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A Multidimensional Approach to Health and Well-being: Theory, Interventions, and Subjective Meaning

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SUMMARY

INTRODUCTION	1
CHAPTER 1 – Health and Well-being: Current Perspectives and Challenges	6
1.1. The evolution of the concept of health.....	7
<i>1.1.1. The biomedical model.....</i>	<i>8</i>
<i>1.1.2. The functional model.....</i>	<i>10</i>
<i>1.1.3. The ecological model.....</i>	<i>12</i>
<i>1.1.4. The biopsychosocial model.....</i>	<i>13</i>
<i>1.1.5. From the biomedical to the biopsychosocial model: An integrative perspective ...</i>	<i>16</i>
1.2. The evolution of the concept of well-being.....	18
<i>1.2.1. The hedonic approach.....</i>	<i>20</i>
<i>1.2.2. The eudaimonic approach.....</i>	<i>21</i>
<i>1.2.3. The quality of life.....</i>	<i>23</i>
<i>1.2.4. The wellness.....</i>	<i>24</i>
<i>1.2.5. Toward an integrated understanding of well-being: Theoretical convergence and critical issues</i>	<i>26</i>
1.3. Determinants of health and well-being.....	28
<i>1.3.1. Personal determinants.....</i>	<i>30</i>
<i>1.3.2. Social determinants.....</i>	<i>32</i>
<i>1.3.3. Economic determinants.....</i>	<i>34</i>
<i>1.3.4. Environmental determinants.....</i>	<i>35</i>
1.4. Representation of health and well-being.....	36
1.5. Aim and structure of the thesis	38
CHAPTER 2 – Effects of University Psychological Counseling on Students’ Health and Well-being in the COVID-19 Pandemic Era.....	40
2.1. Introduction.....	41
<i>2.1.1. The impact of the COVID-19 on health and well-being.....</i>	<i>41</i>
<i>2.1.2. Psychological and academic challenges among university students during the COVID-19 pandemic.....</i>	<i>42</i>
<i>2.1.3. University counseling as a resource for students’ health and well-being.....</i>	<i>44</i>
<i>2.1.4. Psychological well-being, emotion regulation and self-efficacy.....</i>	<i>45</i>
2.2. Aim and Hypotheses	47
2.3. Method.....	48
<i>2.3.1. Design</i>	<i>48</i>

2.3.2. <i>Participants</i>	49
2.4. Materials	50
2.5. Procedure	51
2.6. Data analysis	52
2.7. Results	52
2.7.1. <i>Descriptive statistics and preliminary analyses</i>	52
2.7.2. <i>Psychological well-being</i>	56
2.7.3. <i>Emotion regulation</i>	58
2.7.4. <i>Self-efficacy</i>	59
2.8. Discussion	61
2.9. Limitations and conclusive remarks	65
CHAPTER 3 – Exploring How Social and Economic Determinants Shape the Definition of Health and Well-being	67
3.1. Introduction	68
3.1.1. <i>The conceptualization of health and well-being</i>	68
3.1.2. <i>Social and economic determinants of health and well-being</i>	69
3.1.3. <i>Subjective representations of health and well-being</i>	72
3.2. Aim and Hypotheses	73
3.3. Method	75
3.3.1. <i>Design</i>	75
3.3.2. <i>Participants</i>	76
3.4. Materials and Procedure	76
3.5. Data analysis	77
3.6. Results	77
3.6.1. <i>Descriptive statistics</i>	77
3.6.2. <i>Content analysis for health definition</i>	81
3.6.3. <i>Content analysis for well-being definition</i>	83
3.7. Discussion	85
3.8. Limitations and conclusive remarks	91
CHAPTER 4 – Self-perceived Health and Subjective Well-Being Across Generations ..	93
4.1. Introduction	94
4.1.1. <i>The subjective dimension of health and well-being</i>	94
4.1.2. <i>Self-perceived health</i>	95
4.1.3. <i>Subjective well-being</i>	96
4.1.4. <i>The role of perceived social support and perceived stress</i>	97
4.1.5. <i>Generational differences in health and well-being</i>	99

4.2. Aim and Hypotheses	100
4.3. Method	102
4.3.1. <i>Design</i>	102
4.3.2. <i>Participants</i>	102
4.4. Materials	103
4.4.1. <i>Short Form Health Survey (SF-36)</i>	103
4.4.2. <i>Multidimensional Scale of Perceived Social Support (MSPSS)</i>	104
4.4.3. <i>Perceived Stress Scale (PSS)</i>	104
4.4.5. <i>Positive and Negative Affect Schedule (PANAS-T) and Satisfaction With Life Scale (SWLS)</i>	105
4.5. Procedure	106
4.6. Data analysis	107
4.7. Results	107
4.7.1. <i>Descriptive statistics</i>	107
4.7.2. <i>Generational differences</i>	108
4.7.3. <i>Associations between self-perceived health, psychosocial factors, and subjective well-being</i>	110
4.7.4. <i>Hierarchical regression analyses predicting subjective well-being</i>	114
4.8. Discussion	116
4.9. Limitations and conclusive remarks	122
CONCLUSION	124
BIBLIOGRAPHY	127

INTRODUCTION

At first glance, the title “*A Multidimensional Approach to Health and Well-being: Theory, Interventions, and Subjective Meaning*” might seem to align with a long-standing and already extensive body of research on health and well-being. However, the present thesis seeks to move beyond a simplified understanding of these concepts. Despite decades of theoretical and empirical investigation, health and well-being remain complex, evolving, and only partially understood phenomena across disciplines, including psychology, medicine, public health, and the social sciences (Christoforou et al., 2024; Kivits et al., 2019; Krefis et al., 2018).

Since the World Health Organization’s landmark definition of health in 1948 as “a state of complete physical, mental and social well-being and not merely the absence of disease,” scholars have continuously debated fundamental questions: What is health? What is well-being? To what extent do these constructs overlap? Are they interchangeable, or do they reflect distinct yet related dimensions of human experience? Rather than being conclusively resolved, these questions have generated an expanding and increasingly fragmented body of literature, reflecting both the richness and the ambiguity of the field (Hernández-Torrano et al., 2020; Ramasubramanian et al., 2025; Zhang et al., 2024). This fragmentation is not merely definitional; it is also epistemological, methodological, and practical, as different disciplines, research traditions, and professional settings emphasize different dimensions of health and well-being and translate them into distinct forms of assessment and intervention.

In the current historical context, this complexity becomes even more salient. Contemporary global health is shaped by unprecedented challenges and transformations. While the past century has witnessed extraordinary medical achievements, the twenty-first century presents new complexities, such as population ageing, the growing burden of non-communicable diseases, emerging infectious threats, and widening social inequalities (Harris, 2024). These dynamics have progressively shifted the focus from a disease-centered perspective

toward a more holistic and multidimensional understanding of health. Within this evolving landscape, well-being has gained increasing prominence as a complementary yet distinct construct. More recently conceptualized as a positive and dynamic resource for individuals and societies, well-being is shaped by social, economic, cultural, and environmental determinants (WHO, 2021). As a result, both health and well-being are increasingly understood as multidimensional and context-dependent phenomena that require interdisciplinary and integrative approaches (Harris, 2024).

At the same time, current global and geopolitical contexts – including the long-term consequences of the COVID-19 pandemic, armed conflicts, and emerging mental health crises across different regions of the world (Woo, 2026) – highlight the urgency of re-examining these constructs. In rapidly changing societies, focusing on health and well-being is not only a descriptive endeavor but also a preventive and transformative one, as it may inform more responsive, context-sensitive, and person-centered interventions.

Against this background, the present thesis develops an integrative roadmap for understanding health and well-being through a multidimensional lens. More specifically, it aims to move from the theoretical elaboration of health and well-being to their application in intervention contexts, and finally to their subjective interpretation in everyday life. In doing so, the thesis seeks to show that health and well-being cannot be adequately understood if they are reduced to isolated indicators, decontextualized definitions, or purely individual conditions.

Within this integrative approach, the present thesis specifically examines how different determinants of health and well-being – namely personal, social, economic, and environmental factors – contribute to shaping how individuals experience, represent, and maintain their health and well-being across contexts and life stages. From a biopsychosocial perspective, these determinants are not considered as isolated influences, but as interdependent dimensions that dynamically interact in the production of health and well-being. Particular attention is given to how these determinants are subjectively interpreted and represented, highlighting the role of

individual meaning-making processes in mediating the relationship between structural conditions and lived experience.

The roadmap proposed here starts with a critical examination of the theoretical evolution of both constructs, highlighting their multifaceted and dynamic nature. From this perspective, the biopsychosocial model (Engel, 1977) provides a crucial interpretative framework, emphasizing the interplay between biological, psychological, social, and environmental dimensions. Similarly, the conceptual evolution of well-being reveals a progressive shift from unidimensional and predominantly hedonic perspectives toward more pluralistic, dynamic, and context-sensitive approaches. However, theory alone is not sufficient. Health and well-being are not only defined within academic debates; they are also enacted, negotiated, and transformed through lived experience, professional practices, and social contexts.

For this reason, the thesis also considers health and well-being as subjective and socially mediated realities. Individuals do not experience them as abstract theoretical entities. Rather, they interpret, negotiate, and embody them within everyday life, in relation to their relationships, social positions, cultural frameworks, and life stages (Farr and Markova, 1995; Murray, 2002). Therefore, studying subjective representations helps bridge the gap between objective determinants and lived experience. In this sense, representations function as mediating systems that translate structural conditions into personal meanings and practices (Moscovici, 2008). They play a key role in shaping risk perception, coping strategies, and health-related behaviors (Apostolidis and Dany, 2012; Joffe and Staerklé, 2007). Moreover, attention to these processes is essential for interpreting variability in self-reported measures and for locating individual responses within broader social and cultural contexts.

The present thesis

The thesis is organized into four chapters, each representing a specific step within the proposed roadmap. Chapter 1 lays the conceptual foundations of the thesis by critically

reconstructing the evolution of health and well-being and discussing the main theoretical models that have shaped their development. In particular, the chapter discusses the transition from reductionist perspectives to multidimensional frameworks, including the move from the biomedical to the biopsychosocial model and the evolution of well-being from hedonic conceptualizations toward broader views of wellness and human functioning. By clarifying these theoretical trajectories, the chapter establishes the conceptual basis for the rest of the thesis.

Building on this foundation, Chapter 2 moves from theory to intervention by examining health and well-being in the specific context of the COVID-19 pandemic and its aftermath. This chapter explores how these constructs were represented and experienced during a period of widespread disruption and uncertainty, and it considers the role of counseling interventions in promoting psychological well-being, emotion regulation, and self-efficacy. In this way, the chapter shows how theoretical conceptions of health and well-being are translated into applied settings and how intervention contexts provide a privileged point for observing their dynamic and relational character.

Chapter 3 further advances the roadmap by focusing on how health and well-being are experienced, interpreted, and constructed within everyday relational and social environments. Here, the emphasis shifts to the contextual and interactional dimensions of these constructs, highlighting the role of social and economic factors in shaping individual experiences. This chapter thus deepens the transition from formal definitions toward situated meanings, showing that health and well-being emerge not only from individual conditions but also from the relational worlds in which individuals are embedded.

Finally, Chapter 4 concludes the roadmap by concentrating on the subjective meanings of self-perceived health and subjective well-being, with particular attention to generational differences. By examining how individuals from different generations make sense of these constructs, the chapter addresses the extent to which health and well-being are shaped by shared

historical, cultural, and social experiences. This final step makes it possible to connect the multidimensionality of health and well-being to the variability of subjective meanings, thereby offering a more nuanced understanding of how these constructs are lived and represented across groups.

Overall, this thesis seeks to deepen understanding of how individual, relational, and contextual factors interact in shaping both the social representation and the subjective experience of health and well-being. By integrating multiple levels of analysis – from theory, to intervention, to the investigation of determinants and subjective meanings – the work adopts a biopsychosocial perspective that highlights complexity and interdependence as defining features of human health and well-being.

Specifically, the novelty of this thesis lies in the systematic integration of structural determinants and subjective representations within a single analytical framework. By adopting a roadmap approach that connects theory, intervention, and lived experience, the thesis brings together dimensions that are often examined in isolation, showing how health and well-being are both shaped by contextual conditions and actively constructed through individual meaning-making processes.

CHAPTER 1

Health and Well-being: Current Perspectives and Challenges

Health and well-being are two closely related but yet conceptually distinct constructs that have become central to contemporary health research and policy. According to the World Health Organization (WHO), health is “a state of complete physical, mental and social well-being, not merely the absence of disease” (WHO, 1948). Well-being, as later introduced in the revised version of the “Health Promotion Glossary” (WHO, 2021), is defined as “a positive state experienced by individuals and societies. Similar to health, it is a resource for daily life and is determined by social, economic, and environmental conditions” (WHO, 2021, p.10). Well-being encompasses not only quality of life, but also the capacity of individuals and communities to find meaning and purpose and to actively contribute to society (Nutbeam and Muscat, 2021).

These definitions reflect a shared vision of health and well-being as multidimensional and dynamic processes, shaped by the interaction of biological, psychological, and social factors. Over the past two decades, the integration of these two constructs has gained increasing attention across different academic disciplines and public policy agendas, providing a robust foundation for comprehensive whole-person approaches to health care (Langevin, 2024). Building on this perspective, the WHO has played a key role in promoting a holistic understanding of health and well-being, and in framing health as a fundamental human right, as affirmed in the Ottawa Charter for Health Promotion (Nutbeam, 1986).

The present chapter aims to critically examine the conceptual evolution of these two key concepts – health and well-being –, emphasizing the need for a greater definitional clarity to enhance both research rigor and the effectiveness of professional practices.

1.1. The evolution of the concept of health

The WHO originally defined health as “a state of complete physical, mental and social well-being” (1948). However, this definition was later clarified with the addition of the phrase “and not merely the absence of disease or infirmity” to prevent the misinterpretation of health as the complete absence of any illness or limitation (Sartorius, 2006, p. 662).

Despite this early effort at clarification, the concept of health has remained inherently complex and contested. As Dolfman (1973) pointed out, health is a term used to express “a state or condition of well-being” (p. 491), yet its meaning often lacks precision and varies according to the context in which it is used. The term may serve different purposes – scientific, political, clinical or philosophical – which makes it difficult to adopt a single, universally accepted definition (Dolfman, 1973).

Today, scholars and institutions generally distinguish among three main types of definitions of health, each reflecting a distinct conceptual approach and set of priorities (Sartorius, 2006). The first definition views health as simply the absence of disease or impairment (biomedical model). The second considers health as a state that enables an individual to effectively cope with the demands of daily life, implicitly requiring the absence of illness (functional model). The third definition describes health as a dynamic state of balance, or equilibrium, achieved through the individual’s interaction with the social and physical environment (ecological model). However, in recent decades, the most widely adopted conceptualization is the biopsychosocial model, which integrates biological, psychological, and social dimensions of health (Engel, 1977).

The following sections will examine each of these conceptualizations by exploring their definitions, historical background, main strengths, and limitations.

1.1.1. The biomedical model

The biomedical model conceptualizes health as the absence of disease or infirmity (Sartorius, 2006). This model draws upon three key philosophical and theoretical foundations: Cartesian rationalism, Comte's positivism and Parsons's structural-functionalism (Adibi, 2014). Each of these perspectives contributed to shaping a vision of health that is objective, measurable, and functionally oriented.

The model is rooted in the dualistic view of the human being inherited from Cartesian philosophy, which separates mind and body into two distinct substances with different properties (Descartes, 2006). According to Descartes, the mind is a non-physical and thinking substance that lacks spatial extension, whereas the body is a physical and extended substance that does not think (Correll, 2022). This ontological separation led to a mechanistic view of the body as a machine, with disease conceptualized as the breakdown or malfunction of that machine. Accordingly, the physician's role was conceived as repairing or restoring the machine to its proper function (Engel, 1977).

Comte's positivism provided the epistemological framework for the biomedical model, emphasizing empirical observation, classification, and the control of variables to establish generalizable scientific laws (Rosa, 2019). Within this framework, disease is conceptualized as a deviation from the biological norm, explainable through measurable variables (Engel, 1977). Diagnosis is based on objective signs such as changes in appearance and alterations in functioning, feelings, performance, behavior, or relationships (Engel, 1973; 1977). Health, therefore, is defined as the normative biological state, while disease is a quantifiable and localizable abnormality (Engel, 1960).

Parsons's structural-functionalism added a sociological dimension to the biomedical model. For this author, health is a prerequisite for the effective performance of social roles and a key resource for individual success and societal stability (Parsons, 1951). He conceptualized illness not merely as a biological condition, but as a form of social deviance that disrupts the

normative functioning of society (Gerhardt, 1989). Even when illness appears to be accidental or involuntary, it can carry motivational implications, as individuals may (consciously or unconsciously) engage in behaviors that increase health risks. This view reinforces the idea that individuals have a responsibility to maintain their health for the benefit of the social system (Adibi, 2014).

Building on these foundations, the biomedical model is grounded in several core assumptions that shape its epistemology and clinical applications. According to Hardey (1998), first, this model is dualistic, as it is grounded in the strict separation between mind and body. Mental states are considered irrelevant to the biological mechanisms that define disease (Adibi, 2014; Sartorius, 2006). Second, it is mechanistic: the human body is seen as a machine whose parts can be studied, classified, and repaired, and whose malfunctions are subject to scientific inquiry. Disease is consequently interpreted as a malfunction that follows predictable laws and causes, open to discovery through observation (Engel, 1977). Third, the model is reductionist, as it tries to explain complex health conditions by focusing on biological components, while overlooking psychological or social dimensions. Fourth, it is empirical, because it privileges knowledge derived from measurable phenomena, obtained through experimentation and observation. Consequently, scientific methods are the only valid approach to understanding health and illness. Fifth, it is interventionist, because once the cause of the disease is discovered, medical intervention aims to repair or remove the pathological elements through pharmacological or surgical means (Hardey, 1998).

This biomedical model has shaped Western medicine since the late 19th and early 20th centuries and continues to be the main framework in Western countries. It has served as the driving force behind major advancements in medical science by focusing on disease and disability, their causes, prevention, and cure (Larson, 1999). This model, grounded in scientific empiricism and reductionist principles, has enabled researchers to achieve remarkable progress in understanding and treating a wide range of acute and infectious diseases. One of its greatest

strengths lies in its ability to produce objective, measurable knowledge, leading to the development of effective medical interventions (Adibi, 2014). Research in microbiology, biochemistry, and related fields – guided by biomedical model – has led to the discovery of antibiotics, vaccines, and drug-based therapies capable of eradicating or controlling numerous diseases, including polio, measles, and bacterial infections. For example, the idea of “magic bullets” as pharmacological treatments has become emblematic of modern medicine’s success (Dubos, 1960). The model has also contributed significantly to the evolution of surgical techniques, diagnostic tools, and the integration of science and technology in clinical practice. As a result, clinical science continues to operate at the forefront of innovation, and progress in this field remains rapid and far-reaching (Adibi, 2014).

Despite these remarkable contributions, the biomedical model has also shown critical limitations. As Engel (1977) emphasized already, there is an urgent need to broaden the approach to disease to include psychological and social dimensions, without losing the advantages of biomedical sciences. A major shortcoming lies in its reductionist and dualistic nature, which conceives disease primarily as a biological malfunction and tends to overlook the subjective experience of illness. This perspective can lead to paradoxical situations in which individuals with abnormal laboratory results are treated despite feeling well, while others who feel unwell are told they are healthy because no biological abnormality is found (Engel, 1977). Moreover, by privileging the smallest isolable biological component, the model may exclude valid forms of suffering that do not fit its criteria (Ghaemi, 2009). As Kety (1974) noted, the challenge is not to deny the value of biological factors, but to recognize that experiential and contextual variables are equally essential in understanding illness.

1.1.2. The functional model

The functional model conceptualizes health as the individual’s capacity to maintain an adequate level of functioning in daily life, to fulfil personal and social roles, and to adapt to

changing internal and external demands, including the absence of a disease (Sartorius, 2006). This perspective expands upon the biomedical model by shifting the focus from the mere absence of disease to the individual's ability to respond actively and flexibly to life's challenges. Within this framework, individuals may be considered healthy even in the presence of chronic illness or physical impairment, as long as they are able to preserve autonomy and participate meaningfully in their environment.

The functional model emerged in the mid-twentieth century as a response to the limitations of the biomedical model, particularly its inapplicability in cases of long-term illness and disability. In this sense, health is no longer regarded as a static and universal condition, but as a context-sensitive and individually variable process (Krahn et al., 2021). The model emphasizes the subjective and experiential dimensions of health, integrating physical, psychological, and social factors (WHO, 1986).

A key philosophical contribution to this model was provided by Canguilhem in his work *"Le normal et le pathologique"* (1943). The author argued that health is not a fixed or purely objective state – as the biomedical model –, but rather a normative and generative activity intrinsic to life. Health is the capacity of the human being to establish new norms in response to internal and external changes. Illness, therefore, does not represent the absence of norms, but rather the establishment of a different normative order. As Canguilhem (1943) writes, "to be healthy is not only to be normal in a given situation, but also to be normative – to be able to institute new norms in new situations" (p. 160). From this perspective, health is linked to the concept of normativity, understood as the vital ability to adapt, reconfigure, and innovate in the face of conflict and variability (Vagelli and Moya-Diez, 2015).

Despite its conceptual richness, the functional model has some limitations. Its emphasis on subjective adaptation and coping capacity can be difficult to operationalize in clinical or epidemiological practice, where standardized measures and diagnostic criteria are required (Fletcher et al., 2012). Furthermore, it risks individualizing responsibility for health, by

focusing on personal functioning and resilience, potentially obscuring the structural, economic, and environmental factors that constrain an individual's capacity to function (Wade and Halligan, 2004). Finally, critics have also highlighted how this model may reinforce societal expectations of productivity and independence, which can marginalize those with chronic impairments who do not conform to these standards (Bickenbach et al., 1999).

1.1.3. The ecological model

The ecological model conceptualizes health as a dynamic state of balance or equilibrium, achieved through the individual's continuous interaction with the social and physical environment (Sartorius, 2006). From this perspective, health is not merely the absence of disease – as in the biomedical model – nor solely an individual capacity to function – as in the functional model – but rather the outcome of a complex and reciprocal relationship between individuals and the broader systems in which they are embedded (McLeroy et al., 1988; Stokols, 1992). This definition emphasizes interdependence (McLaren and Hawe, 2005) and environmental embeddedness: individuals are seen as active agents whose health depends on the ability to maintain a sustainable interaction with multiple contextual levels (Bronfenbrenner, 1994).

