



# Article Building Back Better: Fostering Community Resilient Dynamics beyond COVID-19

Giulia Isetti \*🗅, Linda Ghirardello and Maximilian Walder 🕒

Abstract: In light of the COVID-19 crisis and its deep impacts worldwide, questions arise of how to be prepared against and cope with pandemics in particular and disruptions in general. The coronavirus not only posed a physical health threat but caused detrimental effects on people's social lives, adding concerns for individual and collective wellbeing. Herein, within a qualitative explorative case study from Merano (Northern Italy) combining two strands of literature, namely post-disaster recovery and community resilience, 14 semi-structured interviews were conducted with key informants. The interviews served as methodological tool to explore six dimensions (cultural, physical, economic, social, institutional, and ecological) of the local community resilience in the wake of the COVID-19 disaster, and the elements that can further strengthen it. Results show that although there are some networks in place for people to rely on and to support each other, there is still much room for improvement, especially for what concerns local institutional policies. The results are expected to be useful for policy making and for long-term, sustainable, and inclusive management of the risks posed by COVID-19 and future crises looming on the horizon, such as climate change.

**Keywords:** community resilience; post-disaster recovery; pandemic; COVID-19; qualitative methods; Italy; case study

# 1. Introduction

More than two years of the COVID-19 pandemic have heavily put to the test social cohesion and resilience of communities worldwide (Saghin et al. 2022). In order to contain the disease, governments have been implementing unprecedented restrictive measures to ensure social distancing and avoid person-to-person transmission, such as full or partial lockdowns limiting traveling, social interactions, and work life, hence heavily impacting the daily life of modern societies (Di Crosta et al. 2020) and communities. These have been experiencing a climate of uncertainty and fear, with the severe social and economic consequences of the pandemic adding further perturbances to physical and mental health (Dubey et al. 2020). The emergency called for far more than a mere healthcare and medical response, but rather for a response that required the engagement of all citizens. In this context, it has become imperative to develop strategies to build and strengthen resilience, not only on an individual but also on a community level, in order for societies to be able to respond not only to the health crisis, but also to probable future disasters and disruptions (Hynes et al. 2020).

Recovery is a complex process that starts immediately after a disaster causing the disruption of the function of all or part of society by hazardous events, generally natural catastrophes, but also biological crises, such as epidemic and pandemic diseases. Among the many definitions of the concept of post-disaster recovery that can be found in the literature, the UN Office of Disaster Risk Reduction defines it as "decisions and actions aimed at restoring or improving livelihoods, health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society, aligning



Citation: Isetti, Giulia, Linda Ghirardello, and Maximilian Walder. 2022. Building Back Better: Fostering Community Resilient Dynamics beyond COVID-19. *Social Sciences* 11: 397. https://doi.org/10.3390/ socsci11090397

Academic Editor: Nigel Parton

Received: 22 June 2022 Accepted: 12 August 2022 Published: 1 September 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/).

Center for Advanced Studies, Eurac Research, 39100 Bozen-Bolzano, Italy

<sup>\*</sup> Correspondence: giulia.isetti@eurac.edu; Tel.: +39-0471-055-434

with the principles of sustainable development, including build back better to avoid or reduce fu*ture disaster risk"* (UNISDR 2015, pp. 25–26). Both short-term and long-term recovery are therefore emphasized. While the short term focuses on returning to normality, or even a "new normality" (Platt 2018), the long term focuses on helping communities become more resilient and capable of dealing with future disasters (Rouhanizadeh et al. 2020). Recovery is usually divided into four non-linear phases aimed at restoring living conditions in several dimensions (Contreras 2016). According to Contreras' comprehensive framework, physical, social, cultural, economic, institutional, and ecological dimensions of recovery can be used to assess a community's or an area's ability to bounce back in the post-disaster phases. These dimensions include the impact of the disaster on facilities and infrastructures (physical); health, education, and care infrastructures (social); the conservation of monuments and buildings (cultural); commercial and industrial facilities (economic); public buildings (institutional), and open spaces and parks (ecological). Definitions of resilience generally reflect the ability of a system to prepare for, cope, adapt to and recover from extreme events by restoring sustainable living conditions and to even grow after the event has been resolved (Patel et al. 2017). Compared to robustness, which refers to the maintenance of some desired system functions despite fluctuations, resilience provides adaptive capacity that allows for continuous development, such as a dynamic adaptive interplay between sustaining and developing with change (Folke 2006; Magis 2010). Resilience can include both pre-event damage prevention measures as well as post-event strategies to minimize impacts of possible future disasters, therefore it is an important component in (post-)disaster research (Platt 2018), and numerous studies focus on how to achieve resilient recovery. However, too often the socio-cultural needs of disaster-affected communities are marginalized from resilience-based recovery studies (Sou 2019). Therefore, the present study focuses on community resilience (hereafter CR). CR is an inter- and multidisciplinary concept used in many disciplines, including economics, sociology, psychology but also environmental sciences and engineering, and so it lacks a clear consensus on its exact definition, how to measure it (Patel et al. 2017), or the best way to study it. Interest in CR gained momentum especially since the 1980s, following the increased frequency and intensity of the annual number of climatological, hydrological, and meteorological disasters worldwide (Community Resilience Group 2015; Koliou et al. 2020). Alongside environmental disasters and climate change (Smith et al. 2011), extreme events also include cultural oppression and marginalization (Kirmayer et al. 2009), war and terrorist attacks (Pfefferbaum et al. 2007), and disease outbreaks, such as the Ebola virus (Alonge et al. 2019), and, more recently, the coronavirus (Bento and Couto 2021; Fransen et al. 2021; Xu et al. 2021). Disasters are occurring more frequently and with higher intensity also because of the growing concentration of people, activities and resources in urban areas, with severe consequences for the management of cities and communities (Field et al. 2014; Patel et al. 2017). Considering these developments, the concept of CR might gain more importance in the years to come, as it is theorized both as a mitigating as well as a wellbeing-fostering characteristic. For instance, Pfefferbaum et al. (2007) define CR as the ability of community members to take meaningful, deliberate, collective action to remedy the effect of a problem, mitigate future events, and even grow from the crises (see also Sharifi 2016). As such, CR has important implications for health and wellbeing of individuals within a given society and is thus integral to social sustainability (Magis 2010). In fact, the capacity of adaptation and the thoroughly restorative and transformative potential of CR benefit individual health both physically and mentally and foster collective wellbeing on a larger scale. In this context, individual and collective wellbeing go hand in hand, as individual health is strongly embedded in interpersonal relations and social safety networks, as well as related to wider social mechanisms and socio-cultural practices and pre-conditions (Kirmayer et al. 2009; Norris et al. 2008). In fact, individual and CR are inextricably intertwined (Kirmayer et al. 2009), as the societal micro, meso, and macro dimensions of resilience strongly depend on and influence one another (Greenfield et al. 2019; Robertson et al. 2021). This means that individual strategies to maintain balance during exogenous shocks can be a means to

increase CR on a societal level (Field et al. 2014). However, CR is not to be considered as the sum of individual "resiliences" (Norris et al. 2008; Ryan et al. 2018), as it is embedded in and influenced by the characteristics of the economic and social fabric of the community itself<sup>1</sup>. It expresses the interaction between individuals and the community and pertains to the ability of the individual to get help from the community and the ability of the community to help individuals and provide for their needs (Goroshit and Eshel 2013). COVID-19 has prompted further research on the impact of pandemics on the resilience of communities worldwide, and where efforts should be made to enhance it: for example, results from Singapore highlight the urgency of focusing on "physical and psychological health, economic wellbeing, communication, social connectedness and integration and involvement of organizations, with the addition of civic-mindedness and responsibility" (Yip et al. 2021). Moreover, during the pandemic, regular cultural participation behavior has also been proved to create a mental health shield from uncertainty in shock periods and increase pro-cooperative behavior, and should therefore be considered an additional priority for decision makers (Tubadji 2021). A study from Brazil (Bento and Couto 2021) has pointed out the importance of self-organized and decentralized community practices, and how these should be fostered at the policy level. Similar conclusions were obtained through in-depth interviews within a marginalized community in Bangladesh (Ahmad et al. 2022). While stressing the need for research focusing on the adaptative character of resilience (e.g., Fransen et al. 2021), Bento and Couto (2021) warn researchers investigating CR in the wake of the pandemic to take also into proper consideration "the behavioral learning processes and lessons gained at the *community level from a temporal and, therefore, evolutionary perspective"* (p. 3).

By combining two strands of literature, namely research on post-disaster recovery and on community resilience, this paper investigates how the community of Merano (South Tyrol, Italy), was impacted by the COVID-19 pandemic, whether it showed resilient and adaptive dynamics in the post-disaster recovery process, whether social learning and change could be identified, and how community resilience can be further fostered. Thus, the research question answered in this paper can be read as follows: *How can dynamics of community resilience be nurtured in light of the global COVID-19 pandemic and beyond*?, applying a qualitative approach to the case study of Merano (Yin 1994). In doing so, this study contributes to the growing literature on community resilience and post-disaster recovery by providing interesting evidence from a multicultural location with a specific historical tradition of promoting health and wellbeing. Results should generate insights on how to prepare for future crises on a community level, with a special regard to the climate crisis.

