33	63	388	25	18	43	96	76	72	195
	%	2.9%	17.1%	15.5%	%0.08	13.3%	14.9%	29.1%	19.4%	17.2%	23.1%	3.5%
Single, unmarried	u	14	25	59	99	20	54	21	29	130	29	873
	%	10.1%	13.0%	14.5%	13.6%	10.6%	44.6%	14.2%	13.6%	23.1%	9.3%	15.7%
Living in a partnership but in	u	1	17	46	3	13	0	9	12	15	14	371
separate households	%	0.7%	8.8%	11.3%	%9.0	%6.9	0.0%	4.1%	2.4%	2.7%	4.5%	6.7%
Living together in a	u	26	36	75	7	34		25	75	78	50	1103
partnership	%	18.8%	18.7%	18.5%	1.4%	18.1%	0.8%	16.9%	15.2%	13.9%	16.0%	19.9%
Married	u	80	70	133	20	78	47	45	176	196	119	2313
	%	58.0%	36.3%	32.8%	4.1%	41.5%	38.8%	30.4%	35.6%	34.8%	38.1%	41.7%
Divorced / separated	u	13	6	28	1	15		7	09	39	21	543
	%	9.4%	4.7%	%6.9	0.2%	8.0%	0.8%	4.7%	12.1%	%6.9	%1.9	9.8%
Widowed	u	0	3	2	0	3	0	1	8	8	7	148
	%	%0.0	1.6%	0.5%	0.0%	1.6%	0.0%	0.7%	1.6%	1.4%	2.2%	2.7%

Education

		Australia	Czechia	France	India	Italia	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
Did not finish school	u	1	1	1	0	1	0	0	1	3	0	32
	%	0.7%	0.1%	0.2%	0.0%	0.5%	0.0%	%0.0	0.2%	0.5%	%0.0	%9.0

		Australia	Czechia	France	India	Italia	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
Primary school	п	0	18	1	1	3	1	0	9	1	6	183
	%	0.0%	2.6%	0.2%	0.2%	1.6%	0.8%	%0.0	1.2%	0.2%	2.9%	3.3%
Secondary school	п	21	221	15	147	45	5	75	114	166	09	1219
	%	15.2%	31.9%	3.7%	35.5%	23.9%	4.2%	50.7%	23.1%	29.5%	19.2%	22.0%
Professional training /	п	38	262	84	3	9	4	6	25	138	41	3224
Diploma	%	27.5%	<i>‰</i>	20.7%	0.7%	3.2%	3.3%	6.1%	5.1%	24.5%	13.2%	58.1%
University	п	78	190	305	264	133	1111	64	348	255	202	888
	%	56.5%	27.5%	75.1%	63.77%	70.7%	91.7%	43.2%	70.4%	45.3%	64.7%	16.0%

SOTIVITY	1
۳	•
212	

,	L	Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
In education or training	=	8	64	133	438	20	34	72	108	75	82	158
(student)	%	5.8%	33.2%	32.8%	90.3%	10.6%	28.1%	48.6%	21.9%	13.3%	26.3%	2.8%
Household / raising children	п	3	8	7	4	7	4	3	0	11	7	260
	%	2.2%	4.1%	1.7%	0.8%	3.7%	3.3%	2.0%	0.0%	2.0%	2.2%	4.7%
Part-time job	п	24	11	57	8	22	16	11	44	69	21	1222
	%	17.4%	5.7%	14.0%	1.6%	11.7%	13.2%	7.4%	8.9%	12.3%	6.7%	22.0%
Fulltime job	п	87	86	177	18	109	53	58	284	314	151	2654
	%	63.0%	50.8%	43.6%	3.7%	58.0%	43.8%	39.2%	57.5%	55.8%	48.4%	47.9%
Unemployed	п	10	2	6	14	15	14	3	17	50	11	219
	%	7.2%	1.0%	2.2%	2.9%	8.0%	11.6%	2.0%	3.4%	%6.8	3.5%	3.9%
Retired	п	9	10	23	3	15	0	1	41	4	40	1033
	%	4.3%	5.2%	5.7%	0.6%	8.0%	0.0%	0.7%	8.3%	7.8%	12.8%	18.6%

Professional status

No position in an organization n 17 (e.g., at school, housekeeping, % 12. unemployed, retired)	Ausuana	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
keeping, %	7	47	58	98	30	11	2	118	120	88	918
	12.3%	24.4%	14.3%	17.7%	16.0%	9.1%	1.4%	23.9%	21.3%	28.2%	16.6%
In education / training n 10	0	53	88	375	22	34	72	39	73	41	177
7.2	7.2%	27.5%	21.7%	77.3%	11.7%	28.1%	48.6%	7.9%	13.0%	13.1%	3.2%
Employee n 37	7	6	99	11	50	28	34	184	144	117	2185
% 26.	26.8%	4.7%	16.3%	2.3%	26.6%	23.1%	23.0%	37.2%	25.6%	37.5%	39.4%
Junior / Middle management n 15	16	30	94	9	16	20	15	56	103	27	1225
% 10.	%6.01	15.5%	23.2%	1.2%	8.5%	16.5%	10.1%	11.3%	18.3%	8.7%	22.1%
Senior management / Board of n 25		34	57	3	22	10	9	19	49	24	387
directors \(\alpha_{\infty} \) 18.	18.1%	17.6%	14.0%	%9.0	11.7%	8.3%	4.1%	3.8%	8.7%	7.7%	7.0%
Entrepreneur / Business owner n 34	+	20	43	4	48	18	19	78	74	15	654
% 24.	24.6%	10.4%	10.6%	0.8%	25.5%	14.9%	12.8%	15.8%	13.1%	4.8%	11.8%

Religion

		Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	Portugal South Africa	Spain	Switzerland
Catholic	u	20	37	123	29	96	73	58	207	49	153	1512
	%	14.5%	19.2%	30.3%	%0.9	51.1%	60.3%	39.2%	41.9%	8.7%	49.0%	27.3%
Protestant	п	14	2	10	13	0	26	0	4	29	0	1093
	%	10.1%	1.0%	2.5%	2.7%	%0.0	21.5%	0.0%	0.8%	11.9%	%0.0	19.7%
Another Christian church or	п	15	3	2	20	2	17	2	11	272	1	206
community	%	10.9%	1.6%	0.5%	4.1%	1.1%	14.0%	1.4%	2.2%	48.3%	0.3%	3.7%
Muslim	п	1	0	8	18	0	0	0	1	11	0	63
	%	0.7%	0.0%	2.0%	3.7%	0.0%	0.0%	0.0%	0.2%	2.0%	0.0%	1.1%
Jewish	п	1	0	5	1	0	1	0	1	5	1	13

(continued)

		Australia	Czechia	France	India	Italy	Nigeria	Poland	Portugal	South Africa	Spain	Switzerland
	%	0.7%	0.0%	1.2%	0.2%	0.0%	0.8%	0.0%	0.2%	%6.0	0.3%	0.2%
Hindu	п	3	0	1	340	0	0	0	0	3	0	5
	%	2.2%	0.0%	0.2%	70.1%	0.0%	0.0%	0.0%	%0.0	0.5%	0.0%	0.1%
Buddhist	п	9	3	3	2	9	0	1	9	5	3	35
	%	4.3%	1.6%	0.7%	0.4%	3.2%	0.0%	0.7%	1.2%	%6.0	1.0%	0.6%
I am a spiritual person outside	п	26	71	54	24	24	_	27	143	92	33	397
the traditional world religions	%	18.8%	36.8%	13.3%	4.9%	12.8%	0.8%	18.2%	28.9%	13.5%	10.6%	7.2%
Without religion or confession	п	40	72	186	19	38	0	54	121	48	109	2035
	%	29.0%	37.3%	45.8%	3.9%	20.2%	0.0%	36.5%	24.5%	8.5%	34.9%	36.7%
Something different	u	12	5	14	19	22	3	9	0	27	12	187
	%	8.7%	2.6%	3.4%	3.9%	11.7%	2.5%	4.1%	0.0%	4.8%	3.8%	3.4%