Historically, the ecological model emerged during the second half of the twentieth century in response to the growing recognition that the biomedical and the functional models were insufficient to explain the different causes of illness. In particular, the Ottawa Charter for Health Promotion (WHO, 1986) highlighted the need for explicitly endorsing a socio-ecological approach to health, calling for action on political, economic, social, cultural, environmental, behavioral and biological factors. This model also draws upon Bronfenbrenner's ecological systems theory (1979), which conceptualizes human development as shaped by different environmental systems. These contributions emphasized the importance of examining not only individual behaviors, but also the various context in which they occur.

At the heart of the ecological model is the idea that health is determined by multiple interacting factors operating across different levels: individual, interpersonal (microsystem), organizational (mesosystem), community (exosystem) and environmental or public policy (macrosystem and chronosystem) (Bronfenbrenner, 1994; McLeroy et al., 1988; Sallis et al., 2015). Consequently, this perspective supports the development of multilevel intervention models, which underscore the need for enacting various health education and promotion strategies to achieve changes not only in individuals but also in the whole population (Eldredge et al., 2016; Fisher, 2008; Jakes and Brookins, 2004; Sallis et al., 2015). This logic based on systems makes the ecological model particularly useful in public health, health equity, and environmental health research.

As for the previous models, the ecological model has also been subject to criticism, particularly regarding its complexity and the difficulty in translating its principles into concrete interventions. Critics have pointed out that, while the model recognizes multiple determinants of health, it often lacks clear guidance on how to prioritize or operationalize them in policy and practice (Richard et al., 2011; Sallis et al., 2015). Moreover, its emphasis on the environment and social structures may sometimes obscure the role of personal agency or individual variability. Finally, although multilevel interventions are theoretically robust, they can be resource-intensive and politically challenging to implement (McLaren and Hawe, 2005).

1.1.4. The biopsychosocial model

In the contemporary health discourse, the biopsychosocial model is widely recognized as a more comprehensive framework for understanding health and illness. Unlike previous models, which conceive health as the mere absence of disease (biomedical model), as the ability to function (functional model), or as a dynamic equilibrium with the environment (ecological model), the biopsychosocial model integrates all these dimensions. It conceptualizes health as the outcome of the complex and dynamic interactions among biological, psychological, and

social factors (Engel, 1977). This multidimensional model reflects the growing awareness that human health cannot be fully explained by a single discipline, like medicine or epidemiology, but requires an integrated perspective to capture its complexity.

The need for such a model arose in response to the limitations of the biomedical paradigm, which attempted to fit individuals into rigid diagnostic categories. As Engel (1977) observed, a person may experience illness without meeting diagnostic criteria, or conversely, may meet diagnostic standards without subjectively feeling unwell. Furthermore, a full understanding requires additional conceptual frameworks beyond the biological one.

It was in response to this epistemological reductionism that Engel articulated the biopsychosocial model in the late 1970s. His critique of the biomedical paradigm coincided with broader shifts in medicine and psychology, which increasingly recognized the relevance of psychological and social variables in the onset, the course, and the treatment of illness. Engel's work (1977) marked an important moment in medical epistemology: it invited health professionals to adopt a systemic perspective and consider the patient not merely as a body, but as a person embedded in relational, psychological, and social contexts. In this way, the model offered a more accurate understanding of suffering and care (Loughlin et al., 2018).

A central concept introduced by this model is the downward causality, the idea that causation can flow from higher to lower levels of organization. In other words, the whole can influence its parts. Consequently, causal explanations cannot be fully understood by analyzing biological components in isolation (Rocca and Anjum, 2020). For instance, a child deprived of emotional care may experience developmental delays despite adequate physical nourishment, or a patient recovering from surgery may heal faster when supported by meaningful relationships or even animal companions (Ellis, 2012). These examples illustrate how health outcomes often depend not on biological interventions alone, but on psychosocial determinants. The model thus promotes an integrated view of care, in which motivation and resilience are considered central components of health (Rocca and Anjum, 2020).

Since its introduction, the biopsychosocial model has significantly influenced clinical practice, medical education, and health research (Farre and Rapley, 2017), and has “become the orthodox overarching model for health, disease and healthcare” (Bolton and Gillett, 2019, p. 5). Nevertheless, recent critiques have emphasized important limitations of the model. Roberts (2023), for instance, argues that the model has been widely overused and misunderstood, and calls for a clear delineation of what the model can and cannot achieve. As McLaren (1998) has pointed out, to function as a genuinely scientific model, the biopsychosocial model must go beyond the general assertion that illness involves biological, psychological, and social factors. It should provide an integrative theory capable of explaining how these domains interact: for example, how social factors of type X lead to biological events of type Y, which in turn generate psychological symptoms of type Z (Roberts, 2023). Although Engel (1977) hoped to build such a theory using general systems theory, he never fully developed it and no comprehensive version has been established, despite valuable efforts (Bolton and Gillett, 2019; Edwards et al., 2016; Kelly et al. 2014; McLaren, 1998; 2021).

The broadness of this model, while inclusive, also contributes to one of the most frequently cited criticisms, its conceptual vagueness (Bolton and Gillett, 2019; Brendel, 2003; Roberts, 2023). By encompassing nearly all aspects of human life, it risks becoming a truism: it suggests that people become ill because something has gone wrong in one or more of many domains. In this form, the model lacks precision and falsifiability that characterize robust scientific theories (Brendel, 2003; Ghaemi, 2011; McLaren, 1998; Weiner, 2008). In addition to these epistemological concerns, the biopsychosocial model faces significant structural barriers in clinical implementation. In modern highly specialized healthcare systems, professionals tend to focus on isolated domains of care, thus undermining the model’s integrative vision (Kirkengen, 2018). Paradoxically, this reproduces the very fragmentation the model was designed to overcome.

Nonetheless, despite its limitations, the biopsychosocial model remains a foundational framework in modern healthcare. Its enduring relevance lies in its conceptual ambition: it advances a holistic and person-centered understanding of health that takes individual and contextual factors into account. Although it does not provide a fully developed explanatory theory, it serves as a critical paradigm: it challenges reductionist perspectives and fosters interdisciplinary dialogue aimed at better understanding and addressing human illness.

1.1.5. From the biomedical to the biopsychosocial model: An integrative perspective

As discussed in the previous sections, the conceptualization of health has progressively evolved from a reductionist to a more integrative and multidimensional framework (see Table 1 for a summary). Each model emerged in response to the epistemological and practical limitations of its predecessors, reflecting a gradual broadening of what it means to be healthy. The biomedical model, although fundamental for scientific medicine and responsible for major advances in diagnosis and treatment, has been criticized for its mechanistic assumptions and neglect of subjective experience (Bolton and Gillett, 2019; Engel, 1977). Consequently, the functional model responded to these limitations by emphasizing adaptation and the capacity to fulfill social roles, aligning with sociological notions of health as a performance (Parsons, 1951). Yet, this perspective has been challenged for its normative implications and for placing excessive responsibility on the individuals to maintain functionality (Seedhouse, 2001).

The ecological model represented another important step forward, introducing the idea that health arises from a dynamic balance between the individuals and their surrounding environment (Dubos, 1960). By highlighting the social and the ecological factors of health, it offered a systemic understanding that informed later developments in public health and health promotion (Kickbusch, 1989). However, its holistic scope has sometimes been criticized for being too broad to yield precise interventions or explanatory mechanisms (McLaren, 1998).

Finally, the biopsychosocial model (Engel, 1977) attempted to integrate all these perspectives within a unified framework, highlighting that health results from the interaction among biological, psychological, and social factors. This model promoted interdisciplinary dialogue and patient-centered care, which have become key features of contemporary medicine (Farre and Rapley, 2017; Loughlin et al., 2018). Nonetheless, several authors have highlighted persistent issues regarding its operationalization and theoretical consistency (Brendel, 2003; McLaren, 1998, 2021; Roberts, 2023). Without a clear mechanism describing how these domains interact, the model risks becoming heuristic rather than a testable theory (Bolton and Gillett, 2019; Ghaemi, 2011).

In line with these theoretical advances, the WHO sought to translate the conceptual richness of these integrative models into an operational framework through the International Classification of Functioning, Disability, and Health (ICF; WHO, 2001). The ICF explicitly addresses the limitations of the WHO definition (1948) – criticized for its idealized and static notion of “complete well-being” – by redefining health as a dynamic process of functioning. It conceptualizes functioning as the interaction between body functions, activities, and participation, all influenced by environmental and personal factors (Cieza et al., 2008; WHO, 2001). This model introduces the functional dimension of health while embedding it within a multidimensional biopsychosocial perspective, thereby bridging the biomedical and social paradigms and offering a more comprehensive and operational understanding of human health (Bickenbach et al., 1999; Leonardi et al., 2006).

Taken together, the evolution of these models reflects a paradigmatic shift in the health sciences – from a linear and reductionist causality to systemic and relational paradigms (Rocca and Anjum, 2020). Health is increasingly conceived not as a static but a dynamic process of adaptation and regulation across multiple levels of functioning. Yet, the integration of this complexity into practical frameworks remains the major challenge. As Roberts (2023) argues,

future research should aim to translate the conceptual richness of integrative models into empirically grounded approaches capable of informing both science and clinical practice.

MODEL	DEFINITION	STRENGTHS	LIMITATIONS
Biomedical	Health as absence of disease or malfunction	Advances in medicine, objective measurements, effective interventions (e.g., antibiotics, surgery)	Reductionist; neglects psychological and social factors; may ignore subjective experience
Functional	Health as capacity to function, adapt, and fulfill roles	Emphasizes adaptation, resilience, autonomy; applicable to chronic illness	Difficult to operationalize; may individualize responsibility; societal norms may marginalize some individuals
Ecological	Health as dynamic balance through interaction with environment	Emphasizes social determinants, public health interventions	Complex; difficult to operationalize; may obscure personal agency
Biopsychosocial	Health as outcome of interactions among biological, psychological, and social factors	Promotes holistic care, interdisciplinary dialogue, challenges reductionism	Conceptually broad and vague; lacks precise explanatory theory; difficult to implement in specialized systems

Table 1. Strengths and limitations of the health models.

1.2. The evolution of the concept of well-being

The growing recognition that health alone does not fully capture the multiple dimensions of human life has led scholars and policymakers to turn their attention to the broader concept of well-being. This shift reflects the need to move beyond the traditional disease-health continuum and to consider the psychological and social factors that enable individuals and communities to thrive.

Unlike the construct of health, which has been at the center of international discourse since the WHO's definition in 1948 and its subsequent developments, the notion of well-being is relatively recent in public health policy. It was officially introduced in the 2021 edition of

“Health Promotion Glossary”, where it is defined as “a positive state experienced by individuals and societies. Similar to health, it is a resource for daily life and is determined by social, economic, and environmental conditions” (WHO, 2021, p. 10).

Nevertheless, human beings have long reflected on the nature of well-being, health, happiness, and the “good life”, and psychological theorizing has explored these questions across the history of the discipline (Lent, 2004). Despite these philosophical and theoretical interests, sustained empirical attention to the construct of well-being has only emerged in the last few decades. During this period, several conceptual models of well-being have been developed, the field of positive psychology has gained academic recognition, and empirical research has expanded significantly. These advancements have been accompanied by intense theoretical debate and sometimes conflicting perspectives (Jayawickreme et al., 2012; Lent, 2004; Ryan and Deci, 2001).

Nowadays, scientific literature identifies four main conceptualizations of well-being, each reflecting a distinct theoretical orientation (Cooke et al., 2016). The hedonic approach defines well-being in terms of pleasure, happiness, and life satisfaction (Ryan and Deci, 2001). The eudaimonic approach, in contrast, emphasizes psychological functioning, personal growth, and self-realization (Lent, 2004). A third approach focuses on quality of life (QoL), a multidimensional construct encompassing physical, psychological, and social dimensions, and is often used in medical and public health context (WHOQOL Group, 1998). Finally, the fourth approach is based on the idea of wellness, as it promotes a holistic and lifestyle-oriented view of well-being, emphasizing balance and optimal functioning across various domains (Roscoe, 2009).

Although these models differ in focus and scope, they share a common concern with the positive aspects of human experience. At the same time, their conceptual and methodological plurality has raised critical questions regarding the coherence and distinctiveness of the construct of well-being. The coexistence of multiple definitions and measures often complicates

research, policymaking, and intervention design. For these reasons, the following sections will examine each of these conceptualizations by exploring the definition, historical background, main strengths, and limitations.

1.2.1. The hedonic approach

The hedonic approach defines well-being primarily in terms of the maximization of pleasure and the minimization of pain (Tatarkiewicz, 1976). Rooted in a long philosophical tradition, this perspective conceives happiness as the subjective experience of positive affect, life satisfaction, and low levels of negative emotions (Diener and Lucas, 1999). Historically, its foundations can be traced back to Aristippus, a Greek philosopher from the fourth century B.C., who maintained that the goal of life was to maximize pleasure. Later, Hobbes and DeSade reinforced the idea that happiness is found in the pursuit of appetites and sensations. Finally, the utilitarian philosopher Bentham expanded this tradition by linking individual pleasure with the collective good, arguing that the best society is one that promotes the greatest happiness for the greatest number (Ryan and Deci, 2001).

In modern psychology, the hedonic approach has been operationalized through the construct of subjective well-being (SWB), articulated by Diener (1984). According to the tripartite model, SWB comprises three components: life satisfaction, the presence of positive affect, and the absence of negative affect (Diener, 1984; Diener and Lucas, 1999). Life satisfaction is a cognitive evaluation of one's overall life, sometimes including domain-specific assessments such as satisfaction with health, work, or relationships. Positive affect regards the frequency of pleasant emotions, while negative affect is typically assessed as the frequency of unpleasant emotions (Ryan and Deci, 2001; Ryff et al., 2021).

This model has become one of the most widely adopted frameworks for empirical research on well-being, and its indicators are often used as proxies for happiness in psychological studies (Kahneman et al., 1999). A key feature of the hedonic approach is its

emphasis on engaging in pursuits that generate positive emotional experiences – such as pleasure, comfort, entertainment, and enjoyment – and that fulfill personal desires (Fredrickson, 2001; Kahneman, 1999). This view assumes an accumulative effect, whereby high levels of well-being are achieved through the frequent experience of positive emotions and the satisfaction of one's wants (Fredrickson, 2004).

Despite its success, the hedonic approach has been the subject of various criticisms. First, scholars have argued that reducing well-being to affective states neglects essential dimensions of human functioning, such as meaning, autonomy, or personal growth (Ryff, 1989; Ryff and Keyes, 1995; Waterman, 1993). Second, although SWB is often treated as a proxy for overall wellness, this assumption has been challenged by those who argue that happiness, in the hedonic sense, may not fully capture psychological flourishing (Ryff and Singer, 1998, 2000). Finally, the conceptual overlap between hedonic and eudaimonic well-being has raised questions about the discriminant validity of these constructs. Although the hedonic approach focuses on pleasure, life satisfaction, and positive emotions (Diener, 1984; Diener and Lucas, 1999; Ryan and Deci, 2001), and the eudaimonic approach on purpose, autonomy, and personal growth (Ryan and Deci, 2000; Ryff, 1989; Ryff and Keyes, 1995), empirical findings show that these domains often co-occur in people's lives. Experiencing positive emotions can foster meaning and engagement, while living a purposeful life often enhances subjective happiness (Fredrickson et al., 2013; Keyes et al., 2002). This reciprocal relationship suggests that the distinction between hedonia and eudaimonia may be more theoretical than empirical.

1.2.2. The eudaimonic approach

The eudaimonic approach conceptualizes well-being not as the mere experience of pleasure or subjective happiness, as in the hedonic perspective, but as the realization of one's potential and the pursuit of a virtuous and meaningful life (Lent, 2004). Rooted in the Aristotelian concept of *eudaimonia* – literally “living well” through virtue – this perspective

invites individuals to recognize and live in accordance with the *daimon* or “true self” (Norton, 1976). Well-being, therefore, is tied to the realization of one’s inherent potentialities, representing the highest form of human fulfillment (Waterman, 1993).

Although grounded in Aristotelian philosophy, the eudaimonic tradition is also deeply shaped by twentieth-century psychology. Humanistic and existential theorists emphasized growth, self-realization, and meaning: Jung’s individuation process (1933), Frankl’s focus on meaning in adversity (1959), Rogers’s fully functioning person (1961), and Maslow concept of self-actualization (1968) all contributed to a vision of well-being as personal development. Building on this foundation, Ryff (1989; Ryff and Keyes, 1995) proposed a multidimensional model of psychological well-being (PWB) encompassing six dimensions: self-acceptance, positive relations with others, environmental mastery, autonomy, purpose of life, and personal growth. Similarly, Ryan and Deci (2000) proposed the Self-Determination Theory (SDT), which emphasizes the satisfaction of three basic psychological needs – autonomy, competence, and relatedness – as essential to well-being.

The eudaimonic approach offers a comprehensive and theoretically rich perspective, emphasizing authenticity, growth, and purpose over temporary pleasure. Empirical studies have demonstrated that PWB and SWB are positively correlated yet conceptually distinct, supporting the idea that hedonic and eudaimonic well-being represent complementary aspects of psychological flourishing (Keyes et al., 2002). Research further links eudaimonic well-being to beneficial health outcomes, such as improved immune functioning and resilience (Ryff and Singer, 1998). By focusing on psychological needs and developmental challenges, this framework underscores that life’s primary goods for positive health are purpose and meaningful relationships, complemented by self-acceptance and mastery (Ryff and Singer, 1998).

As with the hedonic model, the eudaimonic perspective has been criticized for its normative and expert-driven definitions of well-being, which risk imposing perspective standards of what constitutes a “good life” (Diener et al., 1998). Moreover, while the hedonic-

eudaimonic distinction is conceptually valuable, empirical findings often reveal strong correlations between these dimensions, blurring their boundaries (Kashdan et al., 2008). Consequently, integrating the two approaches may provide a more nuanced framework for understanding well-being, capturing both the experiential and developmental dimensions of human flourishing.

1.2.3. The quality of life

Well-being can also be conceptualized through the lens of Quality of Life (QoL). The WHO defines QoL as a “broad range concept affected in a complex way by the persons’ physical health, psychological state, level of independence, social relationships and their relationship to salient features of their environment” (WHOQOL Group, 1998, p. 1570). According to Cella (1994), QoL comprises two essential components: multidimensionality – covering physical, functional, emotional and social well-being – and subjectivity, meaning that QoL can only be fully understood from an individual’s perspective. Hence, assessing QoL requires consideration of both objective indicators and personal evaluation of well-being.

The concept of QoL emerged at the intersection of medicine, sociology, and psychology, particularly within healthcare and clinical research, where evaluating treatment outcomes required measures beyond symptom reduction (Cella and Stone, 2015; Lent, 2004). Early assessments focused mainly on functional status, but later developments, such as the WHOQOL project, extended the framework to include social, psychological, and spiritual dimensions of life (Skevington et al., 2004; WHOQOL Group, 1998). Over time, QoL became a central construct in patient-centered care and public health policy, reflecting a shift from a purely biomedical model toward a holistic and multidimensional understanding of health (Stiglitz et al., 2009).

This framework offers a comprehensive and interdisciplinary perspective to well-being, integrating both subjective experiences and objective life conditions. As Felce (1997) proposed,

QoL involves three components: (1) objective life conditions, (2) subjective satisfaction with those conditions, and (3) the relative importance attached to different life domains. This structure allows researchers and clinicians to assess well-being in a way that is context-sensitive, person-centered, and adaptable to different populations. QoL measures are thus valuable in evaluating health interventions, chronic illness outcomes, and population well-being, bridging the gap between clinical and psychological domains (Cella and Stone, 2015).

Despite its strengths, the QoL approach faces conceptual and methodological challenges. It often overlaps with SWB and life satisfaction, leading to ambiguity in definition and measurement (Camfield and Skevington, 2008; Peasgood et al., 2014). Moreover, subjective evaluations may be influenced by adaptation processes, response biases, and cultural differences, complicating cross-cultural comparisons (Stewart-Brown, 2015). Instruments also vary in domain weighting and interpretation, sometimes assuming equivalence between dimensions without sufficient empirical justification (Skevington and Epton, 2018). For this reason, the ongoing lack of integration between QoL and SWB research tradition continues to limit the development of a unified and globally applicable framework to well-being.

1.2.4. The wellness

Wellness goes beyond the mere absence of disease, encompassing a dynamic process of growth, awareness, and balance among physical, psychological, social, and spiritual dimensions of life. Dunn (1961) provided one of the earliest modern definitions of wellness, describing it as the maximization of health through an integrated method of functioning oriented toward one's full potential. From this perspective, wellness represents an active, self-directed, and holistic pursuit of well-being and fulfillment. This approach to well-being emphasizes the harmony of mind, body, and spirit, and assumes that optimal health results from the conscious alignment of these dimensions (Roscoe, 2009). Scholars generally agree that wellness is a

multidimensional construct (Adams et al., 1997; Hettler, 1980) and that its dimensions are interrelated and dynamic and not static (Lafferty, 1979).

In the aftermath of World War II, public health conditions improved significantly due to medical advances such as widespread vaccination and the use of antibiotics (Seaward, 1999). While infectious diseases declined, new chronic illnesses – often referred to as “disease of civilization”, including heart disease, diabetes, and obesity – became increasingly prevalent (Susser, 1985). Epidemiological research began linking these conditions to lifestyle and environmental factors such as sedentary behavior, poor nutrition, and work-related stress (Millar and Hull, 1997). Consequently, governments and health institutions started promoting preventive interventions and public health policies in order to encourage healthier lifestyles (Miller, 2005).

The wellness approach provides a comprehensive and integrative framework for understanding human well-being and functioning. Its key strength lies in its holistic orientation: wellness is viewed as the balanced and dynamic integration of multiple life domains rather than the simple absence of illness (Adams et al., 1997; Dunn, 1961). This perspective promotes self-awareness, self-responsibility, and personal growth, encouraging individuals to adopt proactive health behaviors and positive lifestyles (Miller, 2005). Furthermore, wellness frameworks have been effectively applied in clinical, counseling, and educational contexts, offering guidance for prevention, rehabilitation, and personal development (Roscoe, 2009). By bridging medical, psychological, and social domains, the wellness paradigm supports interdisciplinary collaboration and contributes to public health initiatives focused on well-being promotion (Ciziceno, 2022). Its flexibility and emphasis on both subjective experience and objective functioning make it a useful conceptual tool for both researchers and practitioners.