### 2. Materials and Methods

# 2.1. The Case Study Merano

To identify resilience-strengthening strategies at community level, this paper focuses on the city of Merano, which, with a population of about 42,000 people, is the second largest urban center in the autonomous region of South Tyrol. Although detailed aspects of national crisis-management exceed the aim of this paper, a brief overview about the magnitude of the pandemic as well as its administrative and political governance will help contextualizing the local situation in Merano. Italy was the Western country first and hardest hit by the pandemic in early 2020, and recorded unprecedented numbers of infections, deaths, and hospital admissions. It was therefore forced to navigate uncharted territory for a Western democracy by implementing harsh lockdowns, severe curfews, police controls, as well as the complete shut-down of public and cultural life and the closure of working environments and entire economic sectors. On a governmental level, the 2020 coronavirus pandemic in the Italian context can be roughly summarized in two phases. The first phase was defined by a level of uncertainty and a strong centralist management, while the second left more room for regional governments to implement tailored and context-specific measures (Bull 2021). Especially the second phase is interesting to consider in relation to our case study. South Tyrol's administration is unique in Italy, as

the province has been given extensive legislative powers, gaining important autonomy in the areas of health, schooling, training, employment, transport, and roads. Due to its strong autonomous statute, South Tyrol implemented an independent pandemic management, both at the end of the first wave in late spring 2020 and largely during the second one, starting from November 2020 onwards, adopting the so-called "Südtiroler Weg" (engl. "South Tyrolian path"). Nevertheless, even if being able to take faster and more tailored decisions in comparison to other provinces may undoubtedly be an advantage, it also entails risks. According to statistical data, in fact, in the period from March 2020 until June 2021, while Italy registered 7143 confirmed COVID-19 cases every 100,000 people, South Tyrol registered, with 14,031 cases, almost twice as many (Province of Bolzano 2021). This led to even longer lasting and more restrictive measures than in other heavily affected regions such as Lombardy.

Located in an area that was severely hit by the pandemic, the case study of Merano is well suited to be analyzed through the lenses of CR in the wake of COVID-19. In fact, despite the high exposure to the virus and the harsh lockdown measures, secondary data indicate interesting and resilient dynamics that can be categorized into the six dimensions of post-disaster recovery (Contreras 2016). In the following, cultural, physical, economic, social, institutional, and ecological tendencies that point towards relatively strong CR in Merano will be briefly described to provide further contextual details of the case study.

**Culture** plays an important role in the context of Merano, where a variety of cultural activities (music, theatre, museums, art, and gastronomy), which have been shown to improve general health and resilience (Gill et al. 2019; Tubadji 2021), are fostered. In fact, the city is known for its highbrow cultural events<sup>2</sup> but also for low-brow activities<sup>3</sup>. During the pandemic, several initiatives were furthermore taken by artists to perform despite the restrictions. For instance, a cooperation between artistic disciplines enabled spontaneous performances in town<sup>4</sup>.

From a **physical- and health-related** point of view, it can be said that infection rates were relatively low in Merano compared to other municipalities in the region. In fact, for every fatality in the city of Merano, seven occurred in Bolzano, the provincial capital (Province of Bolzano 2021). Nevertheless, the city was also the first town in South Tyrol to open an intensive COVID-19 station in the public hospital, reorganizing an entire department as quick as possible to tackle the emergency situation<sup>5</sup>, which points towards resilience (Barbash and Kahn 2021).

Heavily relying on tourism, the **economic** situation in Merano seemed particularly vulnerable in face of the pandemic. In fact, although tourist arrivals strongly decreased in 2020 (ASTAT 2022), the number of active firms in the retail sector did only slightly decrease in 2020 (Chamber of Commerce of Bolzano 2021). Indeed, although worldwide COVID-19 especially took a toll on small businesses (Belitski et al. 2022), in Merano many local shop holders and entrepreneurs were able to quickly adapt to the circumstances by starting, for instance, delivery services.

Looking at the **socio-demographic** composition of the city, Merano is, with an average age of 44.3 years, one of the oldest cities in South Tyrol (ASTAT 2020c). Another characteristic of the city is the strong presence of small families (on average, 2.1 members per family) (ASTAT 2022) as well as single households, which make up almost half of the population. These social groups have been particularly challenged during the COVID-19 pandemic, to the point of being labeled "at-risk" groups in relation to their physical, mental and developmental health (Kowal et al. 2020; Autonomous Province of Trento 2020). However, Merano is unique in the regional context, as it is characterized by a population balance between the two largest linguistic groups in South Tyrol, German (50.47%) and Italian (49.06%)<sup>6</sup>. According to Gunnestad (2006), people who manage to not forego their own language, values and social support, while assimilating others', show greater resilience and adaptive capacities. Therefore, Merano's multiculturality may indicate higher levels of resilience. Merano's cultural heterogeneity is consolidated by a higher presence of foreign citizens (mostly from Albania, Germany, Morocco, and Kosovo) of about 17.28%, against a

national average of 8.5% (Istat [Italian National Institute of Statistics] 2022). Besides these demographic aspects, several initiatives carried out during the pandemic seem to point to strong social networks and social cohesion. For instance, food delivery and measures to counteract inaccessibility to food and technological tools were provided both by the institutions as well as by NGOs and volunteers, factors which are deemed to foster CR (Jewett et al. 2021; Saghin et al. 2022; South et al. 2020).

From an **institutional** point of view, it is worth mentioning that, while the most important measures remained in the hands of the provincial government, those more closely related to city matters were managed by local governments, generating differences between municipalities. Therefore, as institutional trust in pandemic times is crucial (Abdalla et al. 2021; Esposito et al. 2021), CR might have been impacted by the failure to form a governmental coalition in the municipality of Merano in 2020, which caused a one-year period of commissioned administration<sup>7</sup>.

Finally, with overall 75% of the municipal area covered by green spaces, **ecological** aspects play a fundamental role in Merano. Historically, the city has been known for its mild climate, numerous parks and promenades as well as several natural monuments, making it one of the most popular healing destinations in Europe since the 19th century. Furthermore, in more recent times, Merano has been striving to position itself as a pioneering health-promoting city by facilitating active lifestyles and closeness to nature, both deemed as sources of resilience and social cohesion (Samuelsson et al. 2020), also during pandemic times (Aerts et al. 2021). Moreover, the city is the first one in Italy to have prepared a Green Plan in preparation of climate change mitigation (Schmidt et al. 2020) and has recently obtained the ECOT award—the European city tree price.<sup>8</sup>

Considering these aspects, we aim to highlight dynamics and strategies that can be attributed to a strong CR. The case study is expected to offer precious insights into the elements that characterize and foster CR and which could and should be adopted in case of future challenges and disruptions.

## 2.2. Data Collection and Analysis

A qualitative approach was employed to explore how the community of Merano weathered the pandemic, which behaviors and practices were adopted and, if possible, which coping mechanisms might be attributed to a strong CR in the local context. In particular, for the purpose of this study, six dimensions of post-disaster recovery (Contreras 2016) are used as basis for the analysis. Contreras' dimensions, which focus on recovery from an earthquake disaster and are examined from a geo-spatial research perspective, were however adapted to suit both the context of the COVID-19 pandemic as exogenous shock as well as to explore resilience from a community point of view. Table 1 shows the modified dimensions operationalized for the purpose of investigating CR in the face of COVID-19 in Merano. In detail, the cultural dimension focused on cultural vibrancy and diversity during the pandemic, which are beneficial for health and resilience (Tubadji 2021), while the physical dimension was related to healthcare infrastructure and service provision known to be both fundamental and heavily challenged during the COVID-19 pandemic (Barbash and Kahn 2021; Yip et al. 2021). Moreover, the economic dimension investigated how lockdowns and shutdowns put to the test local economic actors (Belitski et al. 2022). The social dimension looked at interpersonal contacts, networks, and associations but also at the feeling of belonging to a community, as all those aspects underwent considerable restrictions in the harsh phases of COVID-19 (Jewett et al. 2021; Saghin et al. 2022). Institutional aspects were furthermore considered in terms of the relationship between citizens and institutions and less as institutional practices. In fact, trust, information and perceived assistance are deemed crucial for CR in times of global crises such as the pandemic (Abdalla et al. 2021; Esposito et al. 2021; Saghin et al. 2022). Finally, the ecological dimension played a crucial role as well, as green spaces were shown to have a beneficial effect on resilience and mental health during COVID-19 (Aerts et al. 2021).

Dimension	Definition	Key Informants' Expertise
Cultural	The cultural fabric of the city and its diversity, fruition of arts and engagement in cultural activities before and during the disaster (Tubadji 2021).	Representatives of the cultural sector (theater, music, arts, literature).
Physical	Healthcare delivery during the pandemic; quality of care for physical and mental health with a particular focus on how hospitals and retirement homes weathered the pandemic waves (Barbash and Kahn 2021; Yip et al. 2021).	Public healthcare staff representatives (hospitals and retirement homes).
Economic	The economic fabric of the city, the direct and indirect costs of the disaster and the future outlook on the economic development (Belitski et al. 2022).	Local economic representatives in Merano (shopholders, entrepreneurs, public facilitators).
Social	Social networks among groups and individuals within the community. This also includes political engagement, volunteerism, feeling of belonging before and during the disaster (Jewett et al. 2021; Saghin et al. 2022; South et al. 2020)	Leaders and activists of volunteer groups and associations.
Institutional	Trust in political and religious institutions, health services, and media, and their (perceived) ability to provide assistance to citizens in the emergency (Abdalla et al. 2021; Esposito et al. 2021; Saghin et al. 2022).	Representatives of local institutions and media.
Ecological	Perception and use (or lack thereof) of green spaces—parks and promenades—before and during the disaster (Aerts et al. 2021).	Responsible persons for green spaces in the city.

Table 1. Definition of the six dimensions of CR adapted to the case study of Merano.

Participants, key informants and community representatives were purposively selected in the light of their knowledge and active involvement in at least one of the dimensions taken into consideration (see Table 1). Qualitative interviews with key informants are indeed appropriate to explore factors, characteristics and responses within communities facing pandemics and epidemics (see also Alonge et al. 2019) and to identify possible resilient dynamics.