Appendix 9.2

Appendix 9.2.1

Australia: Partial Bivariate Pearson Correlations of Coping Styles with Posttraumatic Growth Domains

	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
	0.073	0.292**	0.145	0.333**	0.049
Positive Reframing	0.312**	0.449**	0.441***	0.515**	0.468**
	0.115	0.231***	0.136	0.339**	0.099
Religion	0.334**	0.471**	0.443**	0.405**	0.729**
Humor	-0.044	0.091	0.032	0.048	-0.046

				Relating	
	Appreciation of Life	Personal Strength	New Possibilities	to others	Spiritual Change
Active Coping	0.210*	0.278**	0.345**	0.300**	0.275**
Self-direction	0.039	0.071	0.034	0.153	0.124
lanning	0.289**	0.401**	0.368**	0.292**	0.325**
nstrumental Support	0.232**	0.361**	0.276**	0.456**	0.361**
Denial	0.285**	0.294**	0.290**	0.193*	0.425**
/enting	0.053	0.143	0.116	0.174*	0.173*
hsengagement	0.014	0.077	0.037	-0.041	0.143
elf-blame	0.055	-0.042	-0.093	-0.033	0.106
ubstance Abuse	-0.042	-0.056	-0.138	-0.036	-0.103

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Appendix 9.2.2

Czech Republic: Partial Bivariate Pearson Correlations of Coping Styles with Posttraumatic Growth Domains

	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Acceptance		0.207**		0.120**	-0.058
raming	0.174**	0.318**		0.326**	0.172**
			0.255**	0.311**	0.190**
Religion	0.130**		0.235**	0.225**	0.647***
Humor			0.112*	0.087	0.038
Active Coping				0.304**	0.149**
			0.209**	0.162**	0.126**
Planning	0.179**	0.229**	0.190^{**}	0.201**	0.144**

(continued)

	tion of Life	Strength	sibilities	Relating to others	Spiritual Change
Instrumental Support				0.359**	0.268**
Denial				0.102*	0.091*
Venting	0.149**	0.129**	0.122**	0.110*	.0098*
Disengagement	0.125**	690'0	*860.0	890.0	0.191**
Self-blame	0.113*	0.076	0.113*	080.0	0.114*
Substance Abuse	0.085	0.030	0.065	0.050	0.135**

Appendix 9.2.3

France: Partial Bivariate Pearson Correlations of Coping Styles with Posttraumatic Growth Domains

	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Acceptance	0.133**	0.141**	0.162**	*860.0	0.058
Positive Reframing	0.254**	0.246**	0.234**	0.225**	0.176**
Emotional Support	0.187**	0.279**	0.188**	0.302**	0.131**
Religion	0.135**	0.113*	0.225**	0.205**	0.661**
Humor	0.072	0.125*	0.085	0.201**	0.021
Active Coping	0.185**	0.233**	0.231**	0.206**	0.084
Self-direction	0.213**	0.200**	0.154**	0.163**	0.048
Planning	0.160**	0.224**	0.244**	0.183**	0.097
Instrumental Support	0.139**	0.264**	0.158**	0.272**	0.087
Denial	0.168**	0.090	0.072	0.056	0.109*
Venting	0.141**	0.261**	0.150^{**}	0.238**	*660.0
Disengagement	0.061	-0.010	-0.039	-0.115^*	0.030

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity,

professional status

	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Self-blame	0.044	800.0	0.047	0.038	0.063
Substance Abuse	0.048	-0.097	0.045	-0.034	-0.021

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Appendix 9.2.4

India: Partial Bivariate Pearson Correlations of Coping Styles with Posttraumatic Growth Domains

Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
0.229**	0.269**	0.210**	0.257**	0.047
0.227**	0.296**	0.320**	0.263**	0.107*
0.182**	0.197**	0.119**		0.141**
*760.0	0.130**	0.135**	0.130**	0.436**
0.083	0.117*	0.092*	0.107*	0.152**
0.282**	0.282**	0.295**	0.171**	880.0
0.282**	0.227**		0.203**	0.153**
0.343**	0.283**		0.228**	*660.0
0.173**	0.147**		0.181**	0.190**
0.034	0.100*	0.167**	990:0	0.196**
0.219**	0.189**	0.246**	0.181**	0.220**
0.018	-0.013	$ 0.102^{*}$	0.011	0.199**
0.144**	7.000	0.057	0.049	0.124**
0.054	0.092*	0.162^{**}	0.072	0.243**
	Appreciation of Life 0.229** 0.227** 0.182** 0.097* 0.083 0.282** 0.282** 0.343** 0.173** 0.018 0.019** 0.018	tion of Life Personal Strength 0.269** 0.296*** 0.197** 0.197** 0.130** 0.282** 0.282** 0.282** 0.282** 0.283** 0.147** 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.100* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0092* 0.0	tion of Life Personal Strength New Possibilities 0.266*** 0.296*** 0.210*** 0.197*** 0.119** 0.130*** 0.130*** 0.117** 0.0282** 0.282** 0.282** 0.282** 0.295** 0.100** 0.147*** 0.147*** 0.147** 0.143** 0.100* 0.0077 0.0057	tion of Life Personal Strength New Possibilities Relating to others 0.269** 0.210** 0.257** 0.257** 0.195** 0.130** 0.130** 0.130** 0.135** 0.135** 0.130** 0.282** 0.282** 0.292** 0.107* 0.282** 0.292** 0.107* 0.292** 0.107* 0.292** 0.107* 0.292** 0.107* 0.292** 0.107** 0.294** 0.107** 0.294** 0.107** 0.294** 0.107** 0.204** 0.203** 0.206** 0.167** 0.167** 0.006 0.007 0.007 0.007 0.007 0.007

Appendix 9.2.5

Italy: Partial Bivariate Pearson Correlations of Coping Styles with Posttraumatic Growth Domains

384

•					
	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Acceptance	820.0	0.342**	0.063	990:0	0.005
Positive Reframing	0.325**	0.294**	0.331**	0.276**	0.284**
Emotional Support	0.274**	0.153*	0.318**	0.462**	0.168*
Religion	0.314**	0.146*	0.222**	0.314**	0.721**
Humor	0.127	0.164*	0.138	0.101	-0.014
Active Coping	0.194**	0.355**	0.276**	0.285**	0.175*
Self-direction	0.154*	0.070	0.117	890.0	0.038
Planning	0.157*	0.404**	0.251**	0.227**	0.131
Instrumental Support	0.281**	0.112	0.295**	0.461**	0.230**
Denial	-0.021	-0.048	0.011	-0.014	0.140
Venting	0.271**	0.176*	0.193**	0.223**	0.168*
Disengagement	0.051	$ -0.217^{**}$	0.030	0.021	0.145
Self-blame	0.078	$ -0.168^*$	-0.020	0.003	0.054
Substance Abuse	0.014	$ -0.155^* $	-0.057	-0.120	-0.014

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Appendix 9.2.6

Nigeria: Partial Bivariate Pearson Correlations of Coping Styles with Posttraumatic Growth Domains