Despite its wide use, the wellness approach remains conceptually ambiguous. Scholars have pointed out the lack of a universally accepted definition and the tendency to conflate wellness with related constructs such as SWB and QoL (Kelly, 2000; Roscoe, 2009). The

multidimensional nature of wellness, while comprehensive, has led to theoretical and methodological inconsistencies, as aggregating different dimensions does not necessarily clarify the underlying construct (Croese et al., 1992). Moreover, the normative and aspirational aspects of wellness – its emphasis on optimal functioning and “positive” health – risk imposing prescriptive standards that may not account for cultural, contextual, or individual differences. Research has often focused on operationalizing wellness through measurement tools rather than refining its conceptual foundations. Consequently, developing a coherent theoretical framework that integrates different disciplinary perspectives remains a major challenge for future research (Ciziceno, 2022).

1.2.5. Toward an integrated understanding of well-being: Theoretical convergence and critical issues

The conceptualization of well-being has evolved from the simple pursuit of pleasure to more complex and multidimensional frameworks encompassing psychological, social, and existential dimensions (see Table 2 for a summary). Each approach reflects a particular epistemological viewpoint on what it means to live well, revealing the different ways in which the notion of well-being has been theorized and operationalized. First of all, the hedonic approach, grounded in the tradition of utilitarian philosophy, has been essential for establishing a measurable and empirically tractable conception of well-being through the construct of subjective well-being (Diener, 1984; Kahneman et al., 1999). However, by equating happiness with positive affect and life satisfaction, it risks overlooking deeper dimensions of meaning, purpose, and authenticity (Ryff, 1989; Waterman, 1993).

In response, the eudaimonic approach introduced a developmental view of well-being, emphasizing personal growth, autonomy, and self-realization (Ryan and Deci, 2000; Ryff and Keyes, 1995). This approach has enriched the theoretical landscape, shifting from pleasure to psychological functioning and virtue. Yet, its normative assumptions about what constitutes a

“good life” have raised concerns about cultural universality and the imposition of expert-driven standards (Diener et al., 1998; Kashdan et al., 2008). Empirically, strong correlations between hedonic and eudaimonic indicators have led several scholars to suggest that they capture overlapping, rather than distinct components of well-being (Huta and Waterman, 2014; Keyes et al., 2002).

The Quality of Life and the wellness approaches further expanded the field toward applied and policy-oriented domains. QoL integrates both subjective evaluations and objective life conditions, offering a valuable bridge between psychological and medical perspectives (Cella and Stone, 2015; WHOQOL Group, 1998). However, its conceptual breadth and methodological heterogeneity often generate ambiguity and hinder cross-cultural comparability (Camfield and Skevington, 2008; Stewart-Brown, 2015). Similarly, the wellness approach promotes a holistic and proactive view of health and well-being, emphasizing balance, prevention, and self-responsibility (Dunn, 1961; Roscoe, 2009). Nonetheless, its broad and aspirational nature risks conflating wellness with related constructs and imposing prescriptive ideal of “optimal living” that may overlook contextual and structural constraints (Ciziceno, 2022; Crose et al., 1992).

In conclusion, these approaches highlight both the richness and the fragmentation of the well-being literature. Despite their conceptual differences, they converge on the idea that well-being is multidimensional, dynamic, and context-dependent. Yet, the coexistence of multiple frameworks has produced theoretical and methodological pluralism that continues to challenge empirical integration (Forgeard et al., 2011; Jayawickreme et al., 2012). As for health, future research should articulate models capable of bridging these traditions – linking subjective experience with social and environmental determinants – to move toward a more unified and actionable science of well-being (Huppert and So, 2013; Ryff and Singer, 2008).

APPROACH	DEFINITION	STRENGTHS	LIMITATIONS
Hedonic	Well-being as the experience of pleasure, positive affect, and life satisfaction, and the absence of negative emotions	Empirically measurable; captures subjective happiness; strong predictive value for life satisfaction	Reductionist; neglects meaning and personal growth; sometimes overlap with eudaimonic well-being
Eudaimonic	Well-being as realization of one's potential and pursuit of meaning, autonomy, and personal growth	Theoretically rich; emphasizes authenticity, purpose, and psychological functioning; supported by empirical research	Normative assumptions about the "good life"; empirical overlap with hedonic well-being; difficult to operationalize
Quality of Life (QoL)	Multidimensional construct including physical, psychological, social, and environmental domains, integrating both subjective and objective aspects	Comprehensive; applicable in clinical and public health settings; bridges subjective well-being and health outcomes	Conceptual ambiguity; cultural and methodological variability; overlap with SWB complicates measurement
Wellness	Dynamic process of holistic integration across physical, psychological, social, and spiritual dimensions aimed at optimal functioning	Holistic and preventive orientation; promotes self-responsibility and lifestyle change; useful for health promotion	Conceptually broad and inconsistent

Table 2. Strengths and limitations of the well-being approaches.

1.3. Determinants of health and well-being

The critical analysis of the theoretical models of health and well-being discussed in the previous sections highlights both the conceptual richness and the persistent challenges in defining these constructs. Although each model offers valuable insights, there is still no consensus on how health and well-being should be conceptualized (La Placa et al., 2013; Ryff and Singer, 2008). Progress in different disciplines – such as medicine, psychology, and sociology – has nonetheless promoted a shift from a static, disease-oriented view to a multidimensional and dynamic framework (Engel, 1977; WHO, 2006).

While these frameworks offer valuable conceptual lenses to understand what health and well-being are, they remain largely descriptive and do not fully explain the mechanisms through which individuals achieve or maintain optimal functioning (Huppert and So, 2013). As discussed in paragraph 1.1.4., one of the limitations of Engel's biopsychosocial model lies in its limited capacity to explain how social factors of type X lead to biological events of type Y, which in turn generate psychological symptoms of type Z (Roberts, 2023).

For this reason, recent research has increasingly focused on the determinants of health and well-being, that are the biological, psychological, and social factors that contribute to their development and maintenance (Vingilis and Sarkella, 1997). This new approach to health and well-being comes from the idea that “we can no longer view health as just a matter of hospitals, doctors and patients. We now know that there are many determinants that affect the health of individuals and groups – determinants such as our social and physical environments, employment, housing and social support, as well as appropriate and effective health care” (Premier's Council on Health, Well-being and Social Justice, 1994, p. 3).

The WHO has also formally adopted this perspective, introducing the term “Determinants of health” in the “Health Promotion Glossary” (2021) and defining them as “the range of personal, social, economic, and environmental factors that determine the healthy life expectancy of individuals and populations” (p. 4). These include, for example, income and access to resources, education, employment and working conditions, access to appropriate health services, and many other structural and contextual factors that influence people's opportunities to achieve and maintain health and well-being.

Building on this multidimensional view, it becomes essential to examine how different layers of determinants – from personal characteristics and psychological resources to social, economic, and environmental conditions – interact to influence health and well-being. The following sections outline these determinants, starting from an individual level and gradually expanding toward broader social and structural context.

1.3.1. Personal determinants

Personal determinants are crucial because they show how individuals actively influence their own health and well-being through behavior, emotions, and coping skills (WHO, 2021). These determinants include a wide range of individual characteristics – such as personality traits, cognitive and emotional resources, and behavioral patterns – that consequently influence how people perceive, maintain, and promote their health and their well-being. In contrast to the static models that conceptualize health as a mere absence of disease, this perspective emphasizes the active role of individuals in regulating their emotions, coping with stress, and engaging in health-promoting behaviors in order to achieve well-being (Antonovsky, 1979; Bandura, 1997; WHO, 2021).

Among the most investigated personal determinants, self-efficacy, locus of control, optimism, purpose in life, and resilience have shown consistent associations with both psychological and physical health outcomes (MacLeod et al., 2021). Self-efficacy, defined as confidence in one's ability to behave in a certain way to produce a desirable outcome (Bandura et al., 1977), influences a wide range of health behaviors. Similarly, individuals with a strong internal locus of control – an individual's belief about the source of control over life outcomes (Rotter, 1966) – tend to adopt more preventative and proactive health behaviors and tend report higher happiness and life satisfaction than those with an external locus of control (Popova, 2012).

Optimism and hope represent further protective psychological resources. Optimism is widely described as the expectation that good things will happen, a positive outlook about the future that shapes behaviors, thoughts, and stress responses (Peters et al., 2016). Optimists tend to expect positive outcomes, cope more adaptively with adversity, and recover faster from illness (Hingle et al., 2014; MacLeod et al., 2018; MacLeod et al., 2021; Puig-Perez et al., 2017). Similarly, purpose in life and meaning have been associated with lower mortality risk,

reduced inflammation, higher psychological well-being, better self-reported health, positive health behaviors, and quality of life (Musich et al., 2018; Ryff, 2013). These findings suggest that having a sense of meaning and purpose can serve as a psychological buffer, fostering resilience and adaptive functioning across the lifespan.

Finally, resilience – the positive adaptation or the ability to maintain or regain mental health despite experiencing adversity (Wald et al., 2006) – integrates many of these psychological resources. Empirical evidence shows that resilient individuals experience higher well-being, better mental health, and even lower healthcare costs (MacLeod et al., 2021).

Beyond these aspects, emotion regulation and coping strategies also play a crucial role in sustaining health and well-being. According to the transactional model of stress (Lazarus and Folkman, 1984), individuals' cognitive appraisal of stressful events and the coping strategies they employ (problem-focused or emotion-focused) critically shape psychological and physiological outcomes. Effective emotion regulation – such as cognitive reappraisal – has been linked to greater psychological resilience, reduced depressive symptoms, and lower cardiovascular risk (Gross, 1998; 2001). Conversely, maladaptive strategies – such as suppression – are associated with poorer health outcomes and reduced memory performance (Balzarotti et al., 2010).

In conclusion, health-related behaviors – such as diet, physical activity, sleep, and substance use – constitute another important set of personal determinants. These behaviors are strongly influenced by motivational and self-regulatory processes, including planning, goal setting, and self-monitoring (Schwarzer, 2008). Individuals with high self-regulation and self-control tend to engage more consistently in preventive behaviors and to maintain long-term health-promoting routines (Duckworth et al., 2018; Hagger, 2025). Thus, from a psychological perspective, maintaining health and achieving well-being is not merely a biological matter but a dynamic process that depends on individuals' capacity to regulate behavior, emotions, and cognition in alignment with personal and social goals.

1.3.2. Social determinants

Beyond individual characteristics, social and structural contexts play an equally decisive role in shaping people's health and well-being. Focusing exclusively on personal determinants risks overlooking the broader forces that create or constraint individuals' opportunities to live healthy (Marmot, 2005; Wilkinson and Pickett, 2009). From this perspective, social determinants represent the contextual and systemic dimension of health and well-being, linking individual outcomes to societal structures and relations. In the "Health Promotion Glossary" (WHO, 2021) the term social determinants refers to "the social, cultural, political, economic, and environmental conditions in which people are born, grow up, live, work, and age, and their access to power, decision-making, money, and resources that give rise to these conditions of daily life" (p. 32). These include eleven factors: Aboriginal status, early life, education, employment and working conditions, food security, health care services, housing, income and its distribution, social safety net, social exclusion, and unemployment and employment security (Raphael, 2006). This classification, widely recognized in public health literature, illustrates the multidimensional nature of social influences on health and well-being. Such factors shape opportunities for health, influence health-related behaviors, and determine the overall life expectancy and quality of life of individuals and communities (Marmot, 2013a; Wilkinson and Pickett, 2009).

The importance of these determinants is strictly related to health inequities. As the definition demonstrates, social determinants have a powerful influence on health inequities (WHO, 2008). In this regard, the concept of the social gradient in health describes the systematic relationship between socioeconomic position and health outcomes: individuals with higher social status, education, and income generally experience better health and longer lives than those with fewer resources (Marmot, 2005; Wilkinson and Pickett, 2009). This gradient is continuous, meaning that health and well-being improve at each step up the socioeconomic

ladder, rather than showing a simple gap between the rich and the poor. The mechanisms underlying this pattern involve material, psychosocial, and behavioral pathways: access to adequate living conditions, exposure to chronic stress, and sense of control and autonomy all play key roles (Raphael, 2020). Conversely, steep social gradients – where inequalities in income, education, and power are large – correspond to lower overall population health, as seen in rates of cardiovascular disease, mental health problems, diabetes, and premature mortality (Marmot, 2013b; Wilkinson and Pickett, 2009).

In conclusion, among these social factors, social support deserves particular attention due to its dual relevance for both physical and psychological well-being. It is defined as “psychological, physical, and financial support accessible to an individual through social ties to other individuals, groups, and the larger community, which can provide a buffer against adverse life events, foster resilience, and provide a positive resource for health” (WHO, 2021, p. 33). Social support can be structural and functional: structural support refers to the size of one’s social network and the frequency of social interactions, whereas functional support refers to the quality of relationships and the types of assistance they provide (WHO, 2021). The functional dimension includes emotional support (e.g., receiving love, empathy, and understanding) and instrumental support (e.g., tangible help such as financial assistance or help with daily activities). Although both dimensions are important, the quality of relationships (functional support) has generally been found to be a stronger predictor of good health than the mere quantity of social connections (structural support) (WHO, 2021).

Consistent evidence suggests that high levels of perceived social support are associated with lower stress reactivity, reduced risk of morbidity and mortality, and greater psychological well-being (Cohen and Wills, 1985; Uchino, 2009). Conversely, social isolation and loneliness have been linked to poorer health outcomes, including increased risk for depression, cardiovascular disease, and early mortality (Xia and Li, 2018). Thus, strengthening social

support networks represents a key strategy in promoting equity and improving overall population health and well-being.

1.3.3. Economic determinants

Beyond social conditions, economic structures exert a profound influence on people's capacity to achieve and sustain health and well-being. In particular, economic determinants refer to the financial and material conditions that shape people's opportunities to maintain and promote their health and well-being across the lifespan. These determinants include income, employment, job security, and access to essential services such as food, housing, and healthcare (Marmot, 2013b; WHO, 2023). Economic resources influence individuals' ability to meet their basic needs, to adopt healthy lifestyles, and to access preventive and curative medical services. Conversely, economic disadvantage is strongly associated with poorer health outcomes, higher exposure to risk factors, and reduced life expectancy (Wilkinson and Pickett, 2009).

These determinants are closely related to the social ones, as they form the socio-economic foundation that underpins health and well-being. As observed for social determinants, the social gradient in health also applies to economic factors: individuals with higher income and education level tend to experience better health and longer lives (Marmot, 2005). This gradient is evident both within and between countries and largely reflects structural inequalities in the distribution of money, power, and resources. Such inequities are perpetuated by economic systems that generate unequal access to opportunities, job stability, and social protection (Birn, 2009; Hall and Lamont, 2013). In particular, insecure employment, precarious work conditions, and low wages have been linked to increased psychological distress, poorer physical health, and limited capacity for health-promoting behaviors (Benach et al., 2014).

At the macro level, national and global economic policies also play a decisive role in shaping population health and well-being. Fiscal policies, taxation systems, welfare provision, and public investment in health and education determine the degree of social protection

available to citizens (WHO, 2011). Weak or regressive taxation and limited public services contribute to widening health disparities by restricting access to care and other key determinants of well-being. Moreover, globalization and economic crises can exacerbate inequalities by disproportionately affecting the most vulnerable populations (Beckfield and Krieger, 2009). These dynamics show that economic determinants are not merely individual or occupational factors but are embedded in broader systems of social and political organization.

1.3.4. Environmental determinants

At the broadest level of analysis, environmental determinants capture the physical and ecological contexts within which all other dimensions of health and well-being unfold. Environmental determinants refer to the physical, chemical, and biological conditions in which people live and work, which can influence both individual and population health (McMichael et al., 2006; WHO, 2021). These determinants encompass a wide range of factors, from access to clean water, hygienic sanitation services, and air quality, to the characteristics of the built environment, such as housing quality, transportation systems, and urban design. They also include working conditions and occupational exposures that may affect health across the lifespan (WHO, 2021). At a broader level, environmental determinants extend to ecological systems and planetary processes – such as the natural cycles of water, carbon, and nitrogen – that sustain all forms of life on Earth (Haines and Ebi, 2019). Disruptions to these systems represent a major threat to global health and well-being and to the sustainability of future generations.

Environmental determinants operate across multiple levels – from the individual and household to the community and global scale – and interact with other social and economic determinants along the social gradient of health. For instance, people living in deprived or industrial areas are more frequently exposed to pollutants, noise, or hazardous waste, and have less access to green spaces and safe infrastructures than those in wealthier neighborhoods

(Barton and Grant, 2006). These inequalities contribute to the uneven distribution of health outcomes and reflect the growing importance of environmental justice in public health discourse (WHO, 2023).

In recent years, increasing attention has been paid to the links between climate change and health and well-being, as global warming and ecological degradation exacerbate existing vulnerabilities. Climate-related phenomena such as droughts, floods, and extreme weather events affect food security, water availability, and living conditions, leading to significant implications for both physical and mental health (Haines and Ebi, 2019). These environmental threats highlight the interconnectedness of human and planetary health and reinforce the need for sustainable development strategies.

1.4. Representation of health and well-being

The analysis of personal, social, economic, and environmental determinants has shown that health and well-being emerge from the complex interplay between individual resources and contextual conditions. However, understanding these constructs solely in terms of determinants risks overlooking an essential dimension of human experience: how people perceive, interpret, and give meaning to them in everyday life. In daily contexts, people do not experience these notions as theoretical frameworks, but through subjective representations that reflect beliefs, values, experiences, and sociocultural contexts (Murray, 2002). In other words, health and well-being are also about how people think and feel about their conditions and life circumstances (Farr and Markova, 1995). For this reason, it becomes important to integrate a representational and psychosocial perspective into the study of these two constructs.

The theory of social representations (Moscovici, 1961, 1976, 2008) offers a useful framework for understanding this dimension. Social representations are socially elaborated and shared forms of knowledge that enable people to make sense of complex and abstract phenomena by transforming them into familiar categories (Moscovici, 2008). They serve both

cognitive and social functions: they make unfamiliar concepts familiar and provide a shared framework for communication, coordination, and identity construction (Åsbring, 2012; Jodelet, 1989). Within this perspective, health and well-being can be seen as symbolic systems that organize how individuals interpret their own experiences and orient their actions in daily life (Apostolidis and Dany, 2012; Joffe and Staerklé, 2007).

Research grounded in this framework has shown that social representations of health are dynamic, context-dependent, and influenced by cultural, generational, and social factors (Herzlich, 1969). People draw on different types of knowledge – medical, experiential, moral, and social – to define what it means to be healthy or to live well, demonstrating the polyphasic nature of everyday cognition (Jovchelovitch, 2006). Such pluralism is particularly visible in the field of health and well-being, where scientific discourse, common sense, and personal experience coexist and interact (Apostolidis and Dany, 2012).

As Herzlich (1973) demonstrated, the main representations of health can be organized along three dimensions: health-in-a-vacuum, referring to the mere absence of illness; reserve of health, seen as a form of vital capital that can increase or diminish over time; and health as equilibrium, understood as the dynamic balance between the physical, psychological, and relational spheres of functioning. These typologies remain a cornerstone for understanding how individuals symbolically construct the meaning of health in their everyday lives.

At the same time, this approach of social representations can be extended to the study of well-being, conceived as a culturally embedded and socially mediated construct (Rodríguez-Araneda, 2013). The representations individuals hold about what constitutes a “good life” or “being well” are shaped by dominant cultural narratives, social expectations, and shared values (Van Dijk, 2000). For instance, in contemporary Western societies, well-being is often equated with autonomy, productivity, and self-realization, reflecting the internalization of neoliberal ideals of individual responsibility (Fassin and Memmi, 2004; Lupton, 1995). Examining these

collective meanings provides insight into how individuals interpret and assess their own life satisfaction and psychological functioning.

In conclusion, studying representations of health and well-being helps to bridge the gap between objective determinants and subjective experience. Representations act as mediating systems that translate structural conditions – such as socioeconomic status, cultural background, generational belonging, or health policy – into personal meanings and practices. They therefore play a crucial role in shaping people’s perceptions of risk, coping strategies, and health-related behaviors (Breakwell, 2014; Leventhal et al., 1980). Furthermore, understanding these representational processes is essential for explaining variability in self-reported measures and for situating individual responses within their broader social and cultural context.

1.5. Aim and structure of the thesis

The previous sections have outlined how health and well-being are multidimensional constructs shaped by the dynamic interplay of personal, social, economic, and environmental determinants. This integrated perspective underscores that health and well-being cannot be understood merely as the absence of disease, but as emergent properties arising from the continuous interaction between individuals and their social, material, and ecological contexts (Marmot, 2013b; WHO, 2023). Within this biopsychosocial and systemic framework, the present research aims to examine how different determinants contribute to shaping the way people experience, represent, and maintain their health and well-being across different contexts and life stages.

The first study focuses on the representation of personal determinants, investigating the relationship between psychological well-being, emotion regulation, and self-efficacy. More specifically, it explores how individuals perceive and represent these dimensions through self-reported measures, and how these representations may change following a psychological counseling intervention conducted during the COVID-19 pandemic among university students.

By focusing on self-perceived rather than objective indicators, this study emphasizes the subjective and representational nature of personal determinants of health and well-being.

The second study addresses the representation of social and economic determinants, exploring how individuals conceptualize health and well-being in relation to their social position and material conditions. Through the analysis of participants' representations, this study seeks to highlight how structural and contextual factors – such as income, education, or social support – shape people's understanding of what it means to be healthy and to live well.

The third study examines the link between self-perceived health and subjective well-being across generations, interpreting generational membership as a socio-historical factor that reflects broader processes of social change. This study investigates how distinct historical and cultural contexts influence the representations and experiences of health and well-being over time.

Collectively, these studies aim to deepen the understanding of how individual and contextual factors interact to influence both the subjective experience and the social representation of health and well-being. By integrating multiple level of analysis – from psychological resources to social and structural conditions – the thesis adopts a biopsychosocial framework that highlights interdependence and complexity as defining feature of human health and well-being. This perspective provides the conceptual foundation for the empirical investigations presented in the following chapters, which seek to translate this integrative model into research practice.

In summary, this chapter has outlined the conceptual and theoretical foundations of health and well-being, emphasizing their multidimensional, dynamic, and social nature. It has shown how these constructs have evolved from reductionist models to integrative frameworks, and how their understanding requires not only the analysis of structural determinants but also the subjective representations through which individuals interpret and experience them.