By means of desk research and informal discussions with local stakeholders, at least two key informants per dimension, in total 21 persons, were identified and contacted either via e-mail or telephone. Out of these, 14 people agreed to participate. The sample was balanced in terms of gender (7 women, 7 men) and language (i.e., 8 German and 6 Italian). As face-to-face interviews were excluded because of COVID-19 restrictions, four researchers conducted interviews either by telephone or videocalls via Zoom/Microsoft Teams in the participants' language of choice. A semi-structured interview guideline consisting of open-ended questions was used to facilitate the interviews. The interview guide contained a standard set of questions for all interviewees. These firstly aimed to investigate (a) the understanding of resilience in relation to the specific community of Merano and the elements that foster it locally; (b) the status quo: which challenges does the local community face and how are they being tackled; and (c) visions for the future, and how to attain them. Secondly, participants were asked (d) a specific set of questions in relation to their dimension of expertise: key informants with expertise in more than one dimension were interviewed with both interview guides. In order to have a common ground with the participants, at the beginning of each interview the researchers provided a definition of the concept of (community) resilience. However, in order to leave room for additional perspectives on resilience linked to the particular field of expertise of each interviewee and the specific local context, an open question on their own understanding

of resilience was added. Thus, the concept of (community) resilience was explained and defined in the interview process while leaving space for more context-specific or applied understandings of the concept.

Data collection included a sample size of 14 interviews. The mean time per interview was 63 min, with a range between 40 min and 1.5 h. The interview partners gave written informed consent prior to the interview. The consent forms could be filled in in Italian or German. Participants were able to withdraw from the study without giving any explanation. All names and elements that could lead to the identity of interviewees were removed to protect participant anonymity.

The interviews were conducted between December 2020 and June 2021, audio-recorded and then verbatim transcribed. Subsequently, the interviews were analyzed with GABEK®-WinRelan (Holistic Processing of Linguistic Complexity) a tool that can support decisionmaking processes within a community by analysing experiences, opinions, and visions for the future expressed by its members (Zelger 2019). GABEK<sup>®</sup> is a computer-assisted method in qualitative research and textual analysis that allows one to reduce content complexity by coding texts on a keyword basis (Buber and Zelger 2000). The analysis was conducted following the steps suggested by Zelger and Oberprantacher (Zelger and Oberprantacher 2002). Data, i.e., the transcribed interviews, were firstly divided into sense units, i.e., meaningful short sections, and then loaded into WinRelan. Interviewees were subdivided according to their dimension of expertise. Subsequently, content-relevant lexical terms were identified in each text unit and used as key terms in the coding operation. Coding was done by two researchers and one research assistant with joint discussions being held regularly to ensure consistency. The resulting list of expressions (i.e., codings) was assessed by one researcher in order to eliminate synonyms and homonyms. Finally, association graphs were extracted (Zelger 2000). The output consists of a visual overview (association graph) of the respondents' statements as semantic networks. The graphs show the link between keywords that are mentioned at least once by respondents within the same conceptual unit (Zelger 2019). GABEK® allowed us to produce a linguistic net with keywords referring to the single dimensions at the center of the graph. The keywords were expanded with a factor ranging from one to six. The resulting linguistic net thus represents keywords—symbolized by ellipses—which, if connected by a black line, appear together in at least one to six meaningful text units. The connecting lines' thickness in the graphs highlights the frequency of the connections: the thicker the lines, the more frequently a connection has been established.

## 3. Results

The following section presents the findings of the 14 interviews, by focusing on each of the six dimensions reported in Table 1. Each dimension is discussed starting from the association graphs that resulted from the GABEK<sup>®</sup>-WinRelan analysis.

#### 3.1. Cultural Dimension

The present dimension aims at analyzing how cultural activities and spaces have been lived in during the pandemic. As has happened almost all over the world, the pandemic pushed the Italian regional governments to enforce the total closure of all non-essential structures and activities, cultural events and institutions included (Agostino et al. 2020). As a consequence, the financial viability of such institutions has been the hardest hit by the pandemic (OECD 2020), as they are traditionally perceived as needy industries that are among the first candidates for austerity measures (Tubadji 2021). Moreover, citizens were deprived of the interaction with arts and the engagement in cultural activities, which are important predictors for psychological wellbeing, happiness and (mental) health (Frick et al. 2021; Tubadji 2021).

Interviewees were asked to describe the city's cultural offers and activities before the pandemic, how these have changed because of COVID-19, and what the prospects for the future are (Figure 1). Respondents defined culture as a lifestyle, which in Merano is linked to wellbeing, physical activities, and *sport*. These have been impacted immensely

by the pandemic because of the limitations in place and the following cancelling of most (in person) events. Furthermore, outward manifestations of culture such as art, theatre, and music events, are a well-established *tradition* in Merano. According to the respondents, promoting culture therefore fosters resilience for individuals as well as for the whole community:

I do believe that resilience can be promoted in certain areas. I believe that cultural work, as we try to implement it concretely in our daily work, can lead a society, people, individuals, and certain groups, to become more open, more liberal, more progressive overall, or even more educated by fundamentally dealing more with social issues (Interviewee I).

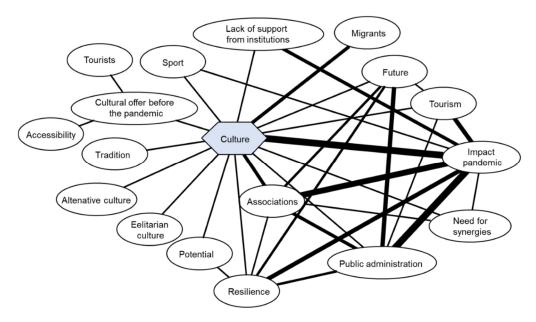


Figure 1. Culture in Merano (N = 14, expansion factor = 3).

According to the interviewees, *before the pandemic the cultural offer* was appealing and *accessible* mostly only to older people with a certain purchasing power, because of its elitist and highbrow character, even if targeted to both *tourists* and residents. Alternative forms of culture exist, but they do not have as much emphasis and visibility as the more highbrow events. The same can be said about cultural impulses for and from the *migrant communities*, that do shape the local culture, though not as much as they could.

The red carpet is rather laid out for the so-called high culture,  $[\ldots]$  such as the Merano Music Weeks, the Grape Festival, where  $[\ldots]$  a relatively folkloristic image of our city, with bands, shooting parades, etc. is shown, while subcultures, etc., have little place, because they are more associated with non-conformity, loudness and possibly drugs and other images (Interviewee I).

As the pandemic struck, the cultural sector showed adaptative capacities and the ability to create new ways of performing art and culture, e.g., with festivals being held outdoors and artists performing via video or in public spaces or balconies. Being pushed to try new ways of bringing art and culture to the people was considered as a learning point:

If people don't take a step towards cultural events, then cultural events have to take a step towards those people [...], I hope this will also be a big lesson of this period, to re-evaluate common spaces like squares and parks. [...] Let's say that the world of art and culture is used to having to be flexible, and in my opinion they are the ones who, where it was possible to do something, reacted the best (Interviewee C).

According to our interviewees, the cultural sector lacked proper *support from the local political institutions* during the pandemic: for the *future*, respondents identified the potential for public institutions to better support the local cultural associations and other economic activities fostering culture. These also need to create more *synergies* and better cooperate among themselves: before the pandemic, artists and people involved in cultural activities were lacking proper representation and, therefore, the ability to lobby for the advantage of the whole sector. To be able to cope with and adapt to the pandemic emergency, artists not only in Merano, but in the whole province of South Tyrol, tried to address this intrinsic weakness by creating an association representing the category:

So now a survey has been carried out, a self-census of artists in South Tyrol, people are participating on a voluntary basis, to create an association that brings together the entire world of South Tyrolean culture. [...] The cultural sector is very divided. That is, sculptors mind their own business, writers are another world. There is no union, no representation, at least to talk to the institutions, in order to defend the artist category in the general sense of the term. And so now there is this intent, and certainly there have been collaborations between associations that have helped each other (Interviewee C).

Better cooperation should also result in overcoming currently still perceived differences between the city's linguistic and cultural groups:

I would like for the two groups to mix [...], while maintaining their own identity. I am not saying that we should water down who we are, but that we should get to know and respect others, and possibly take advantage of the mutual enrichment that contact can bring (Interviewee C).

#### 3.2. Physical (Health) Dimension

Given the specific focus on the pandemic, "physical aspects" were conceptualized in terms of quality and delivery of physical and mental health services during the pandemic (Barbash and Kahn 2021; Patel et al. 2017). As anticipated in Section 2.1, Merano was able to better weather the pandemic in comparison with the rest of the Province: while excess mortality in the health district of the Provincial capital Bolzano increased by 85.9%, the increase in the health district of Merano amounted to 40.1% (ASTAT 2020a).

The public hospital of Merano provided the first ad-hoc COVID-19 intensive station of South Tyrol at the beginning of the pandemic in March 2020, although respondents of the public health domain stressed that "the impact on the health services has been devastating [...] it has significantly put a stop and slowed down performance" (Interviewee O).

Indeed, interviewees recognized the necessity to quickly *restructure* the entire hospital organization and facility use (Figure 2). Many *hospital divisions were closed or reduced* in their capacity to set up an ad-hoc COVID-19 intensive care division, because of a *lack of long-term strategy* concerning unexpected, large-scale emergencies like this one. Another issue was the slow and complicated *digitalization* process in the healthcare sector, essential during the pandemic, especially in *collaboration* with other public entities.

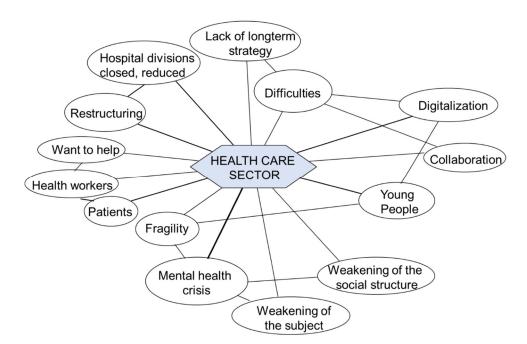


Figure 2. The healthcare sector in Merano (N = 14, expansion factor = 2).