	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Acceptance	0.125	0.135	0.217*	0.044	-0.040
Positive Reframing	0.280**	0.311**	0.391**	0.352**	0.310**
Emotional Support	0.239*	0.313**	0.355**	0.392**	0.330**
Religion	0.358**	0.328**	0.312**	0.378**	0.606**
Humor	0.045	-0.095	-0.005	0.038	-0.074
Active Coping	0.372**	0.331**	0.355**	0.211*	0.298**
Self-direction	0.303**	0.222*	0.359**	0.119	0.217*
Planning	0.276**	0.355**	0.295**	0.224*	0.241**
Instrumental Support	0.273**	0.293**	0.372**	0.462**	0.327**
Denial	0.084	0.020	0.030	0.163	0.174
Venting	0.239*	0.206*	0.161	0.220*	0.214*
Disengagement	0.034	-0.038	-0.001	0.087	-0.011
Self-blame	0.106	-0.008	0.004	0.033	0.071
Substance Abuse	0.041	-0.028	690.0	0.122	0.098

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Appendix 9.2.7

Poland: Partial Bivariate Pearson Correlations of Coping Styles with Posttraumatic Growth Domains

	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Acceptance	-0.007	0.100	0.084	0.045	-0.070
Positive Reframing	0.198*	0.311**	0.311**	0.225**	0.174*
Emotional Support	0.299**	0.150	0.248**	0.254**	0.122
Religion	0.162	0.115	0.199*	0.244**	0.591**
Humor	-0.005	0.167*	0.099	0.166*	0.008
Active Coping	0.225**	0.343**	0.338**	0.233**	0.226**
Self-direction	0.177*	0.183*	0.172*	0.148	-0.023
Planning	0.171*	0.281**	0.259**	0.167*	0.117
Instrumental Support	0.184*	0.101	0.115	0.168*	0.001
Denial	0.152	0.095	0.094	0.012	0.101
Venting	0.182^*	0.137	0.134	0.113	0.124
Disengagement	900.0-	0.052	0.059	-0.031	-0.068
Self-blame	0.101	0.091	0.149	0.105	0.162
Substance Abuse	-0.071	-0.053	-0.028	0.015	-0.055

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Appendix 9.2.8

Portugal: Partial Bivariate Pearson Correlations of Coping Styles with Posttraumatic Growth Domains

0		,			
	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Acceptance	0.063	0.121**	0.048	0.115*	0.029
Positive Reframing	0.211**	0.287**	0.274**	0.300**	0.235**
Emotional Support	0.168**	0.072	0.116*	0.190**	0.136**
Religion	0.218**	0.203**	0.238**	0.309**	0.657**
Humor	690.0	*860.0	0.041	0.126**	0.032
Active Coping	0.276**	0.273**	0.262**	0.242**	0.168**
Self-direction	0.192**	0.178**	0.191**	0.193**	0.132**
Planning	0.281**	0.284**	0.273**	0.229**	0.224**
Instrumental Support	0.228**	0.170**	0.221**	0.280**	0.195**
Denial	0.131**	0.065	0.155^{**}	*860.0	0.196**
Venting	0.147**	0.044	0.119^{**}	0.128**	0.079
Disengagement	0.010	-0.046	0.020	-0.003	0.086
Self-blame	*680.0	-0.023	0.045	-0.004	0.092*
Substance Abuse	-0.001	-0.041	-0.062	-0.062	0.004
				,	

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Appendix 9.2.9

South Africa: Partial Bivariate Pearson Correlations of Coping Styles with Posttraumatic Growth Domains

	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Acceptance	0.272**	0.304**	0.255**	0.257**	0.186**
Positive Reframing	0.349**	0.446**	0.455**	0.415**	0.404**
Emotional Support	0.285**	0.330**	0.294**	0.412**	0.285**
Religion	0.268**	0.346**	0.348**	0.329**	0.632**
Humor	0.103*	0.136**	0.157**	0.153**	0.073
Active Coping	0.306**	0.430**	0.403**	0.297**	0.301**
Self-direction	0.311**	0.229**	0.287**	0.230**	0.199**
Planning	0.292**	0.360**	0.335**	0.277**	0.283**
Instrumental Support	0.273**	0.257**	0.295**	0.397**	0.289**
Denial	*260.0	990.0	0.120**	0.122**	0.119**
Venting	0.085*	0.106*	0.132**	0.047	0.103*
Disengagement	-0.025	-0.108*	-0.045	-0.037	-0.012
Self-blame	-0.055	-0.097*	-0.072	-0.061	-0.050
Substance Abuse	800.0	-0.080	-0.033	-0.017	-0.022
(44					

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Appendix 9.2.10

Spain: Partial Bivariate Pearson Correlations of Coping Styles with Posttraumatic Growth Domains

J.					
	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Acceptance	0.020	0.133*	0.004	0.028	-0.035
Positive Reframing	0.276**	0.467**		0.363**	0.249**
Emotional Support	0.212**	0.197**	0.241**	0.302**	0.178**
Religion	0.071	0.148**	0.178**	0.169**	969.0
Humor	0.034	0.075		0.028	-0.055
Active Coping	0.140*	0.354**	0.225**	0.206**	0.137*
Self-direction	0.330**	0.258**		0.201**	0.121*
Planning	0.210**	0.385**	0.298**	0.223**	0.203**
Instrumental Support	0.212**	0.250**	0.276**	0.325**	0.256**
Denial	0.190**	0.108	0.162**	0.170**	0.157**
Venting	0.106	0.098	0.087	0.113*	0.100
Disengagement	0.121*	0.054	0.073	0.084	0.013
Self-blame	0.017	-0.041	0.005	0.042	0.061
Substance Abuse	-0.008	-0.072	0.054	0.004	0.081
C **	9:	30 0 7 7 - 3	0		1

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Appendix 9.2.11

Switzerland: Partial Bivariate Pearson Correlations of Coping Styles with Posttraumatic Growth Domains

	•	,			
	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Acceptance	0.132**	0.196**	0.149**	**660.0	0.017
Positive Reframing	0.274**	0.312**	0.328**	0.301**	0.179**
Emotional Support	0.251**	0.228**	0.269**	0.396**	0.222**
Religion	0.188**	0.184**	0.255**	0.277**	0.760**
Humor	0.000	0.120**	**090.0	0.062**	0.022
Active Coping	0.298**	0.311**	0.336**	0.273**	0.191**
Self-direction	0.255**	0.216**	0.228**	0.203**	0.129**
Planning	0.254**	0.288**	0.268**	0.227**	0.193**
Instrumental Support	0.219**	0.197**	0.251**	0.329**	0.223**
Denial	0.034*	0.008	0.029*	0.033*	0.092**
Venting	0.146**	0.126**	0.176**	0.132**	0.141**
Disengagement			-0.065**	-0.087**	0.007
Self-blame	0.107**	0.056**	0.135**	0.085**	0.129**
Substance Abuse	$ -0.032^* $	-0.053^{**}	$ -0.036^{**}$	$ -0.036^{**}$	-0.005

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Appendix 9.3

Appendix 9.3.1

Australia: Partial Bivariate Pearson Correlations of Posttraumatic Growth Domains, Perceived Hope, Stress and Well-being

	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Perceived Hope	0.255^{**}	0.460**	0.397**	0.480**	0.377**
Perceived Stress	0.017	-0.150	-0.191*	-0.181*	0.007
	0.207*	0.380**	0.430**	0.350**	0.184*
ing	0.134	0.353**	0.335^{**}		0.171*
	0.272**	0.511**	0.432**	0.557***	0.308**

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Czech Republic: Partial Bivariate Pearson Correlations of Posttraumatic Growth Domains, Perceived Hope, Stress and Well-being