CHAPTER 2

The Effects of University Psychological Counseling on Students' Health and Well-being in the COVID-19 Pandemic Era

This chapter is based on the article “Tinella, L., Borrelli, P., Lanciano, T., Epifani, M.C., Taurino, A., & Curci, A. (2025). The effects of university psychological counseling on students' mental health in the COVID-19 pandemic era. *Current Psychology*, 44, 11334-11347. <https://doi.org/10.1007/s12144-025-07781-4>”.

Building on the theoretical framework outlined in Chapter 1, this chapter focuses on key psychological dimensions that literature conceptualizes as personal determinants of health and well-being. As discussed in paragraph 1.3.1, these determinants are not conceived as fixed traits, but as dynamic and context-sensitive processes, shaped by individuals' interpretations of their emotional experiences, coping strategies and perceived personal resources (WHO, 2021). They include a range of individual characteristics – personality traits, cognitive and emotional resources, and behavioral patterns – that shape how people perceive, maintain, and promote their health and well-being (WHO, 2021).

The COVID-19 pandemic represented a large-scale and prolonged stressor that placed these personal dimensions under exceptional strain, highlighting their relevance while simultaneously exposing their situational vulnerability (Tambling et al., 2021). In this sense, the pandemic did not make personal determinants inherently fragile but rather emphasized how such psychological resources can be challenged, strained, or temporarily destabilized under conditions of sustained uncertainty and disruption (Sodi et al., 2021). In this context, university students represent a particularly relevant population, as they are situated in a developmental transition marked by identity formation, increasing autonomy, and exposure to new academic, relational, and emotional demands (Zittoun, 2008). Within the context of the COVID-19

emergency, these ongoing developmental processes intersected with unprecedented stressors, making students' personal psychological resources especially salient (Baticulon et al., 2021; Sahu, 2020).

Within this framework, university psychological counseling services offer a privileged context for observing how personal determinants of health and well-being are subjectively represented, mobilized, and potentially strengthened through targeted psychological support. Importantly, in the present study, these dimensions are not examined as determinants in causal sense, but as outcome variables, reflecting changes in psychological well-being, emotion regulation strategies, and self-efficacy following a counseling intervention. From this perspective, counseling intervention does not merely reduce symptoms, but it actively works on the subjective processes through which individuals interpret their capacities to regulate emotions, manage stress, and engage adaptively with their environment (Laquale et al., 2015; Savarese et al., 2014; Tinella et al., 2021). Therefore, investigating changes in these dimensions before and after a counseling intervention provides an empirical opportunity to connect the theoretical constructs discussed in Chapter 1 with real-world processes of health and well-being promotion during a historical moment of heightened psychological strain like the COVID-19 pandemic.

2.1. Introduction

2.1.1. The impact of the COVID-19 on health and well-being

The COVID-19 pandemic represented an unprecedented global stressor, affecting health and well-being at multiple levels – psychological, social, and neurobiological (Holmes et al., 2020). Although scholars anticipated its broad effects based on previous epidemics, the scale and duration of COVID-19 amplified existing vulnerabilities in ways that were difficult to predict, generating widespread uncertainty and disrupting everyday life (Lanciano et al., 2020; Lopez et al., 2021; Wang et al., 2020). Empirical evidence reported increased prevalence of

stress, anxiety, depression, irritability, and insomnia across different populations (Brooks et al., 2020; Gualano et al., 2020). For example, studies in Asia indicated that approximately 30-40% of the general population experienced moderate to severe psychological distress during the first waves of infection, while European surveys reported similar rates of anxiety and depressive symptoms (Salari et al., 2020; Tang et al., 2021). These findings suggest a convergence of psychological responses across countries, reflecting the pandemic's capacity to produce a shared sense of strain under conditions of prolonged uncertainty (Lopez et al., 2021).

In Italy – the first European country to be severely affected – the psychological impact was particularly evident, with approximately one-third of the population reporting clinically significant levels of anxiety during the first months of the outbreak (Lenzo et al., 2020; Mazza et al., 2020). Despite regional differences in infection rates and containment measures, an overall increase in fear, uncertainty, and depressive symptoms was widely documented in the Italian context (Meda et al., 2021; Rossi et al., 2020).

Importantly, the psychological consequences of the pandemic were not uniformly distributed across demographic groups, with certain populations showing greater susceptibility due to developmental stage, exposure to multiple stressors, and available personal and social resources (Renati et al., 2023; Varma et al., 2021). Among these groups, university students represent a particularly relevant population, given the intersection between ongoing developmental challenges and the disruptive impact of the pandemic, as discussed in the following paragraph.

2.1.2. Psychological and academic challenges among university students during the COVID-19 pandemic

University students were particularly affected by the COVID-19 pandemic, as the abrupt disruption of academic routines coincided with a critical developmental period characterized by identity exploration and emerging autonomy (Zittoun, 2008). In early 2020, universities

worldwide suspended or shifted in-person courses to online formats, often with minimal preparation (Baticulon et al., 2021; Sahu, 2020; Wang et al., 2020). This rapid transition introduced multiple stressors, including technological challenges, social isolation, and uncertainties regarding examinations, graduations, and future employment opportunities (Boals and Banks, 2020; Copeland et al., 2021).

Empirical evidence indicates that these changes were associated with heightened psychological distress, with students reporting increased stress, anxiety, sleep disturbances, and emotional exhaustion (Dewaele et al., 2019; Tang et al., 2020). Risk factors – including proximity to outbreaks, being in the final year of study or a graduate student – have been associated with higher risk of the development of post-traumatic stress disorder and depression (Tang et al., 2020). Conversely, protective factors such as stable family income, residing with parents, and living in urban regions, were associated with lower levels of anxiety (Cao et al., 2020).

However, the pandemic's impact was not homogeneous, highlighting the role of individual differences in personal resources such as coping strategies, resilience, and self-efficacy (Prowse et al., 2021; Rasheed et al., 2022). Research suggests that students' subjective interpretations of these resources – their perceived ability to manage stress, regulate emotions, and maintain motivation – play a crucial role in shaping psychological outcomes under conditions of prolonged stress (Bochiş et al., 2022). For example, students with higher resilience and a strong sense of life purpose tended to maintain better psychological outcomes despite lockdown conditions (Rasheed et al., 2022).

Taken together, these findings underscore the complexity of university students' experiences during the pandemic, as structural disruptions interacted with individual resources and subjective perceptions, resulting in heterogeneous outcomes. In response to these challenges, many institutions expanded psychological support services – especially through counseling interventions – to enhance coping, sustain academic engagement, and protect

students' health and well-being during a period of prolonged uncertainty (Wind et al., 2020; Zhai and Du, 2020).

2.1.3. University counseling as a resource for students' health and well-being

As discussed in the previous paragraph, the COVID-19 pandemic highlighted the crucial role of university counseling as a support system for students navigating both developmental and situational challenges. The university period represents a transitional phase marked by identity exploration, increased autonomy, and the reorganization of social and academic roles (Cassidy and Trew, 2004; Zittoun, 2008). Within this context, counseling services aim to address a broad range of difficulties, from academic stress and examination anxiety to relational and emotional challenges, by fostering students' awareness of the connections between emotions, behavior, and relational functioning (Savarese et al., 2014).

A growing body of research demonstrated that counseling interventions can enhance personal resources beyond mere symptom reduction. Specifically, counseling has been associated with improvements in psychological well-being, self-regulation capacities, adaptive coping strategies, and positive emotion regulation, such as cognitive reappraisal (Laquale et al., 2015; Savarese et al., 2014; Tinella et al., 2021). These processes are particularly relevant in crisis contexts, where individual vulnerability may be heightened and shaped by factors, such as gender and health status. For instance, studies conducted during the pandemic reported higher levels of depressive and post-traumatic symptoms among women who had contracted the virus and among students (Taurisano et al., 2022; Villani et al., 2021).

Overall, this evidence suggests that university counseling represents a valuable context for observing changes in key psychological dimensions involved in students' adaption to stress, including psychological well-being, emotion regulation, and self-efficacy (Laquale et al., 2015; Savarese et al., 2020; Vescovelli et al., 2017). Rather than being examined as determinants in causal terms, these dimensions are here conceptualized as indicators of psychological

functioning that may be responsive to counseling interventions. By supporting students in making sense of their emotional experiences and enhancing their perceived capacity to cope with challenges, counseling interventions can contribute to sustain academic engagement and promote overall psychological health (Laquale et al., 2015; Savarese et al., 2014; Tinella et al., 2021).

2.1.4. Psychological well-being, emotion regulation and self-efficacy

Previous studies have demonstrated that university counseling interventions are effective not only in reducing psychological distress, but also in enhancing key psychological dimensions and personal resources that support adaptive functioning, particularly in the context of the COVID-19 pandemic (Laquale et al., 2015; Savarese et al., 2014). Among these factors, psychological well-being, emotion regulation, and self-efficacy are especially relevant, as they are consistently associated with students' capacity to cope with stress, maintain motivation, and engage in adaptive and health-promoting behaviors (Antonovsky, 1979; Bandura, 1997; WHO, 2021).

Psychological well-being is a multidimensional construct encompassing positive affect, life satisfaction, role achievement, and sense of belonging (Van Wel et al., 2000). Each dimension is shaped by personal characteristics such as autonomy, mastery of environment, self-acceptance, purpose in life, positive relationship with others, and personal growth – elements that can be challenged under conditions of prolonged stress and uncertainty (Ornell et al., 2020). Among university students, psychological well-being appears particularly sensitive to developmental and academic stressors, which can exacerbate vulnerabilities and challenge adaptive capacities (Cassidy and Trew, 2004).

Closely related to psychological well-being, emotion regulation refers to the strategies individuals use to monitor, modulate, and respond to their emotional experiences (Gross, 2001; Houben et al., 2015). In particular, adaptive strategies such as cognitive reappraisal, which

involves reinterpreting emotionally salient events, have been associated with positive outcomes, whereas maladaptive strategies, such as suppression, that is the inhibition of emotional expression, are linked to increased cognitive load and physiological stress (Balzarotti et al., 2010; Gross, 2001). The pandemic, with its abrupt shifts to online learning, social isolation, and pervasive uncertainty, likely amplified reliance on maladaptive regulation strategies, thereby increasing psychological distress among students (D'Elia et al., 2021; Dewaele et al., 2019; Pérez-Fuentes et al., 2020; Savarese et al., 2020).

Self-efficacy, defined as the belief in one's ability to organize and execute actions to achieve desirable outcomes (Bandura et al., 1977), represents another key psychological dimension involved in students' adaptation to academic and life challenges (Bandura et al., 1977). It shapes motivation, engagement in learning, and the use of self-regulated strategies (Hayat et al., 2020; Siddiqui, 2015). Research suggests that more adaptive emotion regulation strategies, such as reappraisal, are linked to higher perceived self-efficacy, whereas maladaptive strategies, like suppression, may undermine confidence and exacerbate stress (Gross, 2002).

Empirical studies demonstrated that these three dimensions are interdependent and responsive to counseling interventions. Previous studies have shown improvements in adaptive coping strategies, psychological well-being, and academic self-efficacy following targeted counseling sessions (Bani et al., 2020; Monti et al., 2013; Vescovelli et al., 2017). Interventions promoting positive reappraisal (Folkman and Moskowitz, 2000; Garnefski et al., 2001) and refocus on planning (Lazarus and Folkman, 1984) have shown beneficial effects, highlighting the dynamic interplay between emotion regulation, self-efficacy, and psychological well-being (Balzarotti et al., 2016; Strepparava et al., 2015).

Furthermore, these three dimensions are particularly important because they provide students with psychological resources to interpret, manage, and adapt to both developmental and situational challenges. Psychological well-being supports a sense of purpose and satisfaction, emotion regulation enables effective management of emotional responses, and self-

efficacy fosters confidence in goal-directed actions (Bandura, 1997; Gross, 2001; Van Wel et al., 2000). Together, they represent central targets of university counseling interventions and educational strategies aimed at promoting adaptive functioning, resilience, and sustained academic engagement, particularly in the face of unprecedented challenges such as those posed by the COVID-19 pandemic (Laquale et al., 2015; Savarese et al., 2014; Tinella et al., 2021).

2.2. Aim and Hypotheses

Prior research has provided preliminary evidence suggesting that university counseling interventions may be associated with changes in key psychological dimensions relevant to students' adaption, including psychological well-being, emotion regulation, and self-efficacy. For instance, a pilot study conducted during the early phase of the COVID-19 pandemic reported improvements in students' psychological well-being, self-efficacy, and use of adaptive emotion regulation strategies following counseling interventions (Tinella et al., 2021). Additional studies conducted in the Italian context have highlighted the role of institutional factors, coping strategies, and learning conditions in shaping student's mental health and well-being during the pandemic and its aftermath (Tinella et al., 2022).

Despite these findings, important questions remain open regarding the extent to which participation in university counseling services is associated with changes in specific psychological outcomes during the phase of gradual return to in-person academic activities following lockdown. In particular, existing research has not yet sufficiently explored whether improvements can be observed across different domains of psychological functioning, such as psychological well-being, emotion regulation strategies, and perceived self-efficacy, within the Italian university context.

The present study, therefore, aimed to examine changes in psychological well-being, emotion regulation, and self-efficacy among undergraduate students at the University of Bari who participated in a university counseling service during the period of gradual return to normal

academic activities after the COVID-19 lockdown. Specifically, the study investigated whether counseling participation was associated with differences in these psychological dimensions measured before and after the counseling treatment. In this perspective, university counseling is considered as a supportive context in which changes in students' psychological functioning – beyond the reduction of psychological distress – can be observed.

Based on previous evidence, it was hypothesized that students participating in counseling would report higher levels of psychological well-being and perceived self-efficacy following the intervention, reflecting enhanced coping capacity and adaptive functioning (Ho et al., 2020; Qiu et al., 2020; Savarese et al., 2014, 2020; Wang et al., 2020). Regarding emotion regulation, it was expected that participation in counseling intervention would be associated with an increased use of cognitive reappraisal strategies and a reduction in suppression strategies, in line with previous findings linking adaptive emotion regulation to improved psychological outcomes (Balzarotti et al., 2010; Tinella et al., 2021).

2.3. Method

2.3.1. Design

The present study employed a pre-experimental design to examine the effects of counseling interventions on the representation of psychological well-being, emotion regulation, and self-efficacy. The assessment phase (T0 vs. T1) was treated as a within-subjects factor, allowing the evaluation of changes following the counseling intervention. Participants' sex was included as a between-subjects factor to explore potential effects. To account for the variability in treatment timing, the number of days elapsed between the two assessment phases was controlled as a continuous covariate.

2.3.2. Participants

A priori power analysis using G*Power 3.1 (Faul et al., 2009) with a significance level of 0.05, a cautious low effect size of 0.12, and 80% statistical power indicated that a minimum sample of 44 participants was sufficient to detect meaningful effects. The study sample consisted of 86 students (65% female) aged 19 – 52 years ($M = 25.7$, $SD = 4.64$) who accessed the University Counseling Service of the University of Bari between April 2020 and April 2022. Inclusion criteria required participants to be enrolled at the University of Bari Aldo Moro at the time of the study and to have applied for university counseling service. Exclusion criteria were the presence of diagnosed psychopathology, ongoing psychotherapy, or current pharmacological treatment.

The final sample included 30 men (age: $M = 24.7$, $SD = 3.97$) and 56 women (age: $M = 25.7$, $SD = 5.88$). Descriptive statistics for age, years of education, and time elapsed between pre- and post-treatment (in days) are reported in Table 1.

	<i>M</i>		<i>F</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Age	24.7	3.97	25.7	5.88
Education	14	1.42	13.9	1.3
Time	43.6	17.6	51.3	20.3

Table 1. Sample descriptive statistics: age, education and time (elapsed between pre-treatment and post-treatment) separated by sex (M – male and F – female).

Participants were enrolled across various academic programs, including 55 in scientific fields, 27 in humanities, and 4 in finance and business (see Table 2). All participants provided informed consent prior to enrollment and were blind to the study hypotheses. Data was processed anonymously and aggregated to ensure confidentiality. The study procedure adhered to the principles of the Declaration of Helsinki.

	<i>Programs/Courses</i>					
	<i>Scientific</i>		<i>Humanities</i>		<i>Financial</i>	
	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>
n (%)	16 (18.60)	39 (45.34)	11 (12.79)	16 (18.6)	3 (3.48)	1 (1.16)

Table 2. Number (frequencies) of students separated for sex (M – male and F – female) and university’s program.

2.4. Materials

Three self-report instruments were employed to assess respectively psychological well-being, emotion regulation, and self-efficacy.

Psychological well-being was measured using the Italian version of the Psychological General Well-being Index (PGWBI; Grossi et al., 2002). This 22-item questionnaire evaluates six dimensions: anxiety, depression, positive well-being, self-control, vitality, and general health. For each item, respondents indicate the frequency of specific symptoms over the past month on a 6-point Likert scale ranging from 0 to 5, with higher scores reflecting higher well-being. Notably, for the anxiety and depression subscales, higher scores indicate lower levels of anxiety and depression. Reliability coefficients for the subscales ranged from acceptable to good (Anxiety: Cronbach’s $\alpha = 0.72$; Depression: Cronbach’s $\alpha = 0.72$; Positive Well-being: Cronbach’s $\alpha = 0.79$; Self-control: Cronbach’s $\alpha = 0.73$; Vitality: Cronbach’s $\alpha = 0.78$; General Health: Cronbach’s $\alpha = 0.59$).

Emotion regulation strategies were assessed using the Emotion Regulation Questionnaire (ERQ; Balzarotti et al., 2010; Gross and John, 2003). The Italian adaptation of this instrument comprises 10 items, scored on a 7-point Likert scale from 1 (totally disagree) to 7 (totally agree). It measures two distinct emotion regulation strategies: reappraisal (6 items) and suppression (4 items). High scores indicate greater use of the corresponding strategy. Reliability coefficients for the two subscales ranged from acceptable to good (Reappraisal: Cronbach’s $\alpha = 0.89$; Suppression: Cronbach’s $\alpha = 0.73$).

Self-efficacy was assessed with the Scale of Perceived Self-Efficacy in the Management of Complex Problems (Farnese et al., 2007). This 24-item questionnaire evaluates four dimensions: emotional maturity, action finalization, relational smoothness, context analysis. It uses a 5-point Likert scale ranging from 1 (not able) to 5 (completely capable). Reliability coefficients were high for all the subscales (Emotional maturity: Cronbach's $\alpha = 0.87$; Action finalization: Cronbach's $\alpha = 0.92$; Relational smoothness: Cronbach's $\alpha = 0.88$; Context analysis: Cronbach's $\alpha = 0.90$).

2.5. Procedure

The psychological counseling intervention provided by the University of Bari served as the treatment of the present study. The intervention consisted of a cycle of five weekly sessions, each lasting approximately 50 minutes, delivered by university service practitioners, including psychotherapists and psychotherapy trainees. During these sessions, participants discussed personal and academic concerns, such as exam anxiety, study-related difficulties, stress, etc. All sessions were conducted online through various digital platforms (Skype, Teams, Zoom, Google Meet, Messenger), selected according to participants' availability. The complete intervention for each participant was generally concluded within a month.

Data collection occurred across three phases: pre-treatment (T0), treatment, and post-treatment (T1). Before the intervention, participants completed an online survey hosted on Google Forms, which included sociodemographic and anamnestic information, academic performance data, and the self-reported instruments described in the Materials section. The same set of questionnaires was administered again immediately after the completion of the counseling intervention. Each survey session required approximately 20 minutes.

2.6. Data analysis

To examine the effects of the university counseling interventions on students' representations of psychological well-being, emotion regulation, and self-efficacy, repeated-measures ANCOVAs were conducted separately for each subscale of the different questionnaires. The within-subjects factor was the assessment phase (T0 vs. T1), representing pre- and post-treatment measures, while sex (male vs. female) was included as a between-subjects factor to account for potential differences in response to counseling. Additionally, the variability in the timing of sessions, operationalized as the number of days elapsed between T0 and T1, was controlled as a continuous covariate to reduce confounding effects due to differences in intervention duration. All statistical analyses were performed using Jamovi version 1.0.7.0 (The Jamovi Project, 2021).

2.7. Results

2.7.1. Descriptive statistics and preliminary analyses

Descriptive statistics for all variables across the two assessment phases (T0 vs. T1), separated by sex, are reported in Table 3.

Independent-samples t-tests were conducted to examine sex differences in psychological well-being. At T0, female participants reported significantly lower scores than males on Anxiety ($t(84) = -2.30, p = .024, d = 0.52$) and Vitality ($t(84) = -2.73, p = .008, d = 0.62$). No significant sex differences were found for Depression ($t(84) = -1.60, p = .114, d = 0.36$), Positive Well-Being ($t(84) = -1.51, p = .134, d = 0.34$), Self-Control ($t(84) = -0.97, p = .337, d = 0.22$), and General Health ($t(84) = -1.36, p = .178, d = 0.31$).

Paired-samples t-tests were conducted to examine changes between T0 and T1. For female participants, significant improvements were observed in all six dimensions: Anxiety ($t(55) = -8.90, p < .001, dz = 1.19$), Depression ($t(55) = -6.92, p < .001, dz = 0.93$), Positive Well-Being ($t(55) = -7.95, p < .001, dz = 1.06$), Self-Control ($t(55) = -4.84, p < .001, dz = 0.65$),

Vitality ($t(55) = -9.25, p < .001, dz = 1.24$), and General Health ($t(55) = -3.31, p = .002, dz = 0.44$). For male participants, significant increases were found in Anxiety ($t(29) = -3.53, p = .001, dz = 0.64$) and Positive Well-Being ($t(29) = -2.96, p = .006, dz = 0.54$). Non-significant improvements were observed for Depression ($t(29) = -1.92, p = .064, dz = 0.35$), Self-Control ($t(29) = -1.83, p = .078, dz = 0.33$), Vitality ($t(29) = -1.23, p = .228, dz = 0.23$) and General Health ($t(29) = -0.93, p = .360, dz = 0.17$).

With regard to emotion regulation, independent-samples t-tests indicated that female participants reported significantly lower scores than males on Suppression ($t(84) = -2.29, p = .024, d = 0.52$), while no significant sex differences were found for Reappraisal ($t(84) = -0.40, p = .689, d = 0.09$).

Paired-samples t-tests were conducted to examine changes between T0 and T1. For female participants, significant improvements were observed in Reappraisal ($t(55) = -6.00, p < .001, dz = 0.80$) and Suppression ($t(55) = 2.38, p = .021, dz = 0.32$). For male participants, a significant increase was found in Reappraisal ($t(29) = -2.73, p = .011, dz = 0.50$), while no significant change was observed for Suppression ($t(29) = 1.32, p = .198, dz = 0.24$).