However, several *difficulties* were overcome by strong teamwork and informal digitalized coordination of the healthcare staff who communicated mainly via WhatsApp to organize itself during the most acute phase of the emergency. Generally, the ability of adaptation and a high degree of flexibility were thus required and posed a challenge but also an opportunity "to overcome certain boundaries and patterns that had been rigid for so many years. The staff had to be activated and put into play to deal with this situation. People who had been working in the same department for twenty years, with the same routine [ ... ], had to develop different skills, including interpersonal and relationship skills" (Interviewee H). The pandemic was in fact an opportunity for the sector to learn and renew itself: "So definitely there was a growth, a technical professional growth, but also a human and relationship growth [ ... ]. I hope the people in the healthcare sector will become more flexible. We've experienced a lot of flexibility, just the fact of going from one department to another to help out, or having to put yourself out there for something you've never seen and never done before ... I hope that this remains, and also the fact of putting yourself a bit at the service of others" (Interviewee H).

Indeed, *health workers* had to assist *patients* increasingly also emotionally and psychologically, since the impossibility of having their loved ones around and fears of a lonely death or not being able to see their family again exposed many patients to a higher degree of *fragility*. In this context, teamwork, collective efforts, and voluntary extra shifts were highlighted. At the beginning of the pandemic, when COVID-19 health assistance services and facilities had to be organized from scratch, *"if there hadn't been teamwork, something like this couldn't have been accomplished, whether it's here or anywhere else"* (Interviewee H). Adaptation, teamwork, and support were thus mentioned as indispensable to cope with the emergency in the health sector. At the beginning, in spring 2020, *health workers* immediately *wanted to help patients* and did long hours of overtime, but respondents also reported great tiredness and fatigue plaguing most health workers and hospital staff after more than a year of emergency status.

The impact of the pandemic on *mental health* has been very harsh on the community as a whole. Indeed, while there had not been a sharp increase in the number of help seekers at the public psychological service (as of August 2021), numbers may rise in the aftermath of the pandemic, as the psychological effects of COVID-19 are expected to manifest themselves in the long run. With the first lockdown in March 2020, the local health authority made a phone-counselling service available to all citizens of South Tyrol and their own staff for

COVID-19 related mental sufferings and insecurities or general psychological support. In this context, a respondent stated:

We see more eating disorders, more depressive disorders with suicidal ideation and more social withdrawal and phobic aspects [...]. Isolation is a very serious risk factor for mental health, perhaps the most serious (Interviewee O).

Indeed, the pandemic has brought tendencies towards isolation for many different groups of people and spheres of everyday life: working from home has hindered all social aspects of work, while the closure of schools and lack of leisure activities has eliminated all socialization spheres for children and adolescents. Elderly persons, being less accustomed to using technological means, were the most socially marginalized. Indeed, the replacement of interpersonal encounters through advanced *digitalization* is considered to increase both the individual's and community's *fragility. Young people* in developmental stages, who are still learning patterns of social interaction, are especially at risk.

However, the psychological crises many people are experiencing at present are not only caused by the pandemic, but are also intertwined with long-term developments of today's societies, inducing the *weakening of the subject* and of the *social* and family *structure* around the individual:

In other words, we have children, families and society weaker than they used to be. Children tend to mature later and slower, but find themselves exposed to the adult world earlier [...]. This leads to a weakening of the subject (Interviewee O).

# 3.3. Economic Aspects

The direct and indirect costs of a disaster can affect a community for a long time, if not properly addressed: assessing a community's economy and its ability to weather an emergency is therefore an important predictor of CR (Patel et al. 2017). Interviewees were thus asked to describe the impact of the pandemic on the city's economic sectors, how these faced it, and what are the prospects from an economic point of view (Figure 3).

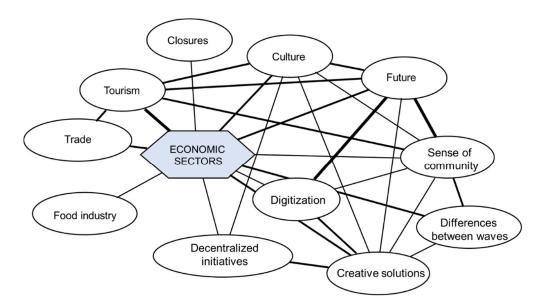


Figure 3. Economic sectors in Merano (N = 14, expansion factor = 3).

Respondents identified *trade*, *culture* and, above all, *tourism* as the sectors most affected by the pandemic and the consequent forced *closures*. Other sectors, however, have not been impacted and, on the contrary, almost grown, such as the *food sector*, which was able to adapt its business model to the situation by, for example, increasing deliveries and take away. Similarly, the *cultural sector* shifted to online or socially distanced events and tried to create synergies across different actors, even beyond Merano (see Section 3.1). In line with the rest of the region, the economic fabric of the city is mostly represented by SME, with

high levels of regional embeddedness and trust (Kofler and Marcher 2018), especially in the tourism sector. However, according to the respondents, the ability to network did not emerge during the pandemic, showing that, in times of crisis, businesses were not able to leverage on collaborations or support from other businesses, especially in the second wave

leverage on collaborations or support from other businesses, especially in the second wave of the pandemic. In fact, positive examples of innovation and creativity across different sectors were mostly provided by the *initiative of individual people or businesses* seeking to adapt to the situation. There was a lack of proper support and coordination from above or within the sector. Interviewees recognize that there was a *difference between the pandemic waves*: in particular, during the first lockdown, activities were completely shut down, while as the state of emergency progressed, new and *creative solutions* were found, especially thanks to the possibilities made feasible by *digitization*. Overall, the city weathered the economic crisis well, as also confirmed by a survey conducted in South Tyrol, according to which only 9.76% of respondents in Merano reported a decrease in income because of the COVID-19 pandemic in 2020 (Eurac Research 2021).

Regarding *future* perspectives, interviewees recognize the need for a stronger *sense of community* and solidarity, but also to find *creative business solutions*. *Digitization* can be a valuable tool to achieve this aim. Innovation is facilitated by tourism, an activity strongly characterizing the identity and the community of the city:

(There is) a strong drive towards the future, and a commitment to move forward and keep developing, which many people here possess, perhaps also because Merano is a tourist town, [...] always accustomed to adapting and carrying on [...], so the people have a lot of drive and enthusiasm (Interviewee N).

Although tourism was highlighted in such a way, it was also mentioned in the interviews, that in order to be resilient, the city cannot only rely on one specific economic sector but must also diversify. Otherwise, the dependency is too strong.

## 3.4. Social Aspects

Even if often overlooked by emergency planners, who tend to overemphasize physical and economic aspects of resilience over the other dimensions (Moreno et al. 2018; Tiernan et al. 2019), social factors are critical in dealing with disasters. We understand the social dimension as referring to the presence of social networks, connectivity among groups and individuals and actions of solidarity that allow collective action (Madsen and O'Mullan 2016; Pfefferbaum et al. 2007; Saghin et al. 2022) within a community. These elements are linked to the time lived in the community, levels of trust and reciprocity, political engagement, volunteerism, community organizations and services, but also to the sense of belonging (National Academies of Sciences, Engineering, and Medicine 2019).

Interviewees were asked to describe the community of Merano and the impact of the pandemic on its social fabric (Figure 4).

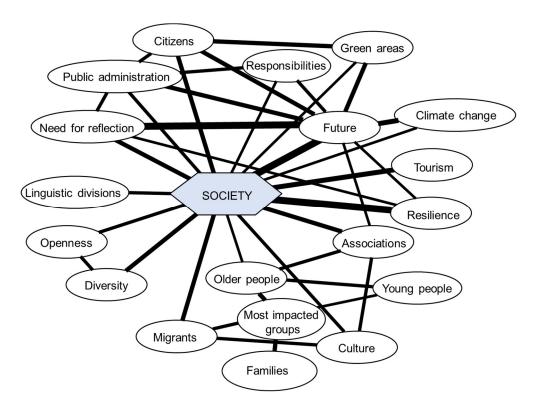


Figure 4. The social community of Merano (N = 14, expansion factor = 6).

Apart from people employed in the hardest hit economic sectors (see Section 3.3), interviewees named other social *groups heavily impacted by the pandemic*, in primis *older people*, more prone to isolation and loss of social relations. Within the city there was however evidence of spontaneous and organized actions of solidarity to help the most fragile people:

We have seen many associations become active and reinventing themselves. For example, some young people have been strongly and actively involved in food collection, home delivery, etc. (Interviewee D).

Indeed, respondents highlighted the fact that the pandemic should teach the community to take care of its more fragile members:

On an individual level, (should a future crisis arise) we should protect even the weakest people. The older, more fragile people. These should be behaviors that we should certainly recall immediately or teach to those who have not experienced this pandemic (Interviewee H).

On a brighter note, a statistical survey conducted in South Tyrol highlighted an overall positive spirit during the lockdown, especially among the older generations, and an increase in individuals' commitment to an healthy lifestyle, which could point to a considerable level of resilience (ASTAT 2020b). This is in line with other studies, according to which, although older adults face higher risks of severe disease and death due to COVID-19, they are less affected by psychological consequences of social isolation, while younger people exhibit the highest levels of stress (Kowal et al. 2020; Odriozola-González et al. 2020). In Merano, loneliness and social exclusion affected *young people*, especially children and adolescents, because of the sudden closure of schools and youth *associations*. A high price of the pandemic has been paid by *families*, and in particular women, who were often forced to juggle paid work and the majority of the workload of the upbringing and care for the children (Kowal et al. 2020; Odriozola-González et al. 2020; Odriozola-González et al. 2020; Odriozola-González et al. 2020). Another survey conducted in South Tyrol in January 2021 in fact highlighted a lower individual wellbeing among women than men and a higher stress level (ASTAT 2021).

In general, respondents described the community of Merano as *diverse*, not only because of the equal representation of German and Italian speakers, but also for the high presence of *migrant minorities*, which make up for 17.28% of the total population, twice the national average. Migrants are seen as an important stressor, which could improve overall societal *resilience*:

Merano lives in a process of continuous change  $[\ldots]$  due to the arrival of new people, which is a possible stressor and therefore resilience factor  $[\ldots]$ . (A society) builds resilience if subject to trauma, stress, change  $[\ldots]$  (Interviewee O).