	Appreciation of Life	rength	New Possibilities	others	Spiritual Change
Perceived Hope	990.0	0.246**	0.232**	0.252**	0.144**
Perceived Stress	0.103*	-0.094*	-0.054	-0.066	0.039
Hedonic Well-being	0.071	0.192**	0.202**		*060.0
Psychological Well-being	0.079	0.285**	0.266**	0.243**	0.147**
Social Well-being	0.160**	0.263**	0.325**	0.393**	0.296**

Appendix 9.3.3

France: Partial Bivariate Pearson Correlations of Posttraumatic Growth Domains, Perceived Hope, Stress and Well-being

	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Perceived Hope	0.150**	0.265**	0.289**	0.326**	0.228**
Perceived Stress	0.019	$ -0.120^*$	-0.052	-0.119*	-0.051
Hedonic Well-being	0.090	0.259**	0.187**	0.214**	0.090
Psychological Well-being	0.143**	0.310**	0.255**	0.280**	0.169**
Social Wellb-eing	0.129**	0.263**	0.235**	0.406**	0.186**

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Appendix 9.3.4

India: Partial Bivariate Pearson Correlations of Posttraumatic Growth Domains, Perceived Hope, Stress and Well-being

			•	,	
	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Perceived Hope	0.156^{**}	0.203**	0.194**	0.185**	0.102*
Perceived Stress	0.024	-0.075	-0.067	-0.035	0.035
Hedonic Well-being	690.0	0.113*	0.137**	0.178**	0.080
Psychological Well-being	$ 0.114^{*}$	0.207**	0.161**		0.115*
Social Well-being	0.146**	0.178**	0.202**	0.229^{**}	0.180^{**}

Appendix 9.3.5

Italy: Partial Bivariate Pearson Correlations of Posttraumatic Growth Domains, Perceived Hope, Stress and Well-being

	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Perceived Hope	0.308**	0.517**	0.414**	0.311**	0.245**
Perceived Stress	-0.082	-0.422**	-0.271^{**}	-0.188*	-0.089
Hedonic Well-being	0.173*	0.499**	0.323**	0.261**	0.139
Psychological Well-being	0.188*	0.555**	0.378**	0.386**	0.195**
Social Well-being	0.244**	0.459**	0.382**	0.420**	0.338**

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Appendix 9.3.6

Nigeria: Partial Bivariate Pearson Correlations of Posttraumatic Growth Domains, Perceived Hope, Stress and Well-being

	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Perceived Hope	0.251**	0.185*	0.349**	0.313**	0.325**
Perceived Stress	0.119	-0.040	960.0-	$ -0.258^{**}$	-0.086
	0.145	0.156	0.306**	0.134	0.116
Psychological Well-being	0.255**	0.210^*	0.392**	0.256^{**}	0.233*
Social Well-being	0.122	0.249**	0.298**	0.418**	0.324**

Appendix 9.3.7

Poland: Partial Bivariate Pearson Correlations of Posttraumatic Growth Domains, Perceived Hope, Stress and Well-being

	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Perceived Hope	0.178*	0.173*	0.161	0.289**	0.246**
Perceived Stress	-0.141	-0.177*	-0.189*	-0.175*	-0.080
Hedonic Well-being	0.236**	0.259**	0.286**	0.284**	0.249**
Psychological Well-being	0.241**	0.309**	0.236**	0.284**	0.114
Social Well-being	0.209*	0.318**	0.296**	0.353**	0.282**

Notes. **Correlation is significant at 0.01 level, *Correlation is significant at 0.05 level. Control variables: Gender, age, marital status, education, main activity, professional status

Appendix 9.3.8

Portugal: Partial Bivariate Pearson Correlations of Posttraumatic Growth Domains, Perceived Hope, Stress and Well-being

	tion of	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Perceived Hope	0.216**	0.312**		0.286**	0.293**
Perceived Stress	0.049	-0.116*	<u> </u>	-0.110*	-0.010
Hedonic Well-being	690:0	0.191**	0.153**	0.230**	0.084
Psychological Well-being	*960.0	0.238**	0.220**	0.272***	0.143**
Social Well-being	0.168**	0.274**	0.233**	0.392**	0.222**

Appendix 9.3.9

South Africa: Partial Bivariate Pearson Correlations of Posttraumatic Growth Domains, Perceived Hope, Stress and Well-being

	on of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Perceived Hope	0.257**	0.419**	0.394**	0.415**	0.442**
Perceived Stress	-0.041	-0.217**	-0.181**	$ -0.210^{**}$	-0.183**
Hedonic Wellbeing	0.144**	0.278**	0.289**	0.337**	0.295**
Psychological Wellbeing	0.188**	0.369**	0.353**	0.354**	0.328^{**}
Social Wellbeing	0.213**	0.355**	0.369**	0.450**	0.363^{**}

Notes. **Correlation is significant at 0.01 level. Control variables: Gender, age, marital status, education, main activity, professional status

Appendix 9.3.10

Spain: Partial Bivariate Pearson Correlations of Posttraumatic Growth Domains, Perceived Hope, Stress and Well-being

•				,	
	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Perceived Hope	0.229**	0.400**	0.339**	0.317**	0.187***
Perceived Stress	0.102	-0.141*	-0.033	-0.085	-0.012
	0.172**	0.299**	0.246**	0.241***	0.127*
Psychological Well-being	0.211**	0.391**	0.325**	0.308**	0.233**
	0.220**	0.370**	0.321**	0.442**	0.279**

Appendix 9.3.11

Switzerland: Partial Bivariate Pearson Correlations of Posttraumatic Growth Domains, Perceived Hope, Stress and Well-being

396

	Appreciation of Life	Personal Strength	New Possibilities	Relating to others	Spiritual Change
Perceived Hope	0.218**	0.288**	0.270**	0.335**	0.202**
Perceived Stress	0.021	$ -0.126^{**} $	-0.059**	-0.094**	0.021
Hedonic Well-being	0.142**	0.244**	0.197**		0.083**
Psychological Well-being	0.178**	0.301**	0.248**		0.151**
Social Well-being	0.206^{**}	0.274**	0.261**	0.457***	$ 0.200^{**} $

Notes: **Correlation is significant at 0.01 level. Control variables: Gender, age, marital status, education, main activity, professional status