Regarding self-efficacy, independent-samples t-tests indicated no significant sex differences for any of the four dimensions: Emotional Maturity ($t(84) = 0.15, p = .884, d = 0.03$), Action Finalization ($t(84) = 0.77, p = .443, d = 0.17$), Relational Smoothness ($t(84) = 1.44, p = .153, d = 0.33$), and Context Analysis ($t(84) = 1.11, p = .270, d = 0.25$).

Paired-samples t-tests were conducted to examine changes between T0 and T1. For female participants, significant increases were observed in Emotional Maturity ($t(55) = -4.80, p < .001, dz = 0.64$), Action Finalization ($t(55) = -6.09, p < .001, dz = 0.81$), and Relational Smoothness ($t(55) = -4.06, p < .001, dz = 0.54$), with a trend toward improvement in Context Analysis ($t(55) = -1.93, p = .059, dz = 0.26$). For male participants, a significant increase was observed in Emotional Maturity ($t(29) = -3.86, p < .001, dz = 0.70$), with a trend toward improvement in Action Finalization ($t(29) = -2.00, p = .055, dz = 0.37$). No significant changes

were observed for Relational Smoothness ($t(29) = -1.46, p = .154, dz = 0.27$) and Context Analysis ($t(29) = -0.45, p = .658, dz = 0.08$).

	<i>T0</i>						<i>T1</i>					
	<i>M</i>			<i>F</i>			<i>M</i>			<i>F</i>		
	<i>M</i>	<i>SD</i>	<i>95% CI</i>	<i>M</i>	<i>SD</i>	<i>95% CI</i>	<i>M</i>	<i>SD</i>	<i>95% CI</i>	<i>M</i>	<i>SD</i>	<i>95% CI</i>
PGWBI												
Anxiety	9.87	4.75	8.09-11.6	7.43	4.65	6.18-8.68	13.4	4.22	11.8-14.9	14.7	4.29	13.6-15.9
Depression	7.70	3.23	6.49-8.91	6.48	3.44	5.56-7.40	8.73	3.03	7.60-9.86	10.1	2.75	9.32-10.8
Positive well-being	8.40	3.79	6.98-9.82	7.11	3.77	6.10-8.12	10.4	2.76	9.34-11.4	11.2	2.03	10.6-11.7
Self-control	7.67	3.53	6.35-8.98	6.93	3.30	6.04-7.81	8.63	3.07	7.49-9.78	9.21	3.21	8.36-10.1
Vitality	8.83	4.21	7.26-10.4	6.52	3.48	5.59-7.45	9.63	3.39	8.37-10.9	11.5	3.88	10.4-12.5
General health	9.03	3.83	7.60-10.5	8.00	3.09	7.17-8.83	9.57	2.73	8.55-10.6	9.57	2.98	8.77-10.4
ERQ												
Reappraisal	4.45	1.19	4.00-4.90	4.34	1.18	4.03-4.66	4.98	1.09	4.57-5.39	5.35	0.911	5.10-5.59
Suppression	4.02	1.05	3.63-4.41	3.46	1.08	3.18-3.75	3.77	1.06	3.37-4.16	3.20	1.18	2.88-3.51
SELF-EFFICACY												
Emotional Maturity	17.0	4.76	15.2-18.8	17.2	4.91	15.8-18.5	19.0	4.70	17.7-21.3	20.1	4.46	18.9-21.2
Action Finalization	17.4	5.86	15.2-19.6	18.4	6.20	16.8-20.1	19.0	5.24	17.0-20.9	21.9	5.54	20.4-23.4
Relational Smoothness	19.5	6.04	17.2-21.7	21.2	4.86	19.9-22.5	20.3	5.60	18.2-22.4	23.0	4.38	21.9-24.2
Context Analysis	22.2	4.73	20.4-24.0	23.3	4.31	22.2-24.5	22.5	4.61	20.8-24.2	24.3	4.00	23.2-25.3

Table 3. Descriptive statistics of measures of Psychological Well-Being (PGWBI), Emotion Regulation (ERQ), and Perceived Self-efficacy (SELF-EFFICACY) before (T0) and after (T1) the intervention and separated for sex (M – male and F – female).

2.7.2. Psychological well-being

Repeated-measures ANCOVAs were conducted to examine changes in psychological well-being from pre- to post-treatment (T0 vs. T1), controlling for session-timing variability and including sex as a between-subjects factor (see Table 4 and Figure 1).

Across the PGWBI dimensions, significant main effects of assessment emerged for Anxiety [$F(1, 83) = 9.35, p = .003, \eta^2_p = .101$], Depression [$F(1, 83) = 32.79, p = .027, \eta^2_p = .058$], Positive Well-Being [$F(1, 83) = 10.051, p = .002, \eta^2_p = .108$], Vitality [$F(1, 83) = 13.72, p < .001, \eta^2_p = .142$], and General Health [$F(1, 83) = 5.62, p = .020, \eta^2_p = .063$]. The main effect for Self-Control approached significance [$F(1, 83) = 3.887, p = .052, \eta^2_p = .045$].

Significant Assessment $\times$ Sex interactions were observed for Anxiety [$F(1, 83) = 7.58, p = .007, \eta^2_p = .084$], Depression [$F(1, 83) = 9.467, p = .003, \eta^2_p = .102$], Positive Well-Being [$F(1, 83) = 6.250, p = .014, \eta^2_p = .070$], and Vitality [$F(1, 83) = 24.20, p < .001, \eta^2_p = .226$]. No significant Assessment $\times$ Sex effects were found for Self-Control or General Health. For all dimensions, the Assessment $\times$ Session Timing interaction was non-significant.

	SS	df	MS	F	p	η^2_p
ANXIETY						
ASSESSMENT	164.514	1	164.514	9.35	0.003	0.101
ASSESSMENT * SEX	133.508	1	133.508	7.58	0.007	0.084
ASSESSMENT * SESSION TIMING	0.136	1	0.136	0.007	0.930	0
Residual	1460.328	83	17.594			
DEPRESSION						
ASSESSMENT	32.7901	1	32.7901	32.79	0.027	0.058
ASSESSMENT * SEX	61.0616	1	61.0616	9.467	0.003	0.102
ASSESSMENT * SESSION TIMING	0.0131	1	0.0131	0.002	0.964	0
Residual	535.3274	83	6.4497			
POSITIVE WELL-BEING						
ASSESSMENT	71.92	1	71.92	10.051	0.002	0.108
ASSESSMENT * SEX	44.72	1	44.72	6.250	0.014	0.070
ASSESSMENT * SESSION TIMING	1.45	1	1.45	0.203	0.653	0.002
Residual	593.89	83	7.16			

SELF-CONTROL

ASSESSMENT	21.760	1	21.760	3.887	0.052	0.045
ASSESSMENT * SEX	17.563	1	17.563	3.137	0.080	0.036
ASSESSMENT * SESSION TIMING	0.569	1	0.569	0.102	0.751	0.001
Residual	464.628	83	5.598			

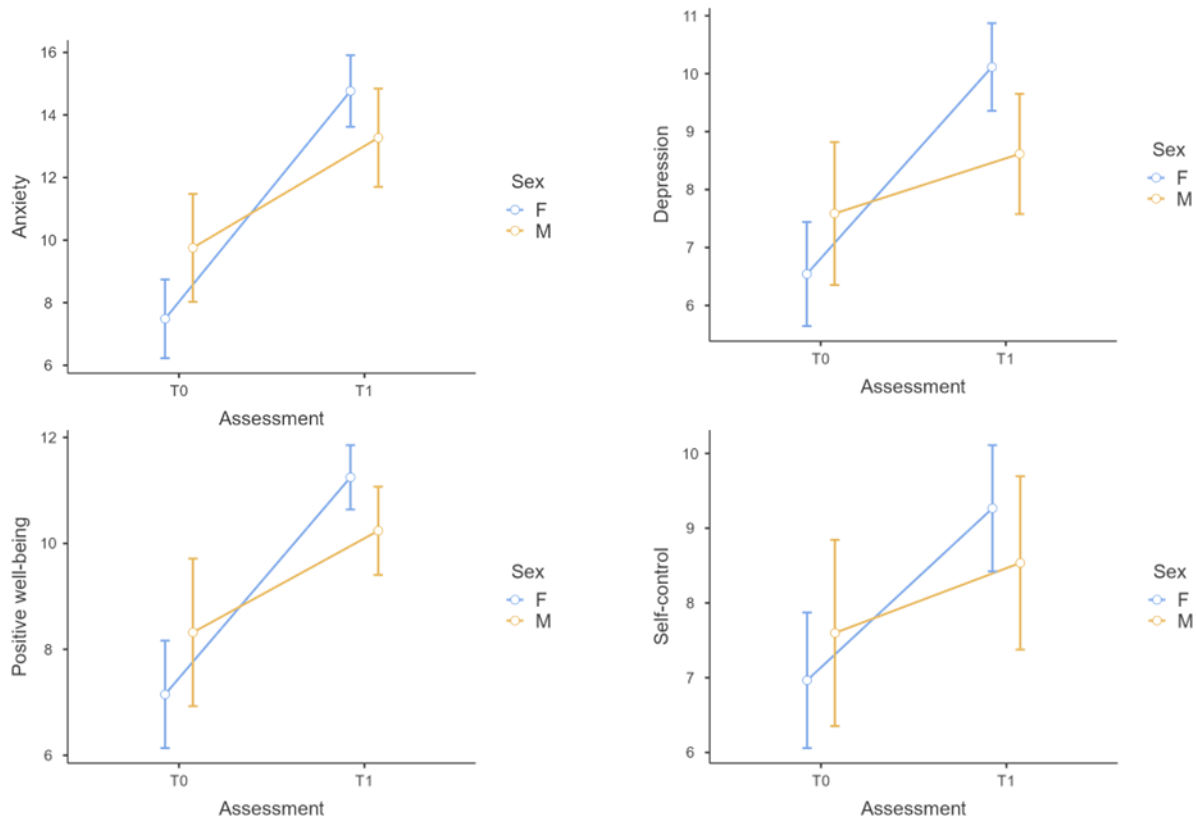
VITALITY

ASSESSMENT	101.9	1	101.85	13.72	<.001	0.142
ASSESSMENT * SEX	179.7	1	179.71	24.20	<.001	0.226
ASSESSMENT * SESSION TIMING	11	1	11.02	1.48	0.227	0.018
Residual	616.3	83	7.43			

GENERAL HEALTH

ASSESSMENT	32.4	1	32.41	5.62	0.020	0.063
ASSESSMENT * SEX	14.6	1	14.60	2.53	0.116	0.030
ASSESSMENT * SESSION TIMING	11.5	1	11.52	2.00	0.162	0.023
Residual	479.1	83	5.77			

Table 4. Main and interaction effects of assessment phase (T0–T1), sex, and session timing on PGWBI dimensions.



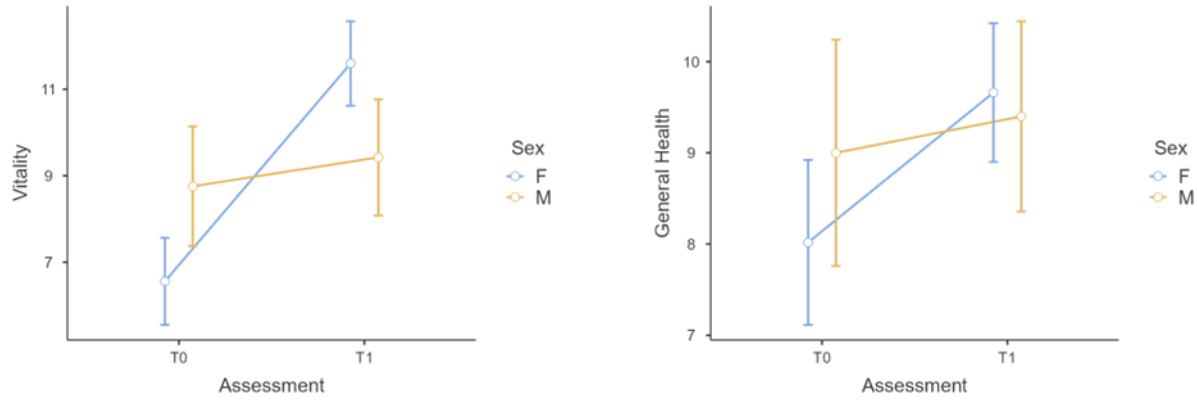


Figure 1. Interaction effects of assessment phase and sex (M – male and F – female) on Anxiety, Depression, Positive well-being, Self-control, Vitality, and General Health; pre-treatment (T0) vs. post-treatment (T1).

2.7.3. Emotion regulation

Analyses of emotion regulation revealed significant improvements following the counseling intervention (see Table 5 and Figure 2). The main effect of assessment phase emerged for both Reappraisal and Suppression. Specifically, Reappraisal scores were significantly higher at T1 than at T0 [$F(1, 83) = 23.50, p < .001, \eta^2_p = .221$], with participants showing a marked increase from T0 ($M = 4.40, 95\% \text{ CI } [4.14, 4.67]$) to T1 ($M = 5.15, 95\% \text{ CI } [4.94, 5.37]$). Conversely, Suppression scores significantly decreased from T0 to T1 [$F(1, 83) = 5.297, p = .024, \eta^2_p = .060$], with lower tendencies to suppress emotions at T1 ($M = 3.49, 95\% \text{ CI } [3.23, 3.75]$) compared to T0 ($M = 3.74, 95\% \text{ CI } [3.50, 3.98]$).

A significant Assessment $\times$ Sex interaction was found for Reappraisal [$F(1, 83) = 5.28, p = .024, \eta^2_p = .060$]. Female participants exhibited a robust increase in Reappraisal, reporting higher levels at T1 ($M = 5.38, 95\% \text{ CI } [5.12, 5.63]$) compared to T0 ($M = 4.32, 95\% \text{ CI } [4.01, 4.64]$), whereas male participants displayed a more modest change [T1 ($M = 4.93, 95\% \text{ CI } [4.58, 5.28]$); T0 ($M = 4.49, 95\% \text{ CI } [4.05, 4.64]$)]. No significant sex differences emerged for Suppression.

In addition, a significant Assessment $\times$ Session Timing interaction emerged for Reappraisal [$F(1, 83) = 7.60, p = .007, \eta^2_p = .084$], indicating that the temporal distance between pre- and post-treatment

had an influence on the use of this type of emotion regulation strategy. No significant session timing effects emerged for Suppression.

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>	η_p^2
REAPPRAISAL						
ASSESSMENT	15.55	1	15.552	23.50	< .001	0.221
ASSESSMENT * SEX	3.50	1	3.496	5.28	0.024	0.060
ASSESSMENT * SESSION TIMING	5.03	1	5.030	7.60	0.007	0.084
Residual	54.92	83	0.662			
SUPPRESSION						
ASSESSMENT	2.1870	1	2.1870	5.297	0.024	0.060
ASSESSMENT * SEX	0.0513	1	0.0513	0.124	0.725	0.001
ASSESSMENT * SESSION TIMING	0.8460	1	0.8460	2.049	0.156	0.024
Residual	34.270	83	0.4129			

Table 5. Main and interaction effects of assessment phase (T0–T1), sex, and session timing on ERQ dimensions.

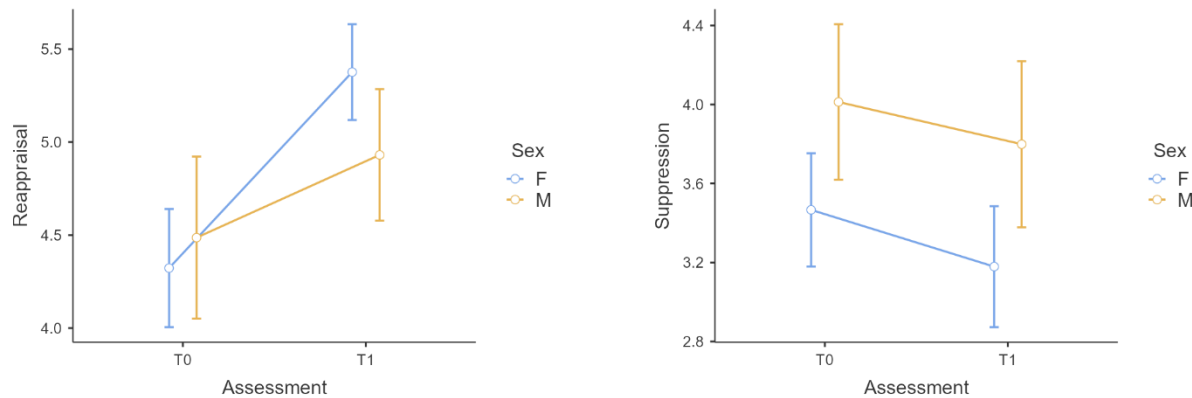


Figure 2. Interaction effects of assessment phase and sex (M – male and F – female) on Reappraisal and Suppression; pre-treatment (T0) vs. post-treatment (T1).

2.7.4. Self-efficacy

Analyses of self-efficacy revealed significant improvements following the counseling intervention in several dimensions (see Table 6 and Figure 3). A main effect of assessment phase emerged for Emotional Maturity [$F(1, 83) = 13.910, p < .001, \eta_p^2 = .144$], Action Finalization [$F(1, 83) = 9.21, p = .003, \eta_p^2 = .100$], and Relational Smoothness [$F(1, 83) = 7.80, p = .006, \eta_p^2 = .086$], indicating that

participants reported higher self-efficacy at T1 compared to T0. No significant main effect was observed for Context Analysis [$F(1, 83) = 2.026, p = .158, \eta^2_p = .024$].

Specifically, Emotional Maturity increased from T0 to T1 for both groups. Action Finalization increased more markedly in female participants [T0 ($M = 18.5, 95\% \text{ CI } [16.8, 20.1]$), T1 ($M = 22.0, 95\% \text{ CI } [20.6, 23.5]$)] than in male participants [T0 ($M = 17.3, 95\% \text{ CI } [15.1, 19.5]$), T1 ($M = 18.8, 95\% \text{ CI } [16.8, 20.8]$)]. Relational Smoothness increased modestly in female participants [T0 ($M = 21.2, 95\% \text{ CI } [19.7, 22.6]$), T1 ($M = 23.1, 95\% \text{ CI } [21.8, 24.4]$)] and in male participants [T0 ($M = 19.5, 95\% \text{ CI } [17.6, 21.5]$), T1 ($M = 20.2, 95\% \text{ CI } [18.4, 22.0]$)].

A significant Assessment $\times$ Sex interaction was found for Action Finalization [$F(1, 83) = 4.46, p = .038, \eta^2_p = .051$], indicating that female participants exhibited a stronger increase in this dimension of perceived self-efficacy compared to male participants. No other Assessment $\times$ Sex or Assessment $\times$ Session Timing interactions reached significance for any other dimension.

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	η^2_p
EMOTIONAL MATURITY						
ASSESSMENT	120.59	1	120.59	13.910	<.001	0.144
ASSESSMENT * SEX	4.40	1	4.40	0.508	0.478	0.006
ASSESSMENT * SESSION TIMING	22.83	1	22.83	2.633	0.108	0.031
Residual	719.60	83	8.67			
ACTION FINALIZATION						
ASSESSMENT	86.0	1	85.99	9.21	0.003	0.100
ASSESSMENT * SEX	41.6	1	41.62	4.46	0.038	0.051
ASSESSMENT * SESSION TIMING	11.0	1	10.96	1.17	0.282	0.014
Residual	774.6	83	9.33			
RELATIONAL SMOOTHNESS						
ASSESSMENT	41.9	1	41.87	7.80	0.006	0.086
ASSESSMENT * SEX	14.0	1	13.98	2.60	0.110	0.030
ASSESSMENT * SESSION TIMING	12.1	1	12.14	2.26	0.136	0.027
Residual	445.7	83	5.37			
CONTEXT ANALYSIS						
ASSESSMENT	13.39	1	13.39	2.026	0.158	0.024
ASSESSMENT * SEX	5.61	1	5.61	0.848	0.360	0.010

ASSESSMENT * SESSION TIMING	5.50	1	5.50	0.833	0.364	0.010
Residual	548.50	83	6.61			

Table 6. Main and interaction effects of assessment phase (T0–T1), sex, and session timing on Self-efficacy dimensions.

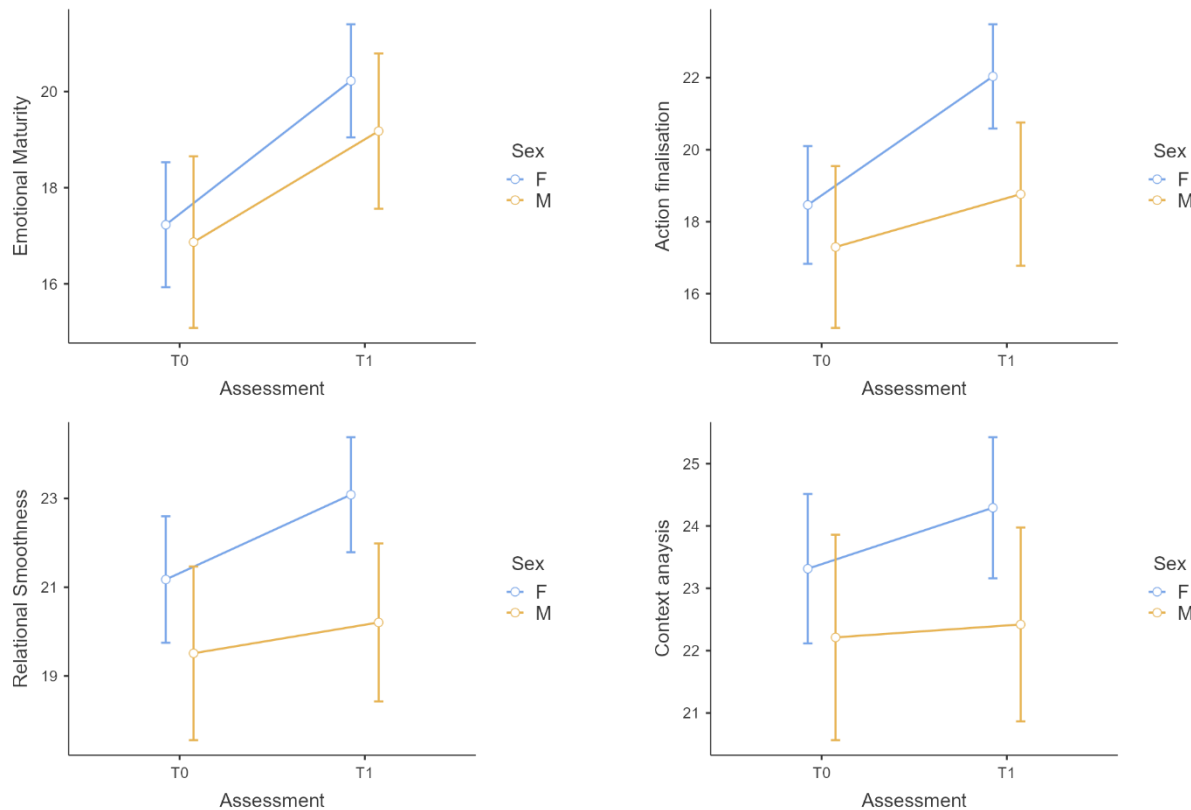


Figure 3. Interaction effects of assessment phase and sex (M – male and F – female) on Emotional Maturity, Action Finalisation, Relational Smoothness and Context analysis; pre-treatment (T0) vs. post-treatment (T1).