Even if many named this factor as an asset for the city, making it more *open*, just as many also highlighted that the different groups—migrants, German, and Italian speakers—rarely come into contact with each other, which results in some divisions. Integration has been further hindered by the pandemic, for example by closing schools, where children firstly come in touch with other cultures, and by heavily impacting low-skill jobs, where most migrants are employed. Statistical data confirm, in fact, that, between November 2020 and April 2021, the number of foreign employees decreased by 18.8% compared to the previous year (Autonomous Province of Bolzano 2021). For this reason, interviewees voiced the need to overcome the dynamics of coexistence in favor of proper integration, which could be facilitated by cultural and social *associations* rather than the *public administration* with its top-down approach (see also Section 3.1).

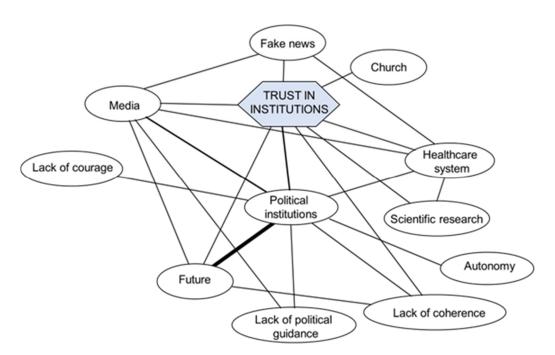
The respondents then highlighted the fact that the city, thanks to its flourishing economy, has the resources to cope with crises. However, it is key to decide how to invest such resources:

Merano is predominantly a tourist town. And as to where one reinvests this budget, this opportunity that is created, that opens the issue of thinking about the city's prospects. Where one decides to invest in terms of schools, culture, and the construction of spaces (Interviewee O).

According to the interviewees, the community of Merano has the characteristics to become more resilient in the *future* and the responsibility to address possible disruptions falls on the public institutions, but also on the citizens.

#### 3.5. Institutional Dimension

The role of institutions is thus a crucial dimension of CR (Patel et al. 2017), not only in terms of political accountability, but also for identifying and promoting resilient attitudes; moreover, trust in institutions and others is deemed a protective factor for communities that experience crises (Esposito et al. 2021; Saghin et al. 2022). Within this context, this dimension captures the degree of trust in institutions and how it can be strengthened. Institutions have the capacity to engage external entities for the efforts of achieving community goals. What emerged in discussion with respondents who work in the municipal administration was the high level of *autonomy* the city of Merano relied on to spend the municipal surplus from the previous financial year and that they used that money to manage the pandemic emergency and intervene directly to stem the effects of the pandemic (Figure 5).



**Figure 5.** Trust in institutions (N = 14, expansion factor = 1).

Furthermore, respondents highlighted the exceptional nature of the *autonomous status* of the province of South Tyrol compared to the rest of the country, which allowed the local *political institutions* to shape its response to the spread of the virus—the so-called "South Tyrolian Path" mentioned earlier, which shows a certain degree of adaptability. Another example of this adaptability was municipal employee mobility: e.g., the cooks employed in school canteens were employed to disinfect playgrounds when the schools were closed during the lockdown. However, some also highlighted that with such freedom, the public administration could have been more *courageous*, but the bureaucracy is still far too complex and slow to cope quickly with an exceptional situation such as the pandemic and foster real change.

The administrative machine is slow and heavy and should be made more adaptable and faster. It's a great challenge. Those who find themselves in government have an enormous responsibility but also a wide margin for maneuver. You have tools, such as the government's Dpcm (i.e., a new ministerial decree), that bypasses Parliament, overriding procedures that would otherwise take weeks, if not months to have results and effects (Interviewee D).

According to respondents, the *citizens' trust in the institutions* has decreased, also due to the continuous communication of contradictory news both from the media as well as politicians. Effective communication during a crisis is in fact considered a key element for resilient communities (Goroshit and Eshel 2013; Patel et al. 2017). This is also confirmed by a survey conducted in January 2021, according to which, compared to the previous spring, 49% of the population is South Tyrol had less trust in political institutions and 40% less trust in the media (ASTAT 2021).

The situation was even more extreme in Merano, as the winner of the local elections in 2020 was not able to form a coalition and govern the city, which was therefore managed by an external commissioner for almost one and half years, consequently resulting in *lack of guidance* and a clear political direction. According to respondents, the *media* have contributed to eroding trust in other institutions, such as the *healthcare sector*, because of *fake news* which was spread to achieve more sensationalism. However, the healthcare system as well as the *scientific research* seem to have weathered the pandemic better than other institutions. Religious institutions, though, such as the *Church*, might have, according to respondents, provided some spiritual support for those seeking it; however, explorative

research conducted in South Tyrol highlighted that pastoral support was scarce during the lockdown (Isetti et al. 2021).

Regarding *future* perspectives, respondents hope for restoring the previous level of trust towards institutions, which can be achieved by adopting clear policies and initiatives in tackling future crises, such as climate change:

I really hope that [...] we won't fall back into business as usual as an administration, but we'll use the lessons we've learned from this, the money we've freed up, so that it goes towards a good long-term development, and I'm thinking first and foremost about the climate crisis, of course. We need to set priorities and concentrate on this much bigger and important issue. As a community, as an administration, as private individuals (Interviewee F).

More specifically, in order to restore or strengthen trust in institutions, a respondent stated "*clear decision making and clear communication*" as a fundamental necessity, as those "*certainly inspire confidence among the citizens*" (Interviewee K). Finally, some respondents highlighted that more participatory methods should be used to ensure the acceptance of political decisions, and that younger people, with their potential to bring new ideas and approaches, should be involved in the decision-making process:

In our society it seems to me that they (i.e., young people and children) don't have a say and instead they should, because they have the right and they could bring alternative solutions. It would be important and wonderful to involve them more, also in relation to institutions. It is easier to accept (political) choices if they are taken through participatory processes. You have to actually do it, not just on paper, because shared choices are also more defensible. The views of children and young people should never be forgotten in these processes (Interviewee C).

# 3.6. Ecological Dimension

The ecological dimension assesses the perception and use of green spaces in Merano. By virtue of the pandemic context and the restrictions on social interaction, green spaces play a fundamental role in ensuring social meeting points, physical activity sites and reinforcing the identity role of a city. What is more, green spaces are deemed a source of individual and CR (Aerts et al. 2021; Samuelsson et al. 2020) and of therapeutic importance.

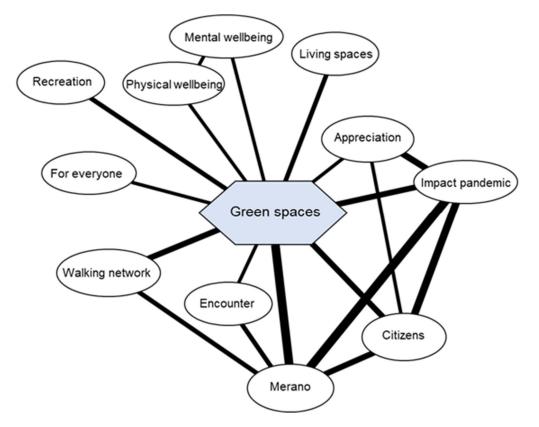
Merano places a lot of attention on its green areas and nature as a whole, as the municipality has developed a "Green plan" (Schmidt et al. 2020), which aims to propose initiatives, policies and guidelines aimed at making the city more resilient to climate change. The municipal territory of Merano is covered 75% by green areas, with many parks and promenades. "*So, I think Merano is spoiled by that, Merano has a lot of beautiful green spaces*" (Interviewee N), as one respondent put it. Interviewees also stated (Figure 6) that the pandemic has taught people to be more *appreciative* of the opportunities the city offers to enjoy *green spaces* and *walking*:

In the spring of 2020, there was this lockdown and then in summer you could go outdoors again. Never before have we really felt how important green spaces are and what quality of life they guarantee to the urban population (Interviewee F).

In some senses, the pandemic did not initiate a change in the city's landscape, but rather promoted a new perspective on already existing green spaces. During the pandemic, people became more aware of the valuable good they have in the city and learned to cherish it.

*Young people*, especially, use parks and outdoor green spaces much more than before the pandemic. Another aspect that was underlined by the respondents which is essential for Merano's public *wellbeing* is constituted by access points to the river or *recreational areas* related to water, that function as places of *encounter*:

These access points to the water have a completely different appeal across the generations and for all language groups, for foreign families. This is a point of attraction



that transcends all language groups and population groups. Water is a huge magnet (Interviewee F).

**Figure 6.** Green spaces in Merano (N = 14, expansion factor = 5).

Some respondents, though, also stated some concerns in this regard and that this should change:

But I don't see it that way, that we have a sort of mingling. I don't really see that so much now. It would have to be initiated more (Interviewee N).

However, green spaces are not only seen as fundamental for providing citizens with meeting points and a space to practice physical activities during the pandemic and beyond, but also for the climate crisis looming on the horizon, as they provide coolness and shade during the hottest months. For the future, respondents demanded a greater focus on ecological elements:

*On the one hand we need more green spaces and on the other hand we need high-quality green spaces* (Interviewee N).

## 4. Discussion and Conclusions

Within social-ecological systems, adaptative responses, social learning, and the ability to co-produce new knowledge and foster change can be interpreted as evidence of resilience (Berkes and Ross 2013), also in times of a pandemic (Bento and Couto 2021). Following a qualitative approach to CR, this study aimed at investigating whether the city of Merano showed resilient dynamics and behaviors to cope with the pandemic and beyond. Indeed, by focusing on the cultural, physical, economic, social, institutional, and ecological dimensions of CR (adapted from Contreras 2016), our findings expand beyond the scope of the COVID-19 crisis and offer insights on policies and strategies to foster CR in view of other future possible crises, such as climate change. Merano is characterized by the co-presence of both strengths and possible frailties when it comes to CR, and was thus selected as a case study. On the one hand, strengths can be identified for example in its economic stability,

a broad cultural offer, the balanced coexistence of many different linguistic, ethnic, and age-related sub-communities. Moreover, its easy access to nature, long walking trails, parks and recreational areas, as already pointed out by previous studies (e.g., Aerts et al. 2021), have a positive impact on community resilience, wellbeing, and social integration. On the other hand, the city has some frailties, linked to its relatively high presence of people at risk of illness, developmental difficulties, or possibilities of social isolation.