References

- Agha, S. (2021). Mental well-being and association of the four factors coping structure model: A perspective of people living in lockdown during COVID-19. *Ethics, Medicine and Public Health*, 16, 1–8. https://doi.org/10.1016/j.jemep.2020.100605
- Ahuja, K. K. (2021). Scanning the VIRUS: A study of dimensions of stress and coping with COVID-19. Current Psychology, 41, 1–11. https://doi.org/10.1007/s12144-021-01369-4
- Aldwin, C. M. (2004). *Culture, coping and resilience to stress* (pp. 563–573). Centre for Bhutan Studies.
- Alshehri, F. S., Alatawi, Y., Alghamdi, B. S., Alhifany, A. A., & Alharbi, A. (2020). Prevalence of post-traumatic stress disorder during the COVID-19 pandemic in Saudi Arabia. Saudi Pharmaceutical Journal, 28(12), 1666–1673. https://doi.org/10.11588/xarep.00001333
- Armeli, S., Gunthert, K. C., & Cohen, L. H. (2001). Stressor appraisals, coping, and post-event outcomes: The dimensionality and antecedents of stress-related growth. *Journal of Social and Clinical Psychology*, 20(3), 366–395. https://doi.org/10.1521/jscp.20.3.366.22304
- Averill, J. R., Catlin, G., & Chon, K. K. (1990). Rules of hope: Recent research in psychology. Springer.
- Averill, J. R., & Sundararajan, L. (2005). Hope as rhetoric: Cultural narratives of wishing and coping. In J. Eliott (Ed.), *Interdisciplinary perspectives on hope* (pp. 133–165). Nova Science.
- Bhattacharjee, A., & Ghosh, T. (2021). COVID-19 pandemic and stress: Coping with the new normal. *Journal of Prevention and Health Promotion*, 3, 30–52. https://doi.org/10.1177/26320770211050058
- Boals, A., & Schuler, K. L. (2018). Reducing reports of illusory posttraumatic growth: A revised version of the Stress-Related Growth Scale (SRGS-R). *Psychological Trauma: Theory, Research, Practice, and Policy*, 10(2), 190–198.
- Boyraz, G., & Legros, D. N. (2020). Coronavirus disease (COVID-19) and traumatic stress: probable risk factors and correlates of posttraumatic stress disorder. *Journal of Loss and Trauma*, 25(6-7), 503–522. https://doi.org/10.1080/15325024.2020.1763556
- Bridgland, V. M. E., Moeck, E. K., Green, D. M., Swain, T. L., Nayda, D. M., Matson, L. A., Hutchison, N. P., & Takarangi, M. K. T. (2021). Why the COVID-19 pandemic is a traumatic stressor. *PLoS One*, 16(1), 1–15. https://doi.org/10.1371/journal.pone.0240146
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *Lancet*, 395(10227), 912–920. https://doi.org/10.1016/S0140-6736(20)30460-8
- Bruininks, P., & Malle, B. F. (2005). Distinguishing hope from optimism and related affective states. *Motivation and Emotion*, 29(4), 324–352. https://doi.org/10.1007/s11031-006-9010-4
- Budimir, S., Probst, T., & Pieh, C. (2021). Coping strategies and mental health during COVID-19 lockdown. *Journal of Mental Health*, 30(2), 156–163. https://doi.org/10.1080/09638237.2021. 1875412
- Cann, A., Calhoun, L. G., Tedeschi, R. G., Taku, K., Vishnevsky, T., Triplett, K. N., & Danhauer, S. C. (2010). A short form of the posttraumatic growth inventory. *Anxiety, Stress, & Coping*, 23(2), 127–137. https://doi.org/10.1080/10615800903094273
- Carver, C. S. (1997). You want to measure coping but your protocol'too long: Consider the brief cope. *International Journal of Behavioral Medicine*, 4(1), 92–100. https://doi.org/10.1207/s15327558ijbm0401_6
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: a theoretically based approach. *Journal of Personality and Social Psychology*, 56(2), 267.
- Casagrande, M., Favieri, F., Tambelli, R., & Forte, G. (2020). The enemy who sealed the world: effects quarantine due to the COVID-19 on sleep quality, anxiety, and psychological distress in the Italian population. *Sleep Medicine*, 75, 12–20. https://doi.org/10.1016/j.sleep.2020.05.011
- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. Structural Equation Modeling: A Multidisciplinary Journal, 14(3), 464–504. https://doi.org/10.1080/10705510701301834

- Chipp, K., Corder, C., & Kapelianis, D. (2013). The role of collectivism in defining the South African bottom of the pyramid. *Management Dynamics: Journal of the Southern African Institute for Management Scientists*, 22(1), 2–13.
- Chun, C. A., Moos, R. H., & Cronkite, R. C. (2006). Culture: A fundamental context for the stress and coping paradigm. In L. C. J. Wong & W. J. Lonner (Eds.), *Handbook of multicultural* perspectives on stress and coping (pp. 29–53). Springer. https://doi.org/10.1007/0-387-26238-5
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385–396. https://doi.org/10.2307/2136404
- Cohen, S., Kessler, R. C., & Gordon, L. U. (Eds.). (1997). *Measuring stress: A guide for health and social scientists*. Oxford University Press on Demand.
- Cohn, M. A., & Fredrickson, B. L. (2006). Beyond the moment, beyond the self: Shared ground between selective investment theory and the broaden-and-build theory of positive emotions. *Psychological Inquiry*, *17*(1), 39–44.
- Cohn, M. A., & Fredrickson, B. L. (2009). Positive emotions. In S. Lopez & C. Snyder (Eds.), Oxford handbook of positive psychology (Vol. 2, pp. 13–24).
- Collins, R., Taylor, S., & Skokan, L. (1990). A better world or a shattered vision: Changes in life perspectives following victimization. Social Cognition, 8, 263–265.
- Cooke, J. E., Eirich, R., Racine, N., & Madigan, S. (2020). Prevalence of posttraumatic and general psychological stress during COVID-19: A rapid review and metaanalysis. *Psychiatry Research*, 292, 113347. https://doi.org/10.1016/j.psychres.2020.113347
- de Quervain, D., Aerni, A., Amini, E., Bentz, D., Coynel, D., Gerhards, C., Fehlmann, B., Freytag, V., Papassotiropoulos, A., Schicktanz, N., Schlitt, T., Zimmer, A., & Zuber, P. (2020). *The Swiss Corona Stress Study*. Report of the University of Basel.
- Eaton, L., & Louw, J. (2000). Culture and self in South Africa: Individualism-collectivism predictions. The Journal of Social Psychology, 140(2), 210–217. https://doi.org/10.1080/00224540009600461
- Engelbrecht, M. C., Heunis, J. C., & Kigozi, N. G. (2021). Post-traumatic stress and coping strategies of South African nurses during the second wave of the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 18(15), 1–14. https://doi.org/10.3390/ijerph18157919
- Erikson, E. H. (1959). *Identity and the life cycle: Selected Papers*. International Universities Press. Fredrickson, B. L. (2013). Positive emotions broaden and build. *Advances in Experimental Social Psychology*, 47(1), 1–53. https://doi.org/10.1016/B978-0-12-407236-7.00001-2
- Gallagher, M. W., Smith, L. J., Richardson, A. L., D'Souza, J. M., & Long, L. J. (2021). Examining the longitudinal effects and potential mechanisms of hope on COVID-19 stress, anxiety, and well-being. *Cognitive Behaviour Therapy*, 50(3), 234–245. https://doi.org/10.1080/16506073. 2021.1877341
- Garbóczy, S., Szemán-Nagy, A., Ahmad, M. S., Harsányi, S., Ocsenás, D., Rekenyi, V., Al-Tammemi, A., & Kolozsvári, L. R. (2021). Health anxiety, perceived stress, and coping styles in the shadow of the COVID-19. BMC psychology, 9(1), 1–13. https://doi.org/10.1186/ s40359-021-00560-3
- Govier, T. (2011). Hope and its opposites. Journal of Social Philosophy, 42(3), 239–253.
- Guszkowska, M., & Dąbrowska-Zimakowska, A. (2022). Coping with stress during the second wave of the COVID-19 pandemic by Polish University students: Strategies, structure, and relation to psychological well-being. *Psychology Research and Behavior Management*, 15, 339. https://doi.org/10.2147/PRBM.S345648
- Heppner, P. P., Heppner, M. J., Lee, D. G., Wang, Y. W., Park, H. J., & Wang, L. F. (2006). Development and validation of a collectivist coping styles inventory. *Journal of Counseling Psychology*, 53(1), 107.
- Horn, M., Wathelet, M., Fovet, T., Amad, A., Vuotto, F., Faure, K., Astier, T., Noël, H., Henryb, M., Stéphane, S., Vaiva, G., & Fabien, D. (2020). Is COVID-19 associated with posttraumatic stress disorder? *The Journal of Clinical Psychiatry*, 82(1), 9886.

- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling: A Multidisciplinary Journal, 6(1), 1–55. https://doi.org/10.1080/10705519909540118
- Hu, Q., Bernardo, A. B., Lam, S. W., & Cheang, P. K. (2018). Individualism-collectivism orientations and coping styles of cyberbullying victims in Chinese culture. *Current Psychology*, 37(1), 65–72. https://doi.org/10.1007/s12144-016-9490-7
- Hu, Y., Ye, B., & Im, H. (2021). Hope and post-stress growth during COVID-19 pandemic: The mediating role of perceived stress and the moderating role of empathy. *Personality and Individual Differences*, 178, 110831. https://doi.org/10.1016/j.paid.2021.110831
- Husky, M. M., Kovess-Masfety, V., & Swendsen, J. D. (2020). Stress and anxiety among university students in France during Covid-19 mandatory confinement. *Comprehensive Psychiatry*, 102, 152191. https://doi.org/10.1016/j.comppsych.2020.152191
- Jayawickreme, E., & Blackie, L. R. (2014). Post-traumatic growth as positive personality change: Evidence, controversies and future directions. *European Journal of Personality*, 28, 312–331. https://doi.org/10.1002/per.1963
- Joseph, S., & Linley, A. (2005). Positive adjustment to threatening events: An organismic valuing theory of growth through adversity. Review of General Psychology, 9, 262–280. https://doi.org/ 10.1037/1089-2680.9.3.262
- Kar, N., Kar, B., & Kar, S. (2021). Stress and coping during COVID-19 pandemic: Result of an online survey. *Psychiatry Research*, 295, 113598. https://doi.org/10.1016/j.psychres.2020. 113598
- Keyes, C. L. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43(2), 207–222. https://doi.org/10.2307/3090197
- Krafft, A. M., Guse, T., & Maree, D. (2021). Distinguishing perceived hope and dispositional optimism: Theoretical foundations and empirical findings beyond future expectancies and cognition. *Journal of Well-Being Assessment*, 4, 1–27. https://doi.org/10.1007/s41543-020-00030-4
- Krafft, A. M., Martin-Krumm, C., & Fenouillet, F. (2019). Adaptation, further elaboration, and validation of a scale to measure hope as perceived by people: Discriminant value and predictive utility vis-à-vis dispositional hope. Assessment, 26(8), 1594–1609. https://doi.org/10.1177/1073191117700724
- Kuo, B. C., Roysircar, G., & Newby-Clark, I. R. (2006). Development of the cross-cultural coping scale: Collective, avoidance, and engagement coping. *Measurement and Evaluation in Counseling and Development*, 39(3), 161–181. https://doi.org/10.1080/07481756.2006.11909796
- Lakhan, R., Agrawal, A., & Sharma, M. (2020). Prevalence of depression, anxiety, and stress during COVID-19 pandemic. *Journal of Neurosciences in Rural Practice*, 11(4), 519–525. https://doi.org/10.1055/s-0040-1716442
- Lazarus, R. S. (1966). Psychological stress and the coping process. McGraw-Hill.
- Lazarus, R. S. (1990). Theory-based stress measurement. *Psychological Inquiry*, 1(1), 3–13. https://doi.org/10.1207/s15327965pli0101_1
- Lazarus, R. S. (1993). From psychological stress to the emotions: A history of changing outlooks. *Annual Review of Psychology*, 44(1), 1–22.
- Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. Springer.
- Linley, P. A., & Joseph, S. (2011). Meaning in life and posttraumatic growth. *Journal of Loss and Trauma*, 16(2), 150–159. https://doi.org/10.1080/15325024.2010.519287
- Linley, P. A., Joseph, S., & Goodfellow, B. (2008). Positive changes in outlook following trauma and their relationship to subsequent posttraumatic stress, depression, and anxiety. *Journal of Social and Clinical Psychology*, 27(8), 877–891. https://doi.org/10.1521/jscp.2008.27.8.877
- Liu, C. H., Zhang, E., Wong, G. T. F., Hyun, S., & Hahm, H. C. (2020). Factors associated with depression, anxiety, and PTSD symptomatology during the COVID-19 pandemic: Clinical implications for U.S. young adult mental health. *Psychiatry Research*, 290, 113172. https:// doi.org/10.1016/j.psychres.2020.113172
- Marcel, G. (1951). Homo viator: Introduction to a metaphysic of hope. St. Augustines Press.

- Maercker, A., & Zoellner, T. (2004). The Janus face of self-perceived growth: Toward a two-component model of posttraumatic growth. *Psychological Inquiry*, 15, 41–48.
- Mahamid, F. A., & Bdier, D. (2021). The association between positive religious coping, perceived stress, and depressive symptoms during the spread of coronavirus (covid-19) among a sample of adults in Palestine: Across sectional study. *Journal of Religion and Health*, 60(1), 34–49. https://doi.org/10.1007/s10943-020-01121-5
- Maia, B. R., & Dias, P. C. (2020). Anxiety, depression and stress in university students: The impact of COVID-19. Estudos de Psicologia (Campinas), 37, e200067. https://doi.org/10.1590/1982-0275202037e200067
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224.
- Markus, H. R., & Kitayama, S. (2003). Culture, self, and the reality of the social. *Psychological Inquiry*, 14(3-4), 277–283. https://doi.org/10.1080/1047840X.2003.9682893
- Marsh, H. W. (1994). Confirmatory factor analysis models of factorial invariance: A multifaceted approach. *Structural Equation Modelling*, 1, 5–34. https://doi.org/10.1080/10705519409539960
- Marsh, H. W., Balla, J. R., & Hau, K. (1996). An evaluation of incremental fit indices: A clarification of mathematical and empirical properties. In G. A. Marcoulides & R. E. Schumacker (Eds.), *Advanced structural equation modeling: Issues and techniques* (pp. 315–353). Lawrence Erlbaum.
- Marujo, H. Á., Velez, M. J., Gonçalves, S. P., Neto, L. M., Krafft, A. M., & Casais, M. (2021). The value of hope: Validation of the perceived hope scale in the Portuguese population. *Current Psychology*, 1–9. https://doi.org/10.1007/s12144-021-02115-6
- Minahan, J., Falzarano, F., Yazdani, N., & Siedlecki, K. L. (2021). The COVID-19 pandemic and psychosocial outcomes across age through the stress and coping framework. *The Gerontologist*, 61(2), 228–239. https://doi.org/10.1093/geront/gnaa205
- Moos, R. H. (1984). Context and coping: Toward a unifying conceptual framework. *American Journal of Community Psychology*, 12(1), 5.
- Moos, R. H. (2002). Context and coping: Toward a unifying conceptual framework. In D. Marks (Ed.), *The health psychology reader* (pp. 167–185). SAGE Publications.
- Morales-Rodríguez, F. M. (2021). Fear, stress, resilience and coping strategies during COVID-19 in Spanish university students. *Sustainability*, *13*(11), 5824. https://doi.org/10.3390/su13115824
- Nolen-Hoeksema, S., & Davis, C. G. (2004). Theoretical and methodological issues in the assessment and interpretation of posttraumatic growth. *Psychological Inquiry*, *15*, 60–64.
- Polizzi, C., Lynn, S. J., & Perry, A. (2020). Stress and coping in the time of COVID-19: Pathways to resilience and recovery. *Clinical Neuropsychiatry*, 17(2), 59. https://doi.org/10.36131/ CN20200204
- Rehman, U., Shahnawaz, M. G., Khan, N. H., Kharshiing, K. D., Khursheed, M., Gupta, K., Kashyap, D., & Uniyal, R. (2021). Depression, anxiety and stress among Indians in times of Covid-19 lockdown. *Community Mental Health Journal*, 57(1), 42–48. https://doi.org/10.1007/s10597-020-00664-x
- Rogowska, A. M., Kuśnierz, C., & Ochnik, D. (2021). Changes in stress, coping styles, and life satisfaction between the first and second waves of the COVID-19 pandemic: A longitudinal cross-lagged study in a sample of university students. *Journal of Clinical Medicine*, 10(17), 4025. https://doi.org/10.3390/jcm10174025
- Roy, D., Tripathy, S., Kar, S. K., Sharma, N., Verma, S. K., & Kaushal, V. (2020). Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. Asian Journal of Psychiatry, 51, 102083. https://doi.org/10.1016/j.ajp. 2020.102083
- Shulruf, B., Hattie, J., & Dixon, J. (2007). Development of a new measurement tool for individualism and collectivism. *Journal of Psychoeducational Assessment*, 25, 385–401. https://doi.org/10.1177/0734282906298992