2.8. Discussion

The present study examined the effects of a university counseling intervention on psychological well-being, emotion regulation, and self-efficacy among undergraduate students during the post-COVID-19 transition. Framed within the theoretical perspectives outlined in Chapter 1 (Engel, 1977; WHO, 2021), the findings contribute to a broader understanding of how counseling interventions are associated with students' psychological, emotional, and behavioral functioning in a period of prolonged stress and gradual readjustment. Consistent with the biopsychosocial model previously discussed, the results

suggest that students' health and well-being reflect the interplay between individual psychological resources, emotional competencies, and contextual conditions. Within this perspective, psychological well-being, emotion regulation, and self-efficacy represent key personal dimensions that were explored in relation to participation in university counseling.

In particular, regarding psychological well-being, the findings revealed overall improvements in positive well-being, vitality, and general health, along with reductions in anxiety and depression from pre- (T0) to post-treatment (T1). These improvements should be interpreted in light of the documented vulnerability of university students during and after the pandemic. Indeed, previous research has shown that prolonged uncertainty, social isolation, and academic disruption were associated with marked declines in vitality and general well-being, as well as increases in anxiety and depression among students (Boals and Banks, 2020; Cao et al., 2020; Savage et al., 2020; Wang et al., 2020). Consequently, the improvements observed in the present study may reflect both a recovery from this pandemic-related burden and the beneficial impact of the counseling intervention, in line with previous evidence highlighting the potential benefits of university counseling for students' health and well-being (e.g., Savarese et al., 2014).

However, these improvements were not uniform across the sample. A significant interaction between sex and assessment phase emerged: female participants, who reported lower well-being and higher distress at pre-treatment (T0), showed more substantial improvements at T1. This pattern reinforces the sex differences discussed above, where female students were shown to experience greater emotional strain during the pandemic (Taurisano et al., 2022; Villani et al., 2021).

Moreover, the observed improvements in psychological well-being also align with recent evidence describing post-pandemic recovery trajectories among university students. For example, Esposito and colleagues (2024) highlighted a notable trend in the well-being levels of university students from the onset of the pandemic through 2022. Compared to 2020, while a sharp decline in well-being was

observed in 2021, a trend towards improvement emerged in 2022. In this context, the present findings support the notion that structured psychological interventions can facilitate re-adaptation during periods of environmental instability (Savarese et al., 2020).

Emotion regulation constitutes another important personal determinants of health and well-being, as discussed in Chapter 1. The present results provide evidence of significant improvements in the use of adaptive strategies, with higher levels of reappraisal and lower levels of suppression reported at T1. These findings align with literature, indicating that reappraisal is associated with more favorable psychological outcomes, whereas suppression is linked to emotional burden and interpersonal difficulties (Balzarotti et al., 2010; Cunha et al., 2022; Gross, 1998, 2001). Furthermore, the results suggest a shift toward more adaptive emotion regulation patterns over time among students who accessed counseling services.

The interaction between assessment phase and sex for reappraisal revealed that female participants showed a greater increase in the use of this strategy. This result is in line with literature which shows that women report a greater use of reappraisal, whereas men more frequently rely on suppression strategies (Preston et al., 2022). Moreover, the overall increase in adaptive regulation strategies is consistent with theoretical models discussed in Chapter 1, which emphasize the role of emotion regulation in shaping psychological functioning under stress (Balzarotti et al., 2010; Gross, 1998, 2001). During the post-pandemic transition, students faced new stressors related to academic reintegration, social re-engagement, and performance pressure. Counseling may have provided structured opportunities to reflect upon and revise maladaptive emotional responses (Savarese et al., 2014, 2020).

However, a significant assessment phase and session timing interaction also emerged for reappraisal, suggesting that the temporal distance between the pre- and post-treatment assessments may influence the extent to which students adopt more adaptive emotion regulation strategies. In other words, participants who had a longer interval between T0 and T1 appeared to benefit differently from the

counseling process than those with a shorter interval, potentially reflecting differences in the time needed to consolidate or operationalize cognitive reappraisal skills within their everyday contexts. This finding is coherent with research indicating that emotion regulation processes are not only shaped by intervention content but also by temporal and contextual factors that support the internalization and stabilization of regulatory strategies (Bergeman et al., 2021). Longitudinal evidence suggests that cognitive reappraisal tends to improve gradually over time, particularly when individuals have sufficient opportunity to practice and integrate new regulatory skills (Cutuli, 2014). Moreover, the consolidation of adaptive strategies may require a temporal buffer that allows individuals to process emotional experiences, reinterpret stressors, and translate counseling insights into behavior (Aldao, 2013).

Finally, regarding self-efficacy, students reported higher levels of emotional maturity, action finalization, and relational smoothness at T1, suggesting enhanced confidence in managing academic and interpersonal challenges. These improvements are consistent with previous studies showing that counseling interventions can strengthen internal resources and promote adaptive self-regulatory behavior (Savarese et al., 2020).

A significant assessment phase and sex interaction for action finalization indicated that female participants exhibited greater gains, paralleling patterns observed in psychological well-being and reappraisal. This convergence of results across these three dimensions suggests that the counseling intervention may have had a global impact on students' emotional, cognitive, and behavioral functioning. During the pandemic, disruptions in routine, reduced autonomy, and limited feedback from academic environments were found to undermine students' sense of competence and agency (Son et al., 2020). Thus, the observed increase in self-efficacy may reflect a gradual restoration of perceived personal effectiveness (Bandura, 1977; McKenzie et al., 2015).

Overall, the present study extends previous work on university counseling by providing an integrated examination of three personal factors – psychological well-being, emotion regulation, and self-

efficacy – within the same intervention framework. Whereas earlier studies have generally focused on single outcomes (e.g., psychological well-being: Monti et al., 2013; Vescovelli et al., 2017; emotion regulation: Strepparava et al., 2015; self-efficacy: Bani et al., 2020), this study demonstrates concurrent and interconnected improvements across all three domains, supporting the view that counseling interventions can have multidimensional effects on students' health and well-being. Furthermore, by situating these changes in the specific context of the post-pandemic transition, the study adds empirical data to emerging evidence on students' recovery trajectories (Esposito et al., 2024), highlighting counseling intervention as a key factor that may facilitate adaptive re-adjustment. Taken together, the results of the present study emphasize the importance of addressing emotional, cognitive, and behavioral resources simultaneously and illustrate how university counseling services can strengthen students' personal dimensions of health and well-being during periods of environmental stress and uncertainty.

2.9. Limitations and conclusive remarks

The present study has several limitations. The pre-experimental design and absence of a control group limit causal inference, although single-group studies have demonstrated utility in tracing outcome trajectories and contextualizing intervention effects (Paulus et al., 2013). Studies conducted without control groups can still provide valuable data on long-term effectiveness, the incidence of rare events, and adverse effects (Fitzpatrick-Lewis et al., 2009). However, without a control group, it remains difficult to explicitly attribute the observed changes exclusively to the intervention. Additionally, the predominance of women (70%) restricts the generalizability of sex-related findings.

Potential confounding variables include age, faculty, socioeconomic status, baseline psychological vulnerability, and individual experiences related to the pandemic. These factors, which are important determinants of health and well-being as discussed in Chapter 1, may have influenced responsiveness to counseling or engagement with support services. Moreover, the present study

considered a sample of Italian participants and cannot be generalized to the entire world population of university students. Future research should employ controlled designs, incorporate additional contextual variables, and consider longitudinal follow-ups to assess the stability of improvements.

In summary, the study offers exploratory but convergent evidence that university counseling interventions may support the recovery and strengthening of psychological functioning among students navigating the post-pandemic transition. Improvements across psychological well-being, emotion regulation, and self-efficacy reflect the multidimensional nature of counseling outcomes. Furthermore, these findings highlight the importance of investing in accessible, evidence-informed psychological services within academic settings. They also underscore the potential of counseling to promote resilience, emotional competence, and academic success during periods of heightened stress or transition.

CHAPTER 3

Exploring How Social and Economic Determinants Shape the Definition of Health and Well-being

Health and well-being are not experienced solely as objective conditions, but also as subjective constructs shaped by individuals' beliefs, values, and lived experiences (Murray, 2002). In other words, people interpret and give meaning to their health and well-being within specific social and cultural contexts, developing personal representations that influence how they perceive, maintain, and promote them. From this perspective, these constructs can be understood not only as biomedical or psychological states, but also as socially and psychologically constructed meanings (Farr and Markova, 1995), as discussed in paragraph 1.4.

For this reason, the present chapter aims to explore how individuals define health and well-being in relation to their social and economic determinants. According to the Health Promotion Glossary (WHO, 2021), social determinants refer to “the social, cultural, political, economic, and environmental conditions in which people are born, grow up, live, work, and age” (p. 32). Economic determinants, instead, concern the material and financial conditions that shape opportunities to maintain and promote health across the lifespan, including income, employment, job security, and access to essential resources such as housing, food, and healthcare (Marmot, 2013b; WHO, 2023).

By examining participants' subjective definitions, this study seeks to show how broader social and economic conditions shape personal conceptions of health and well-being. In doing so, it extends the findings of Chapter 2 by shifting the focus from intervention-related changes to meaning-making processes. Ultimately, this perspective reinforces the view that health and well-being result from the dynamic interaction of biological, psychological, and social factors, in line with the biopsychosocial model (Engel, 1977).

3.1. Introduction

3.1.1. *The conceptualization of health and well-being*

As outlined in Chapter 1, the conceptualization of health has undergone a profound change over time, progressively moving from reductionist models toward integrative and multidimensional perspectives (Engel, 1977; WHO, 2006). Early biomedical approaches, while vital for modern medicine, primarily defined health in terms of the absence of disease and focused on biological dysfunctions (Hardey, 1998; Larson, 1999; Sartorius, 2006). Although this model enabled significant advances in diagnosis and treatment, it was insufficient to account for individuals' subjective experiences and the broader social and environmental contexts in which health is lived and negotiated (Engel, 1977).

Subsequent theoretical developments sought to address these limitations by incorporating functional, social, and contextual dimensions of health. In this evolution, the biopsychosocial model represents a central framework, conceptualizing health as the outcome of dynamic interactions among biological, psychological, and social factors (Engel, 1977). Despite ongoing debates regarding its operationalization, this model has profoundly influenced contemporary health sciences by promoting a more holistic, patient-centered, and interdisciplinary understanding of health (Farre and Rapley, 2017; Loughlin et al., 2018). Importantly, it shifted the focus from static definitions of health to viewing health as a dynamic process of adaptation and regulation across multiple levels of functioning (Lehman et al., 2017).

This process-oriented perspective has also informed institutional frameworks, most notably the World Health Organization's (WHO) International Classification of Functioning, Disability, and Health (ICF; WHO, 2001). The ICF conceptualizes health in terms of functioning, participation, and contextual factors, explicitly acknowledging that health outcomes emerge from the interaction between individual characteristics and environmental conditions (WHO, 2001). By integrating biological, psychological,

and social dimensions within an operational framework, ICF provides a useful bridge between theoretical models of health and empirical research (Bickenbach et al., 1999; Cieza et al., 2008).

A comparable evolution can be observed in the conceptualization of well-being. Literature has progressively expanded from unidimensional approaches centered on pleasure or life satisfaction (Diener and Lucas, 1999) toward multidimensional frameworks encompassing emotional, psychological, and social components (Cella, 1994). Hedonic and eudaimonic traditions, while grounded in different philosophical assumptions, converge in describing well-being as a complex and dynamic phenomenon rather than a static state (Huta and Waterman, 2014; Keyes et al., 2002). More applied perspectives, such as Quality-of-Life (QoL) frameworks, further emphasize the interplay between subjective evaluations and objective life conditions, reinforcing the idea that well-being cannot be fully understood independently of individuals' social and material contexts (Cella and Stone, 2015; WHOQOL Group, 1998).

Taken together, the contemporary models of health and well-being share a core assumption: both constructs are multidimensional, dynamic, and context-dependent processes shaped by the continuous interaction between individuals and their environments. This shift from static and idealized definitions toward relational and process-oriented perspectives underscores the central role of subjective meanings and lived experiences, while highlighting the importance of social and economic conditions in shaping how health and well-being are understood and evaluated. From this perspective, examining how individuals linguistically define and represent health and well-being provides a valuable way to capture the subjective meanings through which these constructs are interpreted and negotiated in everyday life.

3.1.2. Social and economic determinants of health and well-being

The conceptualization of health and well-being as dynamic and context-dependent processes has increased attention on the conditions that shape not only health outcomes but also the ways in which

these constructs are understood and defined by individuals. Within this perspective, the WHO introduced the concept of determinants of health to capture the broad set of factors that influence individuals' opportunities to achieve and maintain health and well-being across their life course (WHO, 2021).

Building on the findings of Chapter 2, focusing exclusively on individual characteristics risks obscuring the broader social and economic conditions that structure everyday experiences and frame subjective interpretations of health and well-being (Marmot, 2005; Wilkinson and Pickett, 2009). Therefore, social and economic determinants represent a crucial contextual dimension through which health and well-being acquire meaning, linking personal representations to lived conditions, social position, and access to resources (WHO, 2021).

As discussed in paragraph 1.3.2., social determinants refer to the social, cultural, political, economic, and environmental conditions in which people are born, grow, live, work, and age, as well as their access to power, resources, and decision-making (WHO, 2021). A body of research has demonstrated that these conditions are systematically associated with population health and well-being, contributing to differences both within and between societies (Marmot and Wilkinson, 2000; Marmot et al., 2012; Raphael, 2006). Beyond shaping exposure to risks and protective factors, social determinants also influence individuals' expectations, values, and beliefs regarding what it means to be healthy or to live well and their consequent health behaviors (Short and Mollborn, 2015). In this sense, they provide the social background in which health and well-being are evaluated and defined.

Several key dimensions have been identified as central social determinants of health, including early life conditions, education, employment and working conditions, food security, housing, income distribution, and social exclusion (Raphael, 2006). These structural conditions not only shape objective living circumstances but also influence how individuals conceptualize health and well-being (Barker, 2010; Blaxter, 2003).

Alongside social determinants, as discussed in paragraph 1.3.3., economic determinants represent another fundamental dimension that shapes health and well-being. These refer to the financial and material resources that influence individuals' opportunities to maintain and promote their health, access care, and pursue well-being across their lifespan (WHO, 2021). Income level, employment stability, and access to essential goods and services such as housing, nutrition, and healthcare have consistently been associated with both physical and psychological health outcomes (Marmot, 2013b; WHO, 2023; Wilkinson and Pickett, 2009).

Economic conditions not only affect material living standards but also shape individuals' perceived control, future expectations, and sense of security, all of which contribute to subjective evaluations of health and well-being (Adler and Ostrove, 1999; Diener et al., 2010). Financial strain, precarious employment, and socioeconomic instability have been linked to poorer mental health and lower perceived well-being, highlighting how economic resources function as both structural and psychological determinants (Marmot, 2005; WHO, 2023).

Within this framework, socioeconomic status (SES) has emerged as a key construct integrating social and economic dimensions. SES reflects individuals' access to material and symbolic resources, typically operationalized through indicators such as income, education, and occupation (Kraus and Stephens, 2012; Manstead, 2018). Importantly, research has shown that both objective and subjective perceptions of socioeconomic position are associated with psychological functioning and well-being, suggesting that how people perceive their social standing may be as relevant as their material conditions (Adler et al., 2000; Cundiff and Matthews, 2017). This perspective reinforces the idea that social and economic determinants shape not only health outcomes but also the meanings individuals attribute to health and well-being.

3.1.3. Subjective representations of health and well-being

Even though decades of research have sought to map the complex definitions of health and well-being and their determinants, it has become increasingly clear that these constructs cannot fully capture the diversity of human experience. Individuals actively interpret, negotiate, and assign meaning to their health and life conditions, producing subjective representations that reflect personal beliefs, cultural norms, and social experiences (Farr and Markova, 1995; Murray, 2002). These representations may coexist with, or diverge from, objective indicators of health and well-being, underscoring the importance of exploring the symbolic and psychosocial dimensions through which people make sense of health and well-being (Apostolidis and Dany, 2012; Joffe and Staerklé, 2007).

As discussed in Chapter 1, the theory of social representations (Moscovici, 1961, 1976, 2008) provides a robust conceptual framework for investigating this dimension. Social representations are socially elaborated and collectively shared forms of knowledge that enable individuals to interpret complex phenomena by transforming them into familiar categories (Moscovici, 2008). They serve both cognitive and social functions, organizing individual understanding while facilitating communication, social coordination, and identity construction (Åsbring, 2012; Jodelet, 1989). Within this framework, health and well-being can be understood as interpretative systems that guide everyday life, decision-making, and orient behavior (Apostolidis and Dany, 2012; Joffe and Staerklé, 2007).

In particular, health has been widely studied as a socially constructed object (Herzlich, 1969, 1973). Representations of health integrate biological, medical, relational, moral, and experiential knowledge, often in a polyphasic manner, where multiple forms of understanding coexist and interact within individuals and groups (Jovchelovitch, 2006; Jovchelovitch and Priego-Hernández, 2015). A similar perspective can be applied to well-being, which is widely recognized as a socially and culturally mediated construct that reflects collective ideals and personal aspirations regarding what it means to “live well” (Rodríguez-Araneda, 2013; Van Dijk, 2000). For example, in the contemporary Western context,

well-being is often associated with autonomy, productivity, and self-realization, reflecting broader cultural narratives emphasizing individual responsibility and self-optimization (Fassin and Memmi, 2004; Lupton, 1995).

Therefore, a growing body of research highlights how social and structural conditions shape how individuals conceptualize health and well-being (Marmot, 2015; Solar and Irwin, 2010). Factors such as age, education, SES, cultural background, and social position influence the symbolic meanings attached to health, the perceived causes of well-being, and the attribution of responsibility for illness (Blaxter, 2003; Cockerham, 2021). For instance, individuals with higher educational attainment may rely more strongly on biomedical frameworks and preventive narratives, whereas those in more disadvantaged contexts may emphasize functional ability or everyday resilience (Abel and Frohlich, 2012). Similarly, life-course perspectives suggest that meanings attached to health and well-being evolve over time: older adults often prioritize functional independence and social participation, whereas younger individuals may place greater emphasis on autonomy, achievement, and future-oriented goals (Bowling, 2005; Carstensen et al., 1999; Heckhausen et al., 2010).

In conclusion, examining subjective representations of health and well-being provides a bridge between structural determinants and lived experience. In other words, these representations translate social, economic, and cultural conditions into personal meaning, shaping health-related behaviors, coping strategies, and interpretations of risk (Breakwell, 2014; Leventhal et al., 1980). In this perspective, exploring individuals' definitions of health and well-being represents a valuable strategy for capturing how structural conditions are subjectively reinterpreted and embedded in everyday meanings.

3.2. Aim and Hypotheses

In recent years, increasing attention has been devoted to health and well-being as central components of sustainable development and social stability (WHO, 2025). The COVID-19 pandemic,

alongside ongoing geopolitical, environmental, and socioeconomic transformations, has further intensified public and institutional awareness of the multidimensional nature of health, highlighting its deep entanglement with everyday life conditions and collective vulnerabilities (WHO, 2025). This renewed focus has contributed to a shift beyond purely biomedical perspectives toward more holistic and person-centered understandings, in which lived experiences, emotional meanings, and social contexts play a crucial role in shaping how health and well-being are conceptualized and evaluated.

Within this evolving landscape, understanding how individuals define and represent health and well-being in their own words becomes particularly relevant. While extensive research has examined objective determinants of health and well-being (Lawton and Lawrence, 1994; Sastre, 1999; Vingilis and Sarkella, 1997), fewer studies have explored how people spontaneously articulate these meanings in natural language in relation to their social and economic conditions. From a social representations perspective, such definitions are not merely individual opinions but socially situated forms of knowledge that reflect shared cultural narratives, lived experiences, and structural constraints (Apostolidis and Dany, 2012; Jodelet, 1989; Moscovici, 2008). To address this gap, the present study adopts a qualitative content-analysis approach to examine how meanings of health and well-being are expressed through participants' own linguistic formulations.

Building on this framework, the present study aimed to explore subjective representations of health and well-being and their relationship with social and economic determinants. Specifically, the study investigated whether and how socio-demographic and socioeconomic characteristics – such as gender, age, educational level, employment status, and perceived economic resources – are associated with variations in the language used to describe these constructs. By focusing on the meanings that individuals attribute to health and well-being, this work seeks to highlight how broader structural conditions are translated into everyday representations, contributing to a more nuanced understanding of the relationship between social context and lived experience.

Based on previous evidence, it was expected that representations of health and well-being might vary according to socio-demographic and socioeconomic characteristics, reflecting differences in lived experience and social positioning (Jyani et al., 2023). More specifically, individuals may emphasize different thematic dimensions when defining health and well-being, suggesting that semantic contents could be shaped by broader social and economic contexts (Christoforou et al., 2024).

3.3. Method

3.3.1. Design

The present study employed a cross-sectional observational design to explore how individuals define health and well-being in relation to their socio-demographic and socioeconomic characteristics. The study adopted a qualitative corpus-based approach grounded in content analysis to examine the thematic structure of participants' short textual definitions.

The corpus corresponded to the full set of textual responses provided by participants to open-ended questions asking them to define health and well-being. These responses were compiled into a single textual dataset and prepared for qualitative analysis in order to explore recurring themes and shared patterns of meaning across participants' definitions.

Socio-demographic and socioeconomic variables were treated as grouping factors to explore potential variations in subjective representations across different social and economic positions. In particular, age was treated as a continuous variable, while marital status, educational level, employment status, and perceived income were classified into predefined categories to enable comparative analyses across participants. Lifestyle-related information (e.g., smoking habits, alcohol consumption, medical conditions, surgical history, and COVID-19 infection and vaccination status) was collected through structured self-report questions including categorical response options.