When the pandemic disrupted this status quo, adaptative processes could be identified, especially in the second pandemic wave, e.g., cultural performances were moved either online or outdoors, while some shops and restaurants sold their products and services via delivery and take-away. Additionally, in line with other studies (e.g., Bento and Couto 2021; Ahmad et al. 2022), the city's flexible, adaptive, and collaborative healthcare sector seemed to have had a positive impact on CR. Thanks to engaged and enthusiastic personnel and informal low-threshold and ad-hoc organizational restructuring, not only has it been possible to keep the healthcare system running, but also to witness both human and professional learning and development on the part of the staff. From a societal point of view, Merano's citizens seem to be able to rely on rather strong networks, while volunteerism and social projects that have emerged during the pandemic show a significant degree of solidarity and altruism. From an institutional point of view, the high level of political autonomy facilitated faster and more tailor-made political interventions as well as more economic resources to address the COVID-19 emergency.

However, results show that, to reach a higher level of resilience beyond the coronavirus crisis, several aspects need to be improved. First, cohesion among inhabitants from different backgrounds needs to be further fostered by creating meeting points and interpersonal exchange among residents. In the city this does not only concern the groups of German and Italian speakers, but also, and especially, migrant communities, currently at high risk of social isolation and economic deprivation. Respondents blamed this on separated institutions, habits and interests among minorities or linguistic groups. Culture and cultural participation have the potential to act as social glue, if conceived in a more inclusive way. Interviewees also underlined that the cultural sector was not supported enough during the pandemic, and that policy makers should invest more in the cultural sector in the future, given its positive effects on both individual and community resilience (see also Tubadji 2021). The attempt to create an association representative of the various cultural actors is however a promising sign of the sector's efforts to change the previous status quo by building alliances and synergies spanning also beyond Merano. Moreover, comparing the first weeks of the pandemic with the subsequent periods, interviewees highlighted that in both healthcare and social dimensions a certain weariness after the initial enthusiasm could be detected, therefore solidarity actions and in general initiatives benefitting the community, even if self-organized, would be longer-lasting and more effective if supported by official channels. While in these dimensions the enthusiasm declined with the progression of the pandemic, the appreciation of green spaces on the other hand grew. The pandemic showed the people value in something they might have taken for granted in the past.

Second, the strong influence of tourism on the city has twofold implications: on the one hand, it makes the city economically prosperous, more inclined to innovation, and culturally active. On the other hand, tourism seems to "anesthetize" community life in several ways, turning some of the public spaces into "ghost" places in low seasons. In this context, Merano suffers from a lack of identity, as several residents feel the city is not truly "theirs". In some cases, respondents perceive an institutional focus on tourists instead of residents' wellbeing. Isolation could thus be prevented by re-focusing on residents' common interests and by revitalizing public spaces not for touristic or commercial purposes, but for the community's sake. Furthermore, in order to be resilient, the local economy should diversify its economic fabric. This is especially true in the context of the pandemic, where sectors such as tourism and trade, where social contact is so important and so difficult to replace, seem to have shown more robustness than resilience, as they were indeed able to weather the pandemic, but showed less adaptive capabilities and renewal potential than other

sectors. The same can be said in relation to the local political institutions, which, despite being more adaptive in comparison to the national ones, can still be considered rather rigid and slow in fostering change and innovation.

Third, results show that a combination of imposed restrictions and fear of the virus took its toll on people's mental health and wellbeing. Interviewees called for institutions, volunteering associations, and health providers to provide appropriate measures to mitigate social isolation, depression, and other psychological crises. This can be achieved by strengthening the (mental) health sector, but also by adopting measures to proactively prevent these issues from arising. Finally, a stronger focus on the needs and wishes of adolescents and children would benefit communities as a whole and, in the case of Merano, qualify the city as resilient across generations.

CR is clearly not something that can be imposed on a community from a distant bureaucracy (Madsen and O'Mullan 2016); however, local institutions can still do much to enhance it. They can facilitate more bottom-up decision-making processes at the community level and neighborhood and community-driven initiatives, celebrations, or projects. Our study showed that fostering collective wellbeing, but also winning back citizens' trust, creates the conditions for individuals and communities to thrive in a post-pandemic world (see also Xu et al. 2021). Nonetheless, even if communities need to be made responsible for their own wellbeing, institutions still have the responsibility to examine and address inequalities that create vulnerabilities and limit adaptability (Penkler et al. 2020), if necessary, with a top-down approach. In particular, as gender equality is fundamental for community functioning and therefore resilience (Berkes and Ross 2013), more effective policies to support women are called for. This means not only mitigating women's higher level of sense of danger and distress symptoms during crises, but also providing institutional and societal support to relieve the mental and physical workload in relation to care work for children, elderly or sick people as well as domestic work (Kimhi et al. 2020). This might translate into more favorable conditions for women-owned firms, incentivizing entry and re-entry into the world of paid work, adopting flexible forms of work, such as smart working, both in public and private companies, and a re-distribution of caring responsibilities, e.g., by incentivizing paternity leave and similar initiatives. Targeted policies also have to support migrants—women in particular—in their journeys to integration, by, for example, advancing their education level and language skills, which would allow them to access better-paid, secure, and permanent professional jobs.

In conclusion, this case study showed that increased interpersonal exchange, interethnic or interlinguistic relationships and stronger community ties could foster resilience by, for example, developing meeting points across economic sectors, urban quarters, age groups, language, and ethnic groups as well as cultural preferences. At the same time, long-term strategies in relation to future crises need to be prepared as they can mitigate the vehemence of shocks. In this regard, Merano has already taken some first steps (e.g., thanks to the Green Plan against climate change), but has indeed also potential for improvement. Crises in fact can and should be seen as an opportunity to rethink established dynamics and mechanisms, and experiment with new approaches as a community to build back better.

This study presents insights in a small city divided into two dominant cultural communities. Both the German speaking and Italian speaking communities of Merano mostly stick to themselves, which presents a unique opportunity to analyze community resilience in two communities in a similar context. By talking to representatives from both communities, this study firstly gathered general information on resilience in the city; future analyses should focus on differences and similarities between the two cultural groups. The present study also has several limitations, which provide opportunities for future research. Firstly, our results were derived from an analysis of interviews with key informants, i.e., from a small representation of the city, which is involved in various capacities in community activities. Therefore, there may be other perspectives within the community that we have not explored, some of which may disagree considerably with the conclusions we have drawn from our respondents. Secondly, results relate to the local conditions and policies of South Tyrol. For this reason, they cannot be generalized without appropriate adaptation to other local realities.

**Author Contributions:** Conceptualization, G.I.; methodology, G.I.; formal analysis, G.I., M.W. and L.G.; investigation, G.I., L.G. and M.W.; data curation, G.I.; writing—original draft preparation, G.I., L.G. and M.W.; writing—review and editing, G.I., L.G. and M.W.; visualization, G.I. and M.W.; supervision, G.I.; project administration, G.I. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding. The APC was funded by Eurac Research.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study for the interviews.

**Data Availability Statement:** The collected and analysed qualitative data used in this article will not be shared because of ethical and privacy reasons.

Acknowledgments: The authors thank Eurac Research for covering the APC. We extend our thanks to Sarah Watschinger, Alessio Tomelleri, Valeria Ferraretto, Valeria von Miller, Michaela Fischer, Alessandra Volgger, Harald Pechlaner (Eurac Research), Angelika Messner (University of Kiel), Hartmut Schröder (Kuwi Frankfurt), and Paul Rösch (Municipality of Merano) for their input and assistance throughout the project. We thank the session organisers and audiences at conferences and workshops where earlier versions of this paper have been presented: the "61th ERSA Annual Congress" (Bolzano, August, 2021) and the online conference "Lessons from the Coronavirus Crisis: From Resilience to Multi-Resilience" (Bolzano, 24 February 2022). Finally, we would like to thank the respondents that kindly took the time to participate in our interviews, allowing this research to be possible.

Conflicts of Interest: The authors declare no conflict of interest.

# Notes

- <sup>1</sup> For more information on the relationship between individual and community resilience, see (Berkes and Ross 2013; Shilo et al. 2015).
- <sup>2</sup> See for example the annual classical music festival: https://www.meranofestival.com/en (accessed on 23 June 2022).
- <sup>3</sup> See for example a self-organized, multicultural no-profit culture club: https://ostwest.it/ (accessed on 23 June 2022).
- <sup>4</sup> See for example the artistic initiative "Improvviso", with performances held in 2020 as presented in a local newspaper: https: //www.buongiornosuedtirol.it/2020/07/improvviso-musik-und-theateraktionen-im-stadtzentrum-merans/ (accessed on 14 July 2021)
- <sup>5</sup> See local news article from March 2020 on the matter: https://www.rainews.it/tgr/tagesschau/articoli/2020/03/tag-Krankenhaus-Meran-Coronavirus-129abe89-33f8-41dd-a29d-4e164c29a8ba.html (accessed on 15 September 2021).
- <sup>6</sup> In South Tyrol, a declaration of linguistic affiliation is carried out by citizens at the age of 18. It serves statistical purposes and fosters the allocation of administrative positions by the respective language group.
- <sup>7</sup> See https://www.sdf.bz.it/2020/11/06/anna-bruzzese-ist-die-kommissarin-der-stadt-meran/ (accessed on 14 July 2022).
- <sup>8</sup> See for example https://www.suedtirolnews.it/politik/meran-bekommt-europaeischen-stadtbaumpreis-ecot-award-2022 (accessed on 23 June 2022).