- Shulruf, B., Alesi, M., Ciochină, L., Faria, L., Hattie, J., Hong, F., Pepi, A. M., & Watkins, D. (2011). Measuring collectivism and individualism in the third millennium. *Social Behavior and Personality: An International Journal*, 39, 173–187. https://doi.org/10.2224/sbp.2011.39. 2.173
- Scioli, A., & Biller, H. (2009). Hope in the age of anxiety. Oxford University Press.
- Slezackova, A., Prošek, T., Malatincová, T., & Krafft, A. M. (2020). Psychometrické vlastnosti české verze Škály prožívané naděje: faktorová struktura a vnitřní konzistence [Psychometric characteristics of the Czech version of The Perceived Hope Scale: Factor structure and internal consistency]. Československá psychologie/Czechoslovak Psychology, 64(3), 288–305.
- Szkody, E., Stearns, M., Stanhope, L., & McKinney, C. (2021). Stress-buffering role of social support during COVID-19. Family Process, 60(3), 1002–1015. https://doi.org/10.1111/famp. 12618
- Taylor, S., Landry, C. A., Paluszek, M. M., Fergus, T. A., McKay, D., & Asmundson, G. J. (2020a).
 COVID stress syndrome: Concept, structure, and correlates. *Depression and Anxiety*, 37(8), 706–714. https://doi.org/10.1002/da.23071
- Taylor, S., Landry, C. A., Paluszek, M. M., Fergus, T. A., McKay, D., & Asmundson, G. J. (2020b). Development and initial validation of the COVID stress scales. *Journal of Anxiety Disorders*, 72, 102232. https://doi.org/10.1016/j.janxdis.2020.102232
- Tedeschi, R., & Calhoun, L. (1995). Trauma and transformation: Growing in the aftermath of suffering. Sage.
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15(1), 1–18. https://doi.org/10.1207/s15327965pli1501_01
- Tennen, H., Affleck, G., & Tennen, R. (2002). Clipped feathers: The theory and measurement of hope. *Psychological Inquiry*, 13(4), 311–317.
- Tillmann, R., Kuhn, U., Kühr, J., Thiévent, R., & Tabin, J. P. (2021). Effets de la pandémie de coronavirus et du semi-confinement sur les conditions de vie: une analyse de l'enquête «COVID-19» du Panel suisse de ménages selon les catégories de revenu. Rapport final. OFAS, FORS.
- Tong, E. M., Fredrickson, B. L., Chang, W., & Lim, Z. X. (2010). Re-examining hope: The roles of agency thinking and pathways thinking. *Cognition and Emotion*, 24(7), 1207–1215. https://doi. org/10.1080/02699930903138865
- Torales, J., O'Higgins, M., Castaldelli-Maia, J. M., & Ventriglio, A. (2020). The outbreak of COVID-19 coronavirus and its impact on global mental health. *International Journal of Social Psychiatry*, 66(4), 317–320. https://doi.org/10.1177/0020764020915212
- Triandis, H. (1996). The psychological measurement of cultural syndromes. American Psychologist, 51, 407–415.
- Triandis, H. C. (2001). Individualism-collectivism and personality. *Journal of Personality*, 69(6), 907–924. https://doi.org/10.1111/1467-6494.696169
- Tsamakis, K., Triantafyllis, A. S., Tsiptsios, D., Spartalis, E., Mueller, C., Tsamakis, C., Chaidou, S., Spandidos, D., Fotis, L., Economou, M., & Rizos, E. (2020). COVID-19 related stress exacerbates common physical and mental pathologies and affects treatment. *Experimental and Therapeutic Medicine*, 20(1), 159–162. https://doi.org/10.3892/etm.2020.8671
- Tseng, W. S. (2001). Handbook of cultural psychiatry. Academic.
- Usher, K., Durkin, J., & Bhullar, N. (2020). The COVID-19 pandemic and mental health impacts. *International Journal of Mental Health Nursing*, 29(3), 315–318. https://doi.org/10.1111/inm. 12726
- Wu, D., Yu, L., Yang, T., Cottrell, R., Peng, S., Guo, W., & Jiang, S. (2020). The impacts of uncertainty stress on mental disorders of Chinese college students: Bhattacharjee and Ghosh 51 Evidence from a nationwide study. *Frontiers in Psychology*, 11, 243. https://doi.org/10. 3389/fpsyg.2020.00243

Yeh, C. J., Arora, A. K., & Wu, K. A. (2006). A new theoretical model of collectivistic coping. In P. T. P. Wong, L. C. J. Wong, & W. J. Lonner (Eds.), *Handbook of multicultural perspectives on stress and coping* (pp. 55–72). Springer. https://doi.org/10.1007/0-387-26238-5_3

Andreas Krafft holds a doctoral degree in Management Sciences at the University of St. Gallen (Switzerland) with special focus on Organizational Psychology, Culture and Development. He has academic specializations in Social Psychology of Organizations, Work and Health Psychology as well as Positive Psychology from the University of Zürich. Andreas is associate researcher for Futures Studies and lecturer at the Institute of Systemic Management and Public Governance at the University of St. Gallen. Furthermore, he teaches at the University of Zürich in the field of Work and Health, at the Master of Applied Positive Psychology at the University of Lisbon, Portugal, as well as at the Master of Futures Studies from the Free University Berlin. He is co-president of swissfuture, the Swiss Society for Futures Studies, member of the executive board of SWIPPA (the Swiss Positive Psychology Association) and of the DACH-PP (German speaking Association of Positive Psychology). Since many years he leads the International Research Network of the Hope Barometer.

JohnBosco Chika Chukwuorji is a Senior Lecturer at the Department of Psychology, University of Nigeria, Nsukka. He was a Fulbright scholar and visiting researcher at Cleveland State University Cleveland, Ohio USA (2019–2020). He holds a PhD in clinical psychology obtained from the University of Nigeria Nsukka. As a research fellow in the Center for Translational and Implementation Research (CTAIR), University of Nigeria Nsukka, he is a core team member in the use of implementation science to enhance the effectiveness and quality of healthcare services in Nigeria. His research is focused on finding innovative approaches to provide quality mental healthcare for people living with challenging health conditions, forcibly displaced persons, justice-involved individuals, underserved communities and the general population. In addition to being the Editor of Nigerian Journal of Psychological Research, he is associate editor of three Journals (Fulbright Chronicles, Nigerian Journal of Psychology, Journal of International Politics & Development Studies) and editorial board member of four journals (BMC Psychology, Journal of Child and Adolescent Trauma, CPQ Women and Child Health, Journal of Psychology and Allied Disciplines).

Rajneesh Choubisa is Associate Professor of Psychology in the Department of Humanities and Social Sciences at Birla Institute of Technology and Science, (BITS) Pilani, Pilani Campus, India. He is a behavioral scientist by training and specializes in Positive Psychology from IIT Delhi. He has carried out meaningful research in the area of positive psychological measurement, positive organizational psychology and well-being promotion. He has rendered his expertise for reviewing projects at the European Commission's Institute of Advance Studies, among others. He is actively providing his expertise in the capacity of reviewer and academic editor for many top quality journals in the field. As an Indian collaborator of the Hope Barometer project, he has keen interest in exploring positive psychological variables theoretically, and also testing the practicability of these variables through customized, theory-driven, tailor-made programs and interventions.