3.3.2. Participants

The study involved a convenience sample of adult participants recruited through an online survey, that was open between late March and October 2025. A total of 168 individuals completed the questionnaire. Participants ranged in age from 18 to 79 years ($M = 36.3$, $SD = 13.7$). The sample consisted of 74.4% women, 25.0% men, and one participant identifying as another gender.

Inclusion criteria required participants to be aged 18 years or older and to provide informed consent prior to participation. Participation was voluntary and anonymous. All procedures were conducted in accordance with the ethical principles of the Declaration of Helsinki.

3.4. Materials and Procedure

The survey was administered online and disseminated through social media platforms (e.g., Facebook, Instagram) and word of mouth. It was implemented using Google Forms and required approximately 15 minutes to complete. After providing informed consent, participants completed a series of questions covering four main areas: demographic information, family structure and marital status, socioeconomic status, and lifestyle factors.

Demographic information included gender and age. Participants were then asked about their family structure and marital status, including marital status, city of residence, household size, and cohabitation arrangements. Socio-economic status was assessed through questions on educational level, current occupation, employment sector, type of contract, and perceived income level, categorized from low to high. Additional questions explored lifestyle factors, including smoking and drinking habits, engagement in physical activity, and general health-related information. Participants were also asked about COVID-19, including whether they had contracted the virus and their vaccination status.

Participants were asked to define the constructs of health and well-being through two open-ended questions. The exact wording of the questions, originally administered in Italian, was: “Lei come

definirebbe la salute?” (“How would you define health?”) and “Lei come definirebbe il benessere?” (“How would you define well-being?”).

3.5. Data analysis

Data analyses were conducted in two complementary stages. First, descriptive statistics were calculated for all socio-demographic, socioeconomic, and lifestyle variables using Jamovi (The Jamovi Project, 2021).

Second, participants’ responses to the open-ended questions defining health and well-being were treated as a textual corpus for content analysis using T-LAB (Lancia, 2004). Prior to analysis, the textual data were prepared and standardized to ensure consistency within the corpus. This process included cleaning the text (e.g., removing unnecessary spaces, punctuation, and formatting inconsistencies), standardizing lexical forms, and simplifying certain expressions to facilitate lexical processing by the software. T-LAB then automatically performed lemmatization procedures to reduce words to their base forms.

Socio-demographic and socioeconomic variables were retained as metadata to explore potential differences in thematic content across social and economic groups. The content analysis focused on identifying recurring themes and semantic patterns within participants’ definitions of health and well-being.

3.6. Results

3.6.1. Descriptive statistics

After excluding 24 participants due to invalid responses (i.e., they described their health and well-being as “good” or “bad” instead of providing a definition), the final sample consisted of 144 participants. Descriptive statistics are presented below, organized into four areas as outlined in the Materials and

Procedure section. All socio-demographic, socioeconomic, and lifestyle variables were included in the content analysis as grouping variables in order to explore potential associations between participants' characteristics and the thematic structure of their definitions. However, only variables showing statistically significant associations with the identified clusters are reported in the results of the content analyses. These associations were examined in an exploratory way, with the aim of identifying possible links between participants' characteristics and the thematic organization of their definitions. Given the exploratory nature of these analyses, no correction for multiple comparisons was applied, and the results should therefore be interpreted with caution.

Demographic information: The sample included 144 participants aged between 18 and 79 years ($M = 35.8$, $SD = 13.9$). The majority were women (72.9%, $n = 105$), followed by men (26.4%, $n = 38$), and one participant (0.7%) identified as another gender.

Family structure and marital status: Regarding marital status, 31.3% ($n = 45$) of participants were single, 27.8% ($n = 40$) were married, 21.5% ($n = 31$) were in a relationship, and 15.3% ($n = 22$) were cohabiting. A small proportion of the sample reported being separated (0.7%, $n = 1$), divorced (1.4%, $n = 2$), widowed (1.4%, $n = 2$), or other (0.7%, $n = 1$).

Given the geographic distribution of respondents, the item referring to city of residence was recoded into a dichotomous variable distinguishing Puglia vs. the rest of Italy. The sample was predominantly composed of participants residing in Puglia (84.7%, $n = 122$), while the remaining participants resided in other Italian regions (15.3%, $n = 22$).

Regarding living arrangements, 36.8% of participants ($n = 53$) lived with their family of origin, while 25.7% ($n = 37$) lived with their partner. Additionally, 11.8% ($n = 17$) lived alone, 11.8% ($n = 17$) lived with roommates or friends, and 11.8% ($n = 17$) lived with their parents. Only 2.1% ($n = 3$) reported living with their children. Concerning housing conditions, 33.3% ($n = 48$) lived in a house owned by their

parents, 33.3% ($n = 48$) owned their home, 28.5% ($n = 41$) lived in rented accommodation, and 4.9% ($n = 7$) reported other housing arrangements.

Socioeconomic status: Regarding educational level, the largest proportion of participants reported postgraduate education (30.6%, $n = 44$), followed by a master's degree (27.1%, $n = 39$) and a high school diploma (25.0%, $n = 36$). Smaller proportions held a bachelor's degree (13.2%, $n = 19$), a lower secondary school qualification (2.8%, $n = 4$), or other educational backgrounds (1.4%, $n = 2$).

About employment status, most participants reported working full-time (43.1%, $n = 62$), followed by students (17.4%, $n = 25$), part-time employees (12.5%, $n = 18$), and self-employed professionals (11.8%, $n = 17$). Smaller proportions included retirees (4.9%, $n = 7$), individuals reporting other occupations (4.9%, $n = 7$), those unemployed or seeking employment (each 2.1%, $n = 3$), and homemakers (1.4%, $n = 2$).

Given the high variability of reported occupations, work sectors were recategorized into broader macro-categories to facilitate interpretation. The largest proportion of participants was employed in the healthcare sector (16.0%, $n = 23$), followed by research (11.8%, $n = 17$) and psychology-related professions (11.1%, $n = 16$). Education-related sectors (including school and university settings) accounted for 9.0% ($n = 13$), while 9.7% ($n = 14$) were students. Public administration represented 4.9% ($n = 7$) of the sample. The remaining sectors were represented by smaller percentages, each accounting for less than 5% of the total sample.

With regard to employment contracts, 32.6% of participants ($n = 47$) reported having a permanent contract, while 27.1% ($n = 39$) were employed on a fixed-term basis. A proportion of the sample was not currently working (18.8%, $n = 27$). More precarious arrangements included occasional work (4.2%, $n = 6$), coordinated and continuous collaboration contracts (4.2%, $n = 6$), and undeclared employment (3.5%, $n = 5$). The remaining 9.7% ($n = 14$) reported other types of contractual arrangements.

Perceived income was categorized into four brackets based on official Italian income tax thresholds (IRPEF). The majority of participants reported a low income (up to €28,000 per year; 61.1%, $n = 88$), while 21.5% ($n = 31$) reported a middle income (€28,000–€50,000), and 4.9% ($n = 7$) reported a high income (above €50,000). Additionally, 12.5% of the sample ($n = 18$) reported having no personal income.

Lifestyle: Regarding alcohol consumption, 57.6% of participants ($n = 83$) reported drinking alcohol, whereas 42.4% ($n = 61$) reported not consuming alcoholic beverages. Among those who reported alcohol use, the duration of consumption varied widely, ranging from a few years to several decades, indicating substantial heterogeneity in drinking history. In terms of quantity, the majority of alcohol users reported very low consumption levels: 86.7% ($n = 72$) reported drinking less than one glass on average, 12.0% ($n = 10$) reported consuming one to two glasses, and only one participant (1.2%) reported drinking three or more glasses.

Regarding smoking behavior, 31.3% of participants ($n = 45$) reported being current smokers, whereas 68.8% ($n = 99$) reported that they did not smoke. As for alcohol consumption, the duration of smoking varied considerably, ranging from one year to over four decades for adults. In terms of intensity, 35.6% ($n = 16$) reported smoking fewer than five cigarettes per day, 31.1% ($n = 14$) reported smoking between five and ten cigarettes daily, and 33.3% ($n = 15$) reported smoking ten or more cigarettes per day.

About physical activity, 60.4% of participants ($n = 87$) reported engaging in sports or regular physical exercise, whereas 39.6% ($n = 57$) reported they were not doing any sport. In terms of frequency, 36.1% of the total sample ($n = 52$) reported not exercising at all, while among those who practiced sports, the most common frequencies were three times per week (23.6%, $n = 34$) and twice per week (20.1%, $n = 29$). Smaller proportions reported exercising once per week (11.1%, $n = 16$) or four or more times weekly (less than 10% overall). The types of physical activity reported were highly heterogeneous. The

most frequent activities included gym-based training (e.g., gym workouts, weight training; approximately 9-10%), walking (7.6%), and bodyweight training (approximately 5%). All other activities (e.g., running, Pilates, yoga, dance, martial arts) were represented by small percentages, each accounting for less than 5% of the sample.

In the end, 77.1% of participants ($n = 111$) reported having contracted the Covid-19 virus at least once, whereas 22.9% ($n = 33$) reported never having been infected. Symptom severity was generally mild: 57.7% of infected participants reported mild symptoms, 33.3% moderate symptoms, and only 2.7% severe symptoms, while a small proportion (3.6%) reported being asymptomatic. Finally, vaccination rates were extremely high, with 98.6% of participants ($n = 142$) reporting having received the vaccine.

3.6.2. Content analysis for health definition

From the cluster analysis, five significant clusters emerged. Each cluster represents a group of elementary context units (ECUs), that is, textual segments sharing similar lexical patterns. Each ECU was assigned to the cluster with which it shared the most similar lexical profile. The percentage associated with each cluster therefore indicates the proportion of ECUs in the corpus classified within that cluster, and the cluster percentages sum to 100% of the classified corpus. Clusters, indicated by interpretative labels, are presented below with the proportion of explained variance. The most representative lemmas for each cluster are reported according to their χ^2 values, which indicate the strength of association between lexical units and clusters: higher values correspond to words that are more strongly and characteristically associated with a given cluster.

Cluster 1 (12% of the corpus) was characterized by lexical units referring to psychological and individual dimensions of health. The most distinctive lemmas were “psichico” (“psychic”) ($\chi^2 = 37.764$, $p < .001$), “psicologico” (“psychological”) ($\chi^2 = 20.888$, $p < .001$), “individuo” (“individual”) ($\chi^2 = 8.388$, $p = .004$), and “fisico” (“physical”) ($\chi^2 = 6.908$, $p = .009$). This cluster was also significantly associated

with living in rented accommodation ($\chi^2 = 7.334, p = .007$) and with being in a romantic partnership ($\chi^2 = 4.566, p = .033$).

Cluster 2 (20% of the corpus) was characterized by highly general and definitional lexical units. The most distinctive lemmas were “condizione” (“condition”) ($\chi^2 = 31.523, p < .001$), “persona” (“person”) ($\chi^2 = 13.798, p < .001$), and “salute” (“health”) ($\chi^2 = 5.245, p = .022$). No socio-demographic or socioeconomic variables were significantly associated with this cluster.

Cluster 3 (26% of the corpus) was characterized by lexical units referring to psychophysical aspects of health. The most distinctive lemmas were “mentale” (“mental”) ($\chi^2 = 33.506, p < .001$), “fisico” (“physical”) ($\chi^2 = 6.843, p = .009$), and “benessere” (“well-being”) ($\chi^2 = 5.606, p = .018$). This cluster was significantly associated with living in housing owned by one’s parents ($\chi^2 = 5.229, p = .022$) and with informal employment conditions ($\chi^2 = 4.453, p = .035$).

Cluster 4 (30% of the corpus) was characterized by lexical units related to illness and functional status. The most distinctive lemmas were “assenza” (“absence”) ($\chi^2 = 41.132, p < .001$) and “malattia” (“illness”) ($\chi^2 = 27.475, p < .001$). Additional significant lemmas included “mente” (“mind”) ($\chi^2 = 8.033, p = .005$), “corpo” (“body”) ($\chi^2 = 7.054, p = .008$), “capacità” (“capacity”) ($\chi^2 = 4.492, p = .034$), and “patologia” (“pathology”) ($\chi^2 = 4.492, p = .034$). No socio-demographic or socioeconomic variables reached statistical significance for this cluster.

In the end, Cluster 5 (12% of the corpus) was characterized by lexical units referring to psychophysical well-being and optimal life conditions. The most distinctive lemmas were “psicofisico” (“psychophysical”) ($\chi^2 = 133.995, p < .001$), “benessere” (“well-being”) ($\chi^2 = 12.201, p < .001$), “ottimale” (“optimal”) ($\chi^2 = 5.534, p = .019$), and “vita” (“life”) ($\chi^2 = 4.284, p = .038$). This cluster was significantly associated with being in one’s thirties ($\chi^2 = 10.022, p = .002$), higher educational attainment ($\chi^2 = 7.986, p = .005$), medium income levels ($\chi^2 = 5.472, p = .019$), being married ($\chi^2 = 6.130, p = .013$), living in a household with three family members ($\chi^2 = 5.546, p = .019$), and owning one’s home ($\chi^2 =$

3.897, $p = .048$). Employment-related variables, including part-time and flexible contractual arrangements, were also significantly associated with this cluster.

Figure 1 shows the distribution of textual contexts across the five thematic clusters of health definitions, labelled according to their predominant semantic content.

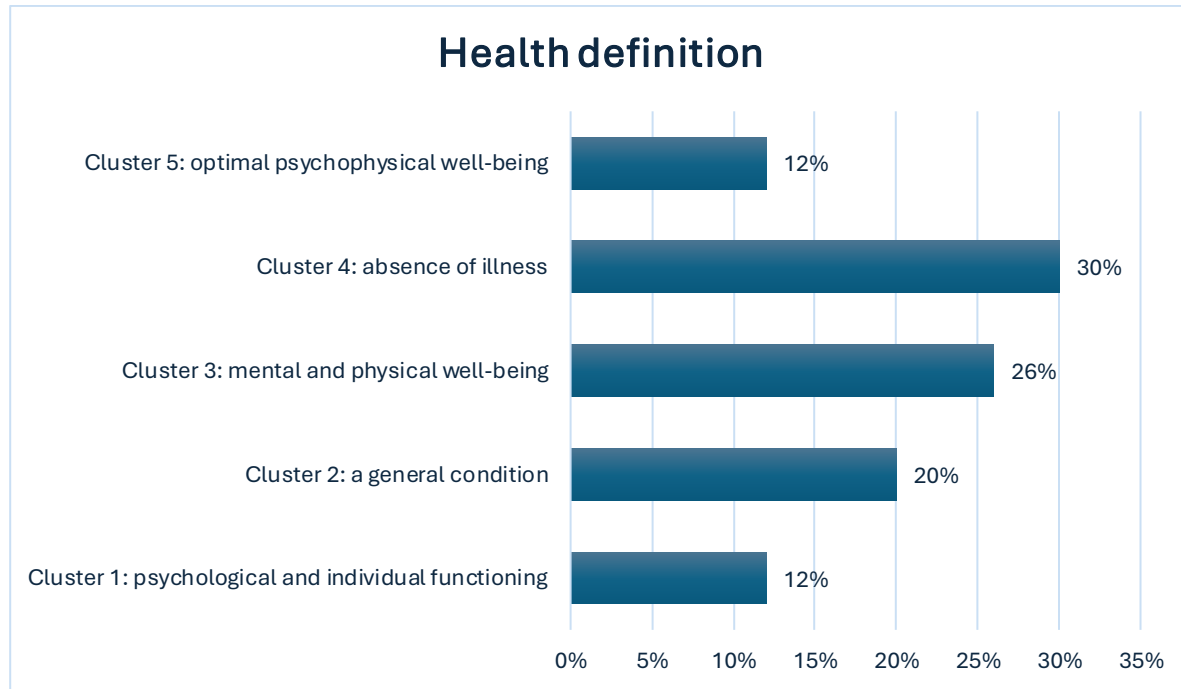


Figure 1. Distribution of thematic clusters in the health definition corpus (Cluster 1: Health as psychological and individual functioning; Cluster 2: Health as a general condition of the person; Cluster 3: Health as mental and physical well-being; Cluster 4: Health as absence of illness; Cluster 5: Health as optimal psychophysical well-being).

3.6.3. Content analysis for well-being definition

In contrast to the health definition, the clustering procedure applied to the well-being definition classified 97 out of the 144 elementary context units (ECUs), corresponding to 67.36% of the corpus. The remaining ECUs were not assigned to any cluster due to insufficient lexical specificity and were therefore excluded from the cluster structure. Consequently, the percentages reported for the well-being clusters refer to the classified portion of the corpus rather than to the total corpus.

Cluster 1 (45.36% of classified corpus) was characterized by lexical units referring to life conditions and overall well-being. The most distinctive lexical unit was “vita” (“life”) ($\chi^2 = 36.768, p < .001$), followed by “benessere” (“well-being”) ($\chi^2 = 22.605, p < .001$). Additional significant lexical units included “lavoro” (“work”) ($\chi^2 = 6.196, p = .013$), “qualità” (“quality”) ($\chi^2 = 6.196, p = .013$), and “soddisfazione” (“satisfaction”) ($\chi^2 = 4.108, p = .043$).

Cluster 2 (20.62% of classified corpus) was characterized by lexical units referring to serenity and psychological balance. The most distinctive lexical unit was “serenità” (“serenity”) ($\chi^2 = 21.326, p < .001$), followed by “persona” (“person”) ($\chi^2 = 17.090, p < .001$) and “psicologico” (“psychological”) ($\chi^2 = 12.075, p = .001$). Additional significant lexical units included “condizione” (“condition”) ($\chi^2 = 7.598, p = .006$) and “psicofisico” (“psychophysical”) ($\chi^2 = 4.999, p = .025$). From a socio-demographic perspective, this cluster was significantly associated with participants living in households composed of six family members ($\chi^2 = 8.115, p = .004$) and with the age modality “24” ($\chi^2 = 5.438, p = .020$). This result should be interpreted with caution, as age was included in the dataset as a continuous variable. However, in T-LAB numerical variables are treated as categorical modalities when examining associations with clusters. Therefore, specific age values may appear in the results as indicative modalities associated with clusters.

Cluster 3 (34.02% of classified corpus) was characterized by lexical units referring to harmony and to physical, mental, and social dimensions of well-being. The most distinctive lexical unit was “armonia” (“harmony”) ($\chi^2 = 11.175, p = .001$), followed by “fisico” (“physical”) ($\chi^2 = 7.835, p = .005$), “corpo” (“body”) ($\chi^2 = 7.306, p = .007$), “sociale” (“social”) ($\chi^2 = 6.038, p = .014$), and “mentale” (“mental”) ($\chi^2 = 5.934, p = .015$). The verb “sentire” (“to feel”) ($\chi^2 = 5.622, p = .018$) further contributed to this representation. From a socio-demographic perspective, this cluster was significantly associated with participants living in households composed of four family members ($\chi^2 = 11.009, p = .001$) and one

family member ($\chi^2 = 5.622, p = .018$), with higher income levels ($\chi^2 = 5.622, p = .018$), with the presence of illness ($\chi^2 = 4.222, p = .040$), and with rented housing conditions ($\chi^2 = 3.893, p = .048$).

Figure 2 shows the distribution of the classified elementary context units (ECUs) across the three thematic clusters identified in the well-being definitions, labelled according to their predominant semantic content.

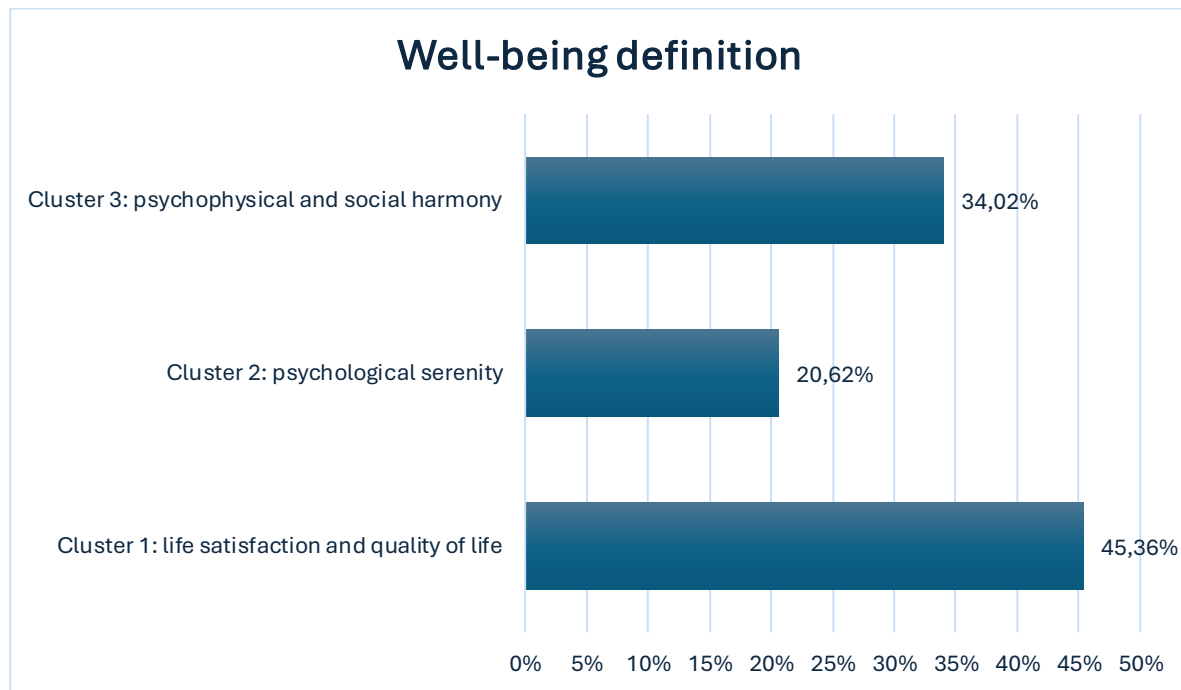


Figure 2. Distribution of thematic clusters in the classified portion of the well-being definition corpus (Cluster 1: Well-being as life satisfaction and quality of life; Cluster 2: Well-being as psychological serenity; Cluster 3: Well-being as psychophysical and social harmony).