# References

- Abdalla, Salma M., Shaffi Fazaludeen Koya, Margaret Jamieson, Monica Verma, Victoria Haldane, Anne-Sophie Jung, Sudhvir Singh, Anders Nordström, Thoraya Obaid, Helena Legido-Quigley, and et al. 2021. Investing in Trust and Community Resilience: Lessons from the Early Months of the First Digital Pandemic. *BMJ* 375: e067487. [CrossRef] [PubMed]
- Aerts, Raf, Naomi Vanlessen, and Olivier Honnay. 2021. Exposure to Green Spaces May Strengthen Resilience and Support Mental Health in the Face of the Covid-19 Pandemic. *BMJ* 373: n1601. [CrossRef] [PubMed]
- Agostino, Deborah, Michela Arnaboldi, and Antonio Lampis. 2020. Italian State Museums during the COVID-19 Crisis: From Onsite Closure to Online Openness. *Museum Management and Curatorship* 35: 362–72. [CrossRef]
- Ahmad, Farooq, Rashedur Chowdhury, Benjamin Siedler, and Wilson Odek. 2022. Building Community Resilience during COVID-19: Learning from Rural Bangladesh. *Journal of Contingencies and Crisis Management*, 1–12. [CrossRef]
- Alonge, Olakunle, Sehwah Sonkarlay, Wilfred Gwaikolo, Christine Fahim, Janice L. Cooper, and David H. Peters. 2019. Understanding the Role of Community Resilience in Addressing the Ebola Virus Disease Epidemic in Liberia: A Qualitative Study (Community Resilience in Liberia). *Global Health Action* 12: 1662682. [CrossRef]

- ASTAT. 2020a. COVID-19: Impact on Mortality. ASTAT 66. Available online: https://astat.provincia.bz.it/it/news-pubblicazioni-info. asp?news\_action=4&news\_article\_id=645277 (accessed on 20 October 2021).
- ASTAT. 2020b. COVID-19—Lockdown. ASTAT. Available online: https://astat.provinz.bz.it/de/aktuelles-publikationen-info.asp? news\_action=4&news\_article\_id=641709 (accessed on 20 October 2021).
- ASTAT. 2020c. Population trends. ASTAT 30. Available online: https://astat.provinz.bz.it/de/aktuelles-publikationen-info.asp?news\_ action=4&news\_article\_id=640772 (accessed on 23 June 2022).
- ASTAT. 2021. COVID-19: Benessere, Comportamenti e Fiducia Dei Cittadini [COVID-19: Citizens' Well-Being, Behaviour and Trust]. ASTAT. Available online: https://astat.provincia.bz.it/it/news-pubblicazioni-info.asp?news\_action=4&news\_article\_id=654481 (accessed on 20 October 2021).
- ASTAT. 2022. Statistic Atlas. Available online: https://astat.provincia.bz.it/barometro/upload/statistikatlas/de/atlas.html#!wirt/ fnv\_fnv\_fn\_nacht (accessed on 6 June 2022).
- Autonomous Province of Bolzano. 2021. Arbeitsmarktbericht Südtirol [Report on the Labor Market in the Province of Bolzano]; Labour Market Observation Office, Autonomous Province of Bolzano. Available online: https://www.provinz.bz.it/arbeit-wirtschaft/arbeit/ statistik/arbeitsmarktberichte.asp (accessed on 19 January 2022).
- Autonomous Province of Trento. 2020. "Report Indagine 'Ri-emergere." Trentino Famiglia. November 23, 2020. Available online: https://www.trentinofamiglia.it/Documentazione/Pubblicazioni/2.23-Report-Indagine-Ri-emergere (accessed on 20 January 2022).
- Barbash, Ian J., and Jeremy M. Kahn. 2021. Fostering Hospital Resilience—Lessons From COVID-19. JAMA 326: 693–94. [CrossRef]
- Belitski, Maksim, Christina Guenther, Alexander S. Kritikos, and Roy Thurik. 2022. Economic Effects of the COVID-19 Pandemic on Entrepreneurship and Small Businesses. *Small Business Economics* 58: 593–609. [CrossRef]
- Bento, Fabio, and Kalliu Carvalho Couto. 2021. A Behavioral Perspective on Community Resilience during the COVID-19 Pandemic: The Case of Paraisópolis in São Paulo, Brazil. *Sustainability* 13: 1447. [CrossRef]
- Berkes, Fikret, and Helen Ross. 2013. Community Resilience: Toward an Integrated Approach. Society & Natural Resources 26: 5–20. [CrossRef]
- Buber, Renate, and Josef Zelger. 2000. GABEK II. Zur Qualitativen Forschung. On Qualitative Research. Innsbruck and Wien: Studienverlag.
- Bull, Martin. 2021. The Italian Government Response to COVID-19 and the Making of a Prime Minister. *Contemporary Italian Politics* 13: 149–65. [CrossRef]
- Chamber of Commerce of Bolzano. 2021. Database. (Data Available on Request). Bolzano: Chamber of Commerce of Bolzano.
- Community Resilience Group. 2015. Community Resilience Planning Guide for Buildings and Infrastructure Systems: Volume II. NIST SP 1190v2. Gaithersburg: National Institute of Standards and Technology. [CrossRef]
- Contreras, Diana. 2016. Fuzzy Boundaries Between Post-Disaster Phases: The Case of L'Aquila, Italy. International Journal of Disaster Risk Science 7: 277–92. [CrossRef]
- Di Crosta, Adolfo, Rocco Palumbo, Daniela Marchetti, Irene Ceccato, Pasquale La Malva, Roberta Maiella, Mario Cipi, Paolo Roma, Nicola Mammarella, Maria Cristina Verrocchio, and et al. 2020. Individual Differences, Economic Stability, and Fear of Contagion as Risk Factors for PTSD Symptoms in the COVID-19 Emergency. *Frontiers in Psychology* 11: 567367. [CrossRef] [PubMed]
- Dubey, Souvik, Payel Biswas, Ritwik Ghosh, Subhankar Chatterjee, Mahua Jana Dubey, Subham Chatterjee, Durjoy Lahiri, and Carl J. Lavie. 2020. Psychosocial Impact of COVID-19. Diabetes & Metabolic Syndrome: Clinical Research & Reviews 14: 779–88. [CrossRef]
- Esposito, Ciro, Immacolata Di Napoli, Barbara Agueli, Leda Marino, Fortuna Procentese, and Caterina Arcidiacono. 2021. Well-Being and the COVID-19 Pandemic. *European Psychologist* 26: 285–97. [CrossRef]
- Eurac Research. 2021. Household Survey (Data Available on Request). Bolzano: Eurac Research.
- Field, Christopher B., Vicente R. Barros, David Jon Dokken, Katharine J. Mach, Michael D. Mastrandrea, and T. Eren Bilir. 2014. *Climate Change* 2014—*Impacts, Adaptation and Vulnerability: Regional Aspects.* Cambridge: Cambridge University Press, vol. Part A.
- Folke, Carl. 2006. Resilience: The Emergence of a Perspective for Social–Ecological Systems Analyses. 2006. Available online: https://www.sciencedirect.com/science/article/pii/S0959378006000379?casa\_token=WtCVBjcKkGkAAAAA:QTU\_hs8 uprnMlRbmcD7Mdzv9SWguiiymKGHPSEoP5-xwdbchk4GxCKv6pmpN4l4gOkQqZSzJmw (accessed on 2 August 2022).
- Fransen, Jan, Daniela Ochoa Peralta, Francesca Vanelli, Jurian Edelenbos, and Beatriz Calzada Olvera. 2021. The Emergence of Urban Community Resilience Initiatives During the COVID-19 Pandemic: An International Exploratory Study. *The European Journal of Development Research* 34: 432–54. [CrossRef] [PubMed]
- Frick, Ulrich, Miles Tallon, Karina Gotthardt, Matthias Seitz, and Katrin Rakoczy. 2021. Cultural Withdrawal during COVID-19 Lockdown: Impact in a Sample of 828 Artists and Recipients of Highbrow Culture in Germany. *Psychology of Aesthetics, Creativity, and the Arts*, 1–14. [CrossRef]
- Gill, Nicola, Vivien Ellis, and Stephen Clift. 2019. Cultural Activities Linked to Lower Mortality. BMJ 367: 16774. [CrossRef]
- Goroshit, Shaul Kimhi Marina, and Yohanan Eshel. 2013. Demographic Variables as Antecedents of Israeli Community and National Resilience. *Journal of Community Psychology* 41: 631–43. [CrossRef]
- Greenfield, Emily A., Kathy Black, Tine Buffel, and Jarmin Yeh. 2019. Community Gerontology: A Framework for Research, Policy, and Practice on Communities and Aging. *The Gerontologist* 59: 803–10. [CrossRef]
- Gunnestad, Arve. 2006. Resilience in a Cross-Cultural Perspective: How Resilience Is Generated in Different Cultures. *Journal of Intercultural Communication* 11: 1–22.