Stella Comte is professor at the University of Cagliari, Italy. She is a member of the Italian Association of Psychology (A.I.P., Experimental Session) and of the Italian Association of Ethology. She is a referee for "Psychological Research" and "International Journal of Psychology". Her main research interest focuses on the following areas: the methodological issues of research on cognitive activity in human and animal: Vigilance and Attention, Language, Perception and Memory, as well as Cooperative Learning, Ethological studies of gulls, BFC and changes after treatment in children and adults and Theater therapy in adults and children. She has been the Scientific Responsible of a number of research projects: 2020 Creation of Help Desk for the Prevention of New Technology Addictions Foundation. She is the author of 180 scientific works,

including monographies, chapters of books, scientific papers and proceedings published in national and international Journals.

Fabien Fenouillet is a professor of positive psychology of learning at the University of Paris Nanterre (UPN) and deputy director of the Interdisciplinary Laboratory in Neuroscience, Physiology and Psychology: Learning, Physical Activity and Health (LINP2-2APS). He is a specialist in motivation, particularly when this concept is applied to school, university or adult learning. He has written several books on this topic and published numerous scientific articles on the relationship between motivation and cognitive processes related to intelligence, memory, or in connection with technologies. He is committed to the optimal functioning of the human being. His research and publications apply more globally to consider different aspects of learning such as those related to well-being, interests, values but also anxiety.

Valle Flores-Lucas is Associate Professor at Valladolid University, in the psychology department. She led the Postgraduate course on Positive Psychology and Humour sense at Valladolid University. Her research work has been centred on two main research lines: developmental language and communication disorders. In the last years, she started another research line in the field of Positive Psychology mainly in the study of hope and its relations with other positive strengths and its applications on education. She is member of the Spanish Positive Psychology Society.

Tharina Guse is a counselling psychologist and obtained an MA (Counselling Psychology) degree from the Potchefstroom University (now North-West University) in 1989. She was in full-time private practice for the next 15 years providing psychotherapy for children, adolescents and adults. In 2003 she obtained her PhD (Psychology) from Potchefstroom University. She returned to academia in 2005 and joined the University of Johannesburg. Since April 2018 she is a professor and Head of the Department of Psychology at the University of Pretoria. Currently she serves on the Professional Board for Psychology of the Health Professions Council of South Africa (HPCSA). She is also President of the recently founded South African Positive Psychology Association (SAPPA). Her research focuses are on positive psychology in general and in particular on psychosocial well-being, positive psychology interventions and psychological strengths such as hope and gratitude. Closely aligned with this broad focus she also conducts research on the application of hypnosis for the promotion of mental health and well-being.

Elżbieta Kasprzak, psychologist, professor at the Kazimierz Wielki University in Bydgoszcz, Poland. Researcher of the determinants of careers and their consequences for the well-being of employees. An important area of her scientific interests are various aspects of positive functioning at work, job satisfaction, hope and passion at work, as well as the conditions and effects of job crafting and proactivity at work. Since 2015 she has been participating in the international research network of the Hope Barometer.

Charles Martin-Krumm is full Professor at the Ecole de Psychologues Praticiens de Paris (EPP). He is the director of the Vulnerability, Capability, and Recovery Laboratory at EPP. He is researcher at APEMAC UR 4360 UDL in Metz and associate at the Institut de Recherche Biomédicale des Armées (IRBA), in Brétigny. He is received the Fellow Award of the International Positive Psychology Association. Author of ten books and more than a hundred scientific publications, his research themes are related to quality of life and education in the fields of school, physical activity and sports, health and organizations.

Helena Agueda Marujo has a PhD in Psychology. She is Associate Professor at the Instituto Superior de Ciências Sociais e Politicas of the University of Lisbon, where she holds the positions of Executive Coordinator of Masters and PhDs programs in Development Human Resources

404 A. M. Krafft et al.

Policies; of Scientific Coordinator of the Postgraduate Degree in Applied Positive Psychology; of researcher at the Centre for Administration and Public Policy (CAPP); and of member of the Ethics Committee. She is the Coordinator of the UNESCO Chair in Education for Global Peace Sustainability at the University of Lisbon. Helena is a member of the Advisory Board of the International Positive Psychology Association and of the Board of Directors of the European Positive Psychology Network.

Chitra Nair started her career as Assistant Professor of Sociology at Government K.N.M. College, Thiruvananthapuram under University of Kerala in 2015. Her ongoing research focuses on positive psychology, improving quality of life and happiness of the marginalized, social exclusion and human rights issues, life course of centenarians and understanding the indigenous approaches to "Healthy Ageing". Her social engagements include advocacy for aged and women through local self-governments, NGOs, student level interventions, industrial partners and academic institutions. Her ongoing engagements include the Major Research Project from National Commission for Women, India to conduct research study titled 'Reproductive Rights and Choices of Fisher Women in Coastal Kerala – an Ethnographic Enquiry' and the Minor Research Project from Indian Council for Social Science Research for the research study on Intimate Partner Violence.

Mark Sinclair is an experienced educator, governance and technology professional. Dr Sinclair's career spans multi-sector education; corporate advisory at KPMG and AT Kearney and IT strategy (banking & public sectors). Dr. Sinclair has advised senior executives at over 100 organizations in a broad range of industries throughout Australia, Southeast Asia and the Middle East, helped establish a successful technology start-up and, over the last 20 years, overseen the development of an Education College that has provided education to 100,000 students.

Alena Slezackova, Ph.D., is an Associate Professor of Psychology and a Vice Head of the Dept. of Psychology and Psychosomatics, Faculty of Medicine, Masaryk University, in Brno, Czech Republic. Her scientific interests include mainly hope, mental health, and well-being. She also has a special interest in the research and practice of mindfulness. Alena is a founder and director of the Czech Positive Psychology Centre (CPPC), a member of the Advisory Council of the International Positive Psychology Association (IPPA), and a member of the Executive Board of the European Network for Positive Psychology (ENPP). She has been a member of several international research projects, and she serves on the editorial boards of five academic psychological journals. Alena is the author of the first comprehensive monograph on positive psychology in the Czech language and dozens of scientific publications in positive psychology and health psychology.

Patryk Stecz, a psychologist, is an assistant professor at the Institute of Psychology, University of Lodz, Poland. From 2014–2017 and 2021–2025, he was elected to the Executive Board of the Polish Suicidology Association. Dr Stecz completed his Ph.D. at the Medical University of Lodz. He published approx. 40 scientific works related to applied clinical psychology (attitudes towards suicide, positive suicidology, religious coping, well-being predictors in clinical and non-clinical populations, risk behavior in students with visual impairment, studies on hope). Dr Stecz has been serving psychological support at the Academic Counseling Centre (Technical University of Lodz) for students and employees with disabilities and special needs since 2008. Dr Stecz was aged 31 when he received the Medical University Rector's Scientific Award. Currently he is finishing a four-year post-graduate Clinical Psychology Specialization Program (Center of Postgraduate Medical Education).

Olga Varsos is the co-Author of the POWER Coaching and the GOAL Models, with extensive experience in executive, adult, homeless and at-risk youth coaching. These leading programs are used extensively in Australia and internationally in the not-for-profit, education, community, and

indigenous youth sectors, focusing on instilling hope to establish goals to help ensure positive lasting change. Olga started her career as a social worker, firstly in the health sector before moving to project managing service delivery in the community sector. Olga has post graduate degrees in Social Work, Human Resources and is an accredited EQ Practitioner.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