3.7. Discussion

The present study aimed to explore how individuals define health and well-being and to examine whether these subjective representations may vary according to socio-demographic and socioeconomic characteristics. Understanding how people conceptualize these constructs is particularly relevant given that both health and well-being have increasingly been recognized as multidimensional and socially embedded phenomena rather than purely biomedical conditions. In contemporary literature, health is

widely conceptualized as the result of the dynamic interaction between biological, psychological, and social factors (Engel, 1977), while well-being is often described as a complex construct encompassing affective, cognitive, and social dimensions (Diener and Lucas, 1999; Ryan and Deci, 2001).

The study adopted a qualitative corpus-based approach grounded in lexical content analysis of participants' textual definitions of health and well-being. By examining recurring lexical patterns within these definitions, the analysis enabled the identification of clusters representing different semantic representations of the two constructs. Given the exploratory nature of the present study, the associations identified should be interpreted with caution. The analysis highlights statistical associations between lexical patterns and socio-demographic characteristics, but it does not allow causal conclusions regarding the mechanisms through which these factors may influence individuals' representations of health and well-being.

Based on the general definitions of health and well-being discussed in Chapter 1, the results revealed the coexistence of multiple representations, suggesting that both constructs may be understood as multidimensional and socially constructed rather than conceptually homogeneous.

In particular, regarding the definition of health, the context analysis identified five clusters. More specifically, Cluster 1 (Health as psychological and individual functioning) emphasizes psychological and individual dimensions of health. The prominence of lemmas such as “psichico” (“psychic”) and “psicologico” (“psychological”) may reflect a view of health that resonates with contemporary biopsychosocial perspectives, in which mental functioning is considered a relevant component of overall health (Engel, 1977). This interpretation could recall the definition proposed by the World Health Organization (WHO, 1948), which conceptualizes health as a state of complete physical, mental, and social well-being rather than merely the absence of disease.

From a socioeconomic perspective, this cluster was also associated with living in rented accommodation and with being in a romantic partnership. Housing conditions represent an important

social determinant of health, and the relationship between housing and health outcomes has been widely documented in the literature (Braubach, 2011; Commission on Social Determinants of Health, 2008). Similarly, romantic relationships may represent a relevant relational context influencing health perceptions and behaviors. Previous research has suggested that individuals often perceive their romantic partners as influential in shaping health-related habits and attitudes (Markey et al., 2007). In this sense, these associations may reflect the broader role of relational and environmental contexts in shaping how individuals interpret their health.

Cluster 2 (Health as a general condition of the person) reflected a more abstract representation of health, emphasizing the physical condition of the individual. The absence of significant socio-demographic associations may indicate that this representation corresponds to a relatively general and widely shared conception of health. In particular, the emphasis on the bodily condition of the individual may be associated with the traditional biomedical model, which conceptualizes health primarily in terms of bodily functioning and the absence of disease (Engel, 1977). Although contemporary perspectives increasingly emphasize the multidimensional nature of health, biomedical representations remain influential in public understandings of health and continue to shape how individuals interpret their health status (Blaxter, 2003; Herzlich, 1973).

Cluster 3 (Health as mental and physical well-being) is characterized by the presence of lemmas such as “mentale” (“mental”) and “fisico” (“physical”). This may suggest a representation of health that integrates both psychological and bodily dimensions. This cluster may therefore be interpreted as a synthesis of the two previous subjective representations, emphasizing a psychophysical conception of health that aligns closely with the biopsychosocial model (Engel, 1977), according to which health results from the interaction of biological, psychological, and social factors.

From a socioeconomic perspective, this cluster was associated with living in housing owned by parents and with informal employment conditions. These patterns may be observed among individuals

experiencing transitional socioeconomic situations. Indeed, in Southern European contexts, prolonged co-residence with parents and delayed economic independence have been described as relatively common patterns among younger adults (Cittadini and Offredi, 2025). However, the present findings do not allow direct inferences about developmental processes and should therefore be interpreted cautiously.

Cluster 4 (Health as absence of illness) was centered on the lemmas “assenza” (“absence”) and “malattia” (“disease”), reflecting a biomedical definition of health as the absence of pathology. This representation may align with the traditional biomedical model, in which health is primarily operationalized in terms of functional capacity and disease status (Sartorius, 2006). Despite the growing diffusion of multidimensional models of health, this perspective remains influential in both medical practice and lay understandings of health.

Finally, Cluster 5 (Health as optimal psychophysical well-being) referred to a more holistic understanding of health as an optimal life condition. The most represented lemmas – “psicofisico” (psychophysical), “benessere” (well-being), and “ottimale” (optimal) – may suggest a representation of health as a state of overall balance and positive functioning rather than merely the absence of illness. The different socioeconomic associations observed for this cluster, including higher education, stable family status, medium income, and home ownership, may indicate that this representation could appear more frequently among individuals in relatively stable socioeconomic positions. These patterns may be consistent with research suggesting that individuals’ representations of health are shaped by structural resources and life conditions (Farr and Markova, 1995; Murray, 2002).

On the other hand, the analysis of well-being definitions revealed three main representations. The largest cluster (Cluster 1: Well-being as life satisfaction and quality of life) conceptualized well-being in terms of “vita” (life), “lavoro” (work), “qualità” (quality), and “soddisfazione” (satisfaction). This may reflect an evaluative and life-domain approach, that could be consistent with hedonic theories of well-being, particularly those emphasizing life satisfaction and quality of life (Cella, 1994; Diener, 1984;

Diener and Lucas, 1999). Participants seem to anchor well-being in concrete life conditions, especially work and overall quality of life (Felce, 1997).

Cluster 2 (Well-being as psychological serenity) centered on “serenità” (serenity) and psychological balance, as reflected in lemmas such as “psicologico” (psychological) and “psicofisico” (psychophysical). This representation may align with affective and emotional conceptualizations of well-being, emphasizing internal harmony and emotional regulation. Such perspective could be consistent with the wellness approach to well-being, which conceptualizes well-being as an active, self-directed, and holistic pursuit of balance and personal fulfillment (Dunn, 1961).

From a socioeconomic perspective, the association with younger age (24 years) may reflect developmental concerns related to emotional stability and identity consolidation during early adulthood, a life stage often characterized by significant personal and social transitions. However, as discussed in the results section, the association with a specific age value should be interpreted cautiously, given the categorical nature of this variable in the T-Lab software. Nonetheless, this interpretation could be consistent with the characteristics of the sample described in Chapter 2, where university students are navigating a critical transitional phase while negotiating between positive and negative experiences and attempting to achieve psychological balance.

Finally, Cluster 3 (Well-being as psychophysical and social harmony) emphasized “armonia” (“harmony”) and the integration of physical, mental, and social dimensions, as described by different lemmas. This representation may appear closer to the multidimensional conceptualizations of well-being, as discussed in paragraph 1.2.5. From a socioeconomic perspective, the association with higher income and specific household configurations may suggest that structural stability may be associated with a more complex and integrated conceptualization of well-being (Diener and Seligman, 2004). Interestingly, the association with the presence of illness may indicate that individuals experiencing health challenges

could conceptualize well-being in broader, more integrative terms, possibly as a compensatory cognitive framework.

Overall, as previously highlighted, the findings should be interpreted with caution. However, the findings may appear to provide partial support for the expectations of the study. The results seem to suggest that subjective representations of health and well-being may vary according to some socio-demographic and socioeconomic characteristics. Although educational level did not appear to significantly influence the definitions overall, other structural factors such as income level, housing conditions, and family context emerged as elements that may be associated with differences in how individuals conceptualize health and well-being. However, these patterns should be interpreted as exploratory rather than definitive relationships, particularly given the relatively small sample size and the number of variables examined.

Regarding the second hypothesis, the findings seem to suggest that individuals may emphasize different thematic dimensions when defining health and well-being, supporting the continued relevance of the theoretical perspectives discussed in Chapter 1. Specifically, with regard to health, although psychological aspects may appear to be more prominent than in the past, the idea of health as the absence of illness remains highly salient. This could indicate that both the biomedical model and the biopsychosocial model continue to underpin individuals' subjective representations of health (Engel, 1977; Sartorius, 2006).

Similarly, the conceptualizations of well-being reflected multiple theoretical perspectives, ranging from hedonic approach to wellness approach. Overall, well-being was predominantly described as a positive and desirable condition to be achieved, rather than as a stable state in which individuals continuously live (Lent, 2004).

In conclusion, these results may reinforce the multidimensional and context-dependent nature of both health and well-being. At the same time, they may suggest that lay representations of health and

well-being reflect multiple theoretical traditions simultaneously (biomedical, hedonic, and eudaimonic). Moreover, the possible associations with social and economic determinants may suggest that representations are not purely cognitive abstractions but are also embedded within material and relational contexts.

3.8. Limitations and conclusive remarks

Despite the contributions of the present study, several limitations should be acknowledged. First, the sample size was relatively limited and consisted mainly of university students and young adults, which may reduce the generalizability of the findings to other age groups and social contexts. Future studies should consider larger and more heterogeneous samples in order to explore whether similar representations of health and well-being emerge across different populations and life stages.

Second, the cross-sectional nature of the study does not allow conclusions about possible changes in individuals' representations over time. Since conceptualizations of health and well-being may evolve throughout the life course and in response to changing social conditions, longitudinal research could provide a deeper understanding of how these representations develop and transform.

Another limitation concerns the specific socio-cultural context in which the study was carried out. Representations of health and well-being are strongly embedded in cultural and social frameworks; therefore, the meanings identified in this study may reflect the characteristics of the actual context considered. Comparative studies across different cultural or national contexts could help clarify how broader social structures influence individuals' conceptualizations of these constructs.

Despite these limitations, the present study contributes to literature by highlighting the plurality of meanings that individuals attribute to health and well-being. The findings show that people do not rely on a single conceptual framework but rather draw on multiple perspectives that coexist within everyday understandings. In particular, both biomedical and biopsychosocial views appear to shape representations

of health, while different theoretical approaches to well-being, ranging from hedonic perspectives to wellness, emerge in individuals' definitions.

Overall, the results underscore the importance of considering subjective representations when studying health and well-being. These meanings are not only individual interpretations but are also shaped by broader socio-demographic and socioeconomic conditions. Understanding how people conceptualize health and well-being may therefore provide valuable insights for research, policy, and health promotion interventions aimed at fostering more comprehensive and context-sensitive approaches to well-being.

CHAPTER 4

Self-Perceived Health and Subjective Well-Being Across Generations

In recent years, increasing attention has been paid to the subjective evaluation of health and well-being. These constructs have traditionally been investigated through objective indicators such as physical health conditions, functional limitations, or socio-economic resources, often assuming that such conditions can be verified by external observers (Lawton and Lawrence, 1994). However, a growing body of research highlights the importance of individuals' perceptions and personal evaluations in understanding how health and well-being are experienced in everyday life (Biswas-Diener and Diener, 2001; Marmot and Wilkinson, 1999).

Within this perspective, self-perceived health and subjective well-being represent two key constructs for understanding how individuals evaluate their health and well-being. These evaluations are shaped not only by individual characteristics but also by broader social and historical contexts that influence life experiences and available resources, including generational belonging (Chen et al., 2025; Cheng and Yan, 2021; Huang et al., 2024).

For this reason, the present chapter examines the relationship between self-perceived health and subjective well-being across generations, considering generational membership as a socio-historical factor reflecting different social, economic, and cultural contexts. Furthermore, the role of perceived social support and perceived stress was investigated. In doing so, it extends the findings of Chapter 3 by shifting from the exploration of subjective definitions of health and well-being to the quantitative investigation of how individuals evaluate these constructs.

4.1. Introduction

4.1.1. *The subjective dimension of health and well-being*

Previous chapters have shown that research on health and well-being has long struggled to reach a consensus regarding the conceptualization of these constructs (La Placa et al., 2013; Ryff and Singer, 2008). One approach to addressing this complexity has been to focus on the determinants of health and well-being, that are the biological, psychological, social, and environmental factors that contribute to their development and maintenance (Vingilis and Sarkella, 1997). Accordingly, as demonstrated in Chapters 2 and 3, a growing body of research has emphasized the role of personal, social, economic, and contextual conditions in shaping individuals' living circumstances and life opportunities.

However, examining health and well-being solely through the lens of structural determinants risks overlooking an essential dimension of human experience: how individuals perceive, interpret, and evaluate their own conditions in everyday life (Murray, 2002). As highlighted in Chapter 3, people do not experience health and well-being as abstract theoretical constructs, but through subjective representations shaped by beliefs, values, personal experiences, and sociocultural contexts (Farr and Markova, 1995). While the previous chapter explored how individuals symbolically define and construct meanings of health and well-being, it remains equally important to investigate how these constructs are subjectively evaluated in empirical research.

From this perspective, health and well-being can also be understood as subjective evaluations that reflect how individuals assess their physical, psychological, and social functioning. Therefore, subjective indicators have become an important strategy for capturing how individuals evaluate their health conditions and overall quality of life (Biswas-Diener and Diener, 2001; Marmot and Wilkinson, 1999). Among these indicators, self-perceived health (SPH) and subjective well-being (SWB) have emerged as key constructs for understanding how people evaluate their overall functioning and life satisfaction within specific social and historical contexts (Diener, 1984; Jylhä, 2009).

4.1.2. Self-perceived health

Self-perceived health (SPH), often referred to as self-rated health, represents one of the most widely used subjective indicators in population health research. It is generally defined as an individual's overall evaluation of their own health status, typically assessed through a single global question asking respondents to rate their health on a scale ranging from poor to excellent (Jylhä, 2009; Shields and Shooshtari, 2001). Despite its apparent simplicity, this measure has proven to be a reliable, valid, and informative indicator of health status across different populations and cultural contexts (Shields and Shooshtari, 2001).

A substantial body of research has demonstrated the reliability and construct validity of SPH. Self-assessments of health show relatively high test-retest reliability across different sub-populations and are strongly correlated with more comprehensive health measures, including functional ability, chronic disease indicators, and multidimensional health scales such as the Short Form-36 Health Survey (SF-36) (Idler and Benyamini, 1997; Shields and Shooshtari, 2001). Moreover, SPH has been found to be significantly associated with physicians' assessments of health status, further supporting its validity as a global indicator of individuals' health conditions (DeSalvo et al., 2006).

However, beyond its reliability, one of the most remarkable features of SPH is its strong predictive power. Numerous longitudinal studies have shown that individuals' self-assessments of their health are associated with a wide range of health-related outcomes, including the onset of chronic diseases (Ferraro et al., 1997; Kaplan et al., 1996; Møller et al., 1996; Shadbolt, 1997), functional decline (Farmer et al., 1997; Grand et al., 1988; Idler et al., 1995; Idler et al., 2000; Kaplan et al., 1993; Mor et al., 1994), utilization of health care services (Evashwick et al., 1984; Miilunpalo et al., 1997; Wdlinsky et al., 1994), and recovery from illness (Wilcox et al., 1996). Notably, SPH has consistently been identified as a robust

predictor of mortality across diverse populations, even when objective health measures and clinical evaluations are considered (Kaplan et al., 1996; Mor et al., 1994; Miilunpalo et al., 1997).

However, the mechanisms underlying individuals' evaluations of their health are complex and multifaceted. SPH does not simply reflect objective medical conditions but integrates multiple dimensions of individuals' lives, including physical functioning, psychological well-being, social roles, and contextual experiences (Piko, 2000; Segovia et al., 1989). As Jylhä (2009) suggests, individuals evaluate their health by drawing on personal health biographies, comparisons with relevant reference groups, and culturally shaped norms about what constitutes good or poor health. Consequently, SPH can be seen as a “black box” indicator that summarizes a wide range of health-related information and subjective interpretations into a single global assessment (Gumà, 2021).

In conclusion, these characteristics explain why SPH has become a central indicator in health research. By capturing how individuals interpret and evaluate their own health conditions, SPH provides valuable insight into the subjective dimension of health and complements more objective medical indicators.

4.1.3. Subjective well-being

Together with SPH, subjective well-being (SWB) represents another key construct for understanding how individuals evaluate their quality of life. As discussed in Chapter 1, contemporary psychological research has largely operationalized the hedonic perspective on well-being through this concept. Introduced by Diener (1984), SWB refers to individuals' evaluations and experiences of their own lives and is typically conceptualized as a multidimensional construct comprising three components: life satisfaction, the presence of positive affect, and the relative absence of negative affect (Diener, 1984; Diener and Lucas, 1999). That is, life satisfaction reflects a cognitive judgement about the overall quality of one's life, sometimes including evaluations of specific life domains such as health, work, or

interpersonal relationships. Positive and negative affect refer to the frequency and intensity of pleasant and unpleasant emotional experiences in everyday life (Ryan and Deci, 2001; Ryff et al., 2021).

Over the past decades, SWB has become one of the most widely adopted frameworks for the empirical study of well-being in psychology and related disciplines (Kahneman et al., 1999). Unlike philosophical or normative approaches that attempt to prescribe what constitutes a good life, research on SWB focuses on individuals' own evaluations of their lives, considering these personal judgements as a central component of human well-being. In this perspective, well-being is assessed through individuals' reflections on their life circumstances and emotional experiences, allowing researchers to capture how people subjectively interpret their quality of life (Diener et al., 2018).

Although the three components of SWB are interrelated, they capture distinct aspects of well-being and are often measured through separate instruments (Diener et al., 2018). In empirical research, the cognitive component of SWB is commonly assessed through the Satisfaction With Life Scale (SWLS), which measures individuals' global evaluations of their life satisfaction, whereas the affective component is typically measured using instruments such as the Positive and Negative Affect Schedule (PANAS), which assesses the frequency of positive and negative emotional experiences. By examining both cognitive and affective dimensions, these measures provide a comprehensive assessment of SWB (Jovanović, 2015). Within this framework, SWB represents an important indicator of the subjective dimension of quality of life and complements health-related indicators such as SPH.

4.1.4. The role of perceived social support and perceived stress

Among the psychosocial factors associated with health and well-being, perceived social support and perceived stress deserve particular attention. As discussed in Chapter 1, social support can be broadly defined as the psychological, physical, and material assistance accessible to individuals through their relationships with others and with the wider community (WHO, 2021). A common distinction is made

between structural support, which refers to the size and frequency of social ties, and functional support, which refers to the quality of relationships and the types of assistance they provide, such as emotional, instrumental, or informational support (WHO, 2021). In this perspective, perceived social support refers to individuals' subjective evaluation that supportive resources are available and that others can be relied upon in times of need. This aspect is particularly relevant because research has shown that social support can exert both a direct beneficial effect on well-being and an indirect buffering effect by reducing the negative impact of stressors (Cohen and Wills, 1985; Gençöz et al., 2004). Furthermore, consistent evidence indicates that higher levels of perceived social support are associated with better physical and psychological health, lower stress reactivity, and greater well-being (Acoba, 2024; Uchino, 2009).

At the same time, perceived stress represents another key psychosocial factor for understanding variations in health and well-being. In contrast to objective measures of stressful life events, the concept of perceived stress emphasizes individuals' appraisal of situations as unpredictable, uncontrollable, or overwhelming (Cohen et al., 1983; Lazarus, 1966; Lazarus and Cohen, 1977). Indeed, the effects of stress depend not only on the occurrence of adverse events, but also on how individuals interpret environmental demands in relation to their available coping resources (Cohen et al., 1983). A large body of research has shown that higher levels of perceived stress are associated with poorer physical health, greater psychological distress, and lower SWB (Cohen et al., 1983; Slavich, 2019).

Taken together, these studies demonstrate that perceived social support and perceived stress may contribute to explaining how individuals evaluate both their health and their well-being. More specifically, social support may act as a protective resource, whereas perceived stress may represent a risk factor in the relationship between SPH and SWB.

4.1.5. Generational differences in health and well-being

As demonstrated in the previous paragraphs, a variety of factors may influence SPH and SWB, ranging from socioeconomic status to psychosocial resources such as social support and perceived stress. In addition, generational belonging may provide a useful lens for understanding how individuals interpret and evaluate their health and quality of life.

Generations are commonly defined as cohorts of individuals born within a similar time period who share comparable socio-historical experiences that shape their attitudes, values, and behaviors over the life course (Pendergast, 2009; Pendergast and Garvis, 2014). In this sense, generational theory offers a socio-cultural framework for understanding how broader historical contexts influence individuals' perceptions and life experiences.

In empirical research, generational categories are often used as analytical tools to examine how different cohorts respond to social, economic, and technological changes over time. Following the classification adopted by the Pew Research Center (Dimock, 2019), four main generational groups can be identified: Baby Boomers (1946-1964), Generation X (1965-1980), Generation Y or Millennials (1981-1996), and Generation Z (1997-2012). Although generational boundaries are not exact and should be interpreted as heuristic tools rather than rigid categories, they allow researchers to examine how formative experiences associated with specific historical periods may influence individuals' attitudes and behaviors (Dimock, 2019).

Each of these cohorts has grown up in distinct socio-historical contexts that have shaped their priorities, challenges, and conceptualizations of health and well-being. For instance, Baby Boomers experienced the post-World War II economic expansion and may associate health and well-being with economic stability and personal achievement (Lind et al., 2021; Manchester et al., 2006). Generation X grew up during periods of economic and social transition and often emphasizes independence and work-life balance (Gesell, 2010). Millennials came of age during major global events such as the 9/11 attacks

and the Great Recession, which influenced their economic and social outlook (Dimock, 2019). Finally, Generation Z has grown up in a highly digitalized environment characterized by constant connectivity and increased awareness of mental health issues (Akbar et al., 2024).

Taken together, these considerations suggest that the ways in which individuals perceive their health and evaluate their well-being may be shaped not only by personal and psychosocial factors, but also by the socio-historical contexts in which they were raised (Braveman and Barclay, 2009). This aspect may be relevant in the study of SPH and SWB, as both constructs rely on subjective appraisals that are likely to be influenced by socially shared norms, expectations, and meanings associated with health, life satisfaction, and psychological functioning (Chen et al., 2025; Helliwell and Putnam, 2004). From this perspective, generational belonging may serve as a useful interpretative lens for understanding whether individuals from different cohorts rely on different criteria when assessing their health and well-being. Adopting a generational perspective may therefore help to describe possible cohort-related patterns and to examine whether broader historical, economic, and cultural conditions are associated with the ways individuals evaluate their health and well-being across the life course.

4.2. Aim and Hypotheses

A substantial body of research suggests that SPH is closely associated with SWB, with individuals who report better perceived health generally experiencing higher levels of life satisfaction and positive emotional states. Conversely, poorer health perceptions are often linked to lower well-being and increased psychological distress (Angner et al., 2013; Graham et al., 2011; Helliwell, 2011; Mizobuchi, 2017). These findings highlight the importance of subjective health evaluations as key indicators of how individuals experience their quality of life.

However, emerging evidence suggests that this relationship may not be uniform across different generational cohorts. Individuals belonging to different generations have grown