- Hynes, William, Benjamin Trump, Patrick Love, and Igor Linkov. 2020. Bouncing Forward: A Resilience Approach to Dealing with COVID-19 and Future Systemic Shocks. *Environment Systems and Decisions* 40: 174–84. [CrossRef] [PubMed]
- Isetti, Giulia, Agnieszka Elzbieta Stawinoga, and Harald Pechlaner. 2021. Pastoral Care at the Time of Lockdown. An Exploratory Study of the Catholic Church in South Tyrol (Italy). *Journal of Religion, Media and Digital Culture* 10: 355–81. [CrossRef]
- Istat [Italian National Institute of Statistics]. 2022. Database. Available online: https://dati.istat.it/Index.aspx?DataSetCode=DCIS\_POPSTRRES1 (accessed on 6 June 2022).
- Jewett, Rae L., Sarah M. Mah, Nicholas Howell, and Mandi M. Larsen. 2021. Social Cohesion and Community Resilience During COVID-19 and Pandemics: A Rapid Scoping Review to Inform the United Nations Research Roadmap for COVID-19 Recovery. International Journal of Health Services 51: 325–36. [CrossRef] [PubMed]
- Kimhi, Shaul, Hadas Marciano, Yohanan Eshel, and Bruria Adini. 2020. Resilience and Demographic Characteristics Predicting Distress during the COVID-19 Crisis. Social Science & Medicine 265: 113389. [CrossRef]
- Kirmayer, Laurence. J., Megha Sehdev, Rob Whitley, Stéphane F. Dandeneau, and Colette Isaac. 2009. Community Resilience: Models, Metaphors and Measures. *Journal de La Santé Autochtone* 5: 62–117.
- Kofler, Ingrid, and Anja Marcher. 2018. Inter-Organizational Networks of Small and Medium-Sized Enterprises (SME) in the Field of Innovation: A Case Study of South Tyrol. *Journal of Small Business & Entrepreneurship* 30: 9–25. [CrossRef]
- Koliou, Maria, John W. van de Lindt, Therese P. McAllister, Bruce R. Ellingwood, Maria Dillard, and Harvey Cutler. 2020. State of the Research in Community Resilience: Progress and Challenges. *Sustainable and Resilient Infrastructure* 5: 131–51. [CrossRef]
- Kowal, Marta, Tao Coll-Martín, Gözde Ikizer, Jesper Rasmussen, Kristina Eichel, Anna Studzińska, Karolina Koszałkowska, Maciej Karwowski, Arooj Najmussaqib, Daniel Pankowski, and et al. 2020. Who Is the Most Stressed during the COVID-19 Pandemic? Data From 26 Countries and Areas. *Applied Psychology: Health and Well-Being* 12: 946–66. [CrossRef]
- Madsen, Wendy, and Cathy O'Mullan. 2016. Perceptions of Community Resilience After Natural Disaster in a Rural Australian Town. Journal of Community Psychology 44: 277–92. [CrossRef]
- Magis, Kristen. 2010. Community Resilience: An Indicator of Social Sustainability. Society & Natural Resources 23: 401–16. [CrossRef]
  Moreno, Jenny, Alejandro Lara, and Mauricio Torres. 2018. Community Resilience in Response to the 2010 Tsunami in Chile: The Survival of a Small-Scale Fishing Community. International Journal of Disaster Risk Reduction 33: 376–84. [CrossRef]
- National Academies of Sciences, Engineering, and Medicine. 2019. Building and Measuring Community Resilience: Actions for Communities and the Gulf Research Program. Washington, DC: The National Academies Press.
- Norris, Fran H., Susan P. Stevens, Betty Pfefferbaum, Karen F. Wyche, and Rose L. Pfefferbaum. 2008. Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness. *American Journal of Community Psychology* 41: 127–50. [CrossRef] [PubMed]
- Odriozola-González, Paula, Álvaro Planchuelo-Gómez, María Jesús Irurtia, and Rodrigo de Luis-García. 2020. Psychological Symptoms of the Outbreak of the COVID-19 Confinement in Spain. *Journal of Health Psychology* 27: 1359105320967086. [CrossRef]
- OECD. 2020. Culture Shock: COVID-19 and the Cultural and Creative Sectors. Available online: https://www.oecd.org/coronavirus/ policy-responses/culture-shock-covid-19-and-the-cultural-and-creative-sectors-08da9e0e/ (accessed on 2 August 2022).
- Patel, Sonny S., M. Brooke Rogers, Richard Amlôt, and G. James Rubin. 2017. What Do We Mean by 'Community Resilience'? A Systematic Literature Review of How It Is Defined in the Literature. *PLoS Currents Disasters* 9. [CrossRef]
- Penkler, Michael, Ruth Müller, Martha Kenney, and Mark Hanson. 2020. Back to Normal? Building Community Resilience after COVID-19. *The Lancet Diabetes & Endocrinology* 8: 664–65. [CrossRef]
- Pfefferbaum, Betty J., Dori B. Reissman, Rose L. Pfefferbaum, Richard W. Klomp, and Robin H Gurwitch. 2007. Building Resilience to Mass Trauma Events. In *Handbook of Injury and Violence Prevention*. New York: Springer, pp. 347–58.
- Platt, Stephen. 2018. Factors Affecting the Speed and Quality of Post-Disaster Recovery and Resilience. In *Earthquake Engineering and Structural Dynamics in Memory of Ragnar Sigbjörnsson: Selected Topics*. Edited by Rajesh Rupakhety and Símon Ólafsson. Geotechnical, Geological and Earthquake Engineering; Cham: Springer International Publishing, pp. 369–403. [CrossRef]
- Province of Bolzano. 2021. Civil Protection Agency. 2021. Available online: https://afbs.provinz.bz.it/upload/coronavirus/Corona. Data.Detail.csv (accessed on 7 June 2022).
- Robertson, Tony, Paul Docherty, Fiona Millar, Andy Ruck, and Sandra Engstrom. 2021. Theory and Practice of Building Community Resilience to Extreme Events. *International Journal of Disaster Risk Reduction* 59: 1–7. [CrossRef]
- Rouhanizadeh, Behzad, Sharareh Kermanshachi, and Thahomina Jahan Nipa. 2020. Exploratory Analysis of Barriers to Effective Post-Disaster Recovery. *International Journal of Disaster Risk Reduction* 50: 101735. [CrossRef]
- Ryan, Saskia, Maria Ioannou, and Merle Parmak. 2018. Understanding the Three Levels of Resilience: Implications for Countering Extremism. *Journal of Community Psychology* 46: 669–82. [CrossRef]
- Saghin, Despina, Maria-Magdalena Lupchian, and Daniel Lucheş. 2022. Social Cohesion and Community Resilience during the COVID-19 Pandemic in Northern Romania. International Journal of Environmental Research and Public Health 19: 4587. [CrossRef]
- Samuelsson, Karl, Stephan Barthel, Johan Colding, Gloria Macassa, and Matteo Giusti. 2020. Urban Nature as a Source of Resilience during Social Distancing Amidst the Coronavirus Pandemic. Available online: http://urn.kb.se/resolve?urn=urn:nbn:se:hig: diva-34273 (accessed on 5 November 2021).
- Schmidt, Magdalene, Mauro Tomasi, and Paolo Viskanic. 2020. Der Grünplan von Meran [The Merano Green Plan]. Municipality of Merano. Available online: https://www.gemeinde.meran.bz.it/de/Gruenplan\_der\_Stadt\_Meran\_-\_Entwurf\_des\_Endberichtes (accessed on 6 June 2022).

- Sharifi, Ayyoob. 2016. A Critical Review of Selected Tools for Assessing Community Resilience—ScienceDirect. *Ecological Indicators* 69: 629–47. [CrossRef]
- Shilo, Guy, Nadav Antebi, and Zohar Mor. 2015. Individual and Community Resilience Factors among Lesbian, Gay, Bisexual, Queer and Questioning Youth and Adults in Israel. *American Journal of Community Psychology* 55: 215–27. [CrossRef] [PubMed]
- Smith, Timothy F., Phillip Daffara, Kevin O'Toole, Julie Matthews, Dana C. Thomsen, Sohail Inayatullah, John Fien, and Michelle Graymore. 2011. A Method for Building Community Resilience to Climate Change in Emerging Coastal Cities. Futures, Alternative City Futures 43: 673–79. [CrossRef]
- Sou, Gemma. 2019. Sustainable Resilience? Disaster Recovery and the Marginalization of Sociocultural Needs and Concerns. *Progress* in Development Studies 19: 144–59. [CrossRef]
- South, Jane Jude Stansfield, Richard Amlôt, and Dale Weston. 2020. Sustaining and Strengthening Community Resilience throughout the COVID-19 Pandemic and Beyond. *Perspectives in Public Health* 140: 305–8. [CrossRef] [PubMed]
- Tiernan, Anne, Lex Drennan, Johanna Nalau, Esther Onyango, Lochlan Morrissey, and Brendan Mackey. 2019. A Review of Themes in Disaster Resilience Literature and International Practice since 2012. *Policy Design and Practice* 2: 53–74. [CrossRef]
- Tubadji, Annie. 2021. Culture and Mental Health Resilience in Times of COVID-19. *Journal of Population Economics* 34: 1219–59. [CrossRef]
- UNISDR. 2015. Proposed Updated Terminology on Disaster Risk Reduction: A Technical Review. Available online: http://www.preventionweb.net/files/45462\_backgoundpaperonterminologyaugust20.pdf (accessed on 7 June 2022).
- Xu, Wenping, Lingli Xiang, David Proverbs, and Shu Xiong. 2021. The Influence of COVID-19 on Community Disaster Resilience. International Journal of Environmental Research and Public Health 18: 88. [CrossRef]
- Yin, Robert K. 1994. Case Study Research. Design and Methods, 2nd ed. Thousand Oaks: Sage.
- Yip, Wanfen, Lixia Ge, Andy Hau Yan Ho, Bee Hoon Heng, and Woan Shin Tan. 2021. Building Community Resilience beyond COVID-19: The Singapore Way. *The Lancet Regional Health—Western Pacific* 7: 100091. [CrossRef] [PubMed]
- Zelger, Josef. 2000. Twelve Steps of GABEK WinRelan. In *GABEK II Zur Qualitativen Forschung*. Innsbruck-Wien: Studien Verlag, pp. 205–20.
- Zelger, Josef. 2019. Erforschung und Entwicklung von Communities: Handbuch zur Qualitativen Textanalyse und Wissensorganisation mit GABEK<sup>®</sup> [Researching and Developing Communities: Handbook for Qualitative Text Analysis and Knowledge Organisation with GABEK<sup>®</sup>]. Wiesbaden: Springer Fachmedien Wiesbaden. [CrossRef]
- Zelger, Josef, and Andreas Oberprantacher. 2002. Processing of Verbal Data and Knowledge Representation by GABEK<sup>®</sup>-WinRelan<sup>®</sup>. Forum Qualitative Sozialforschung/Forum: Qualitative Social Research 3: 1–35. [CrossRef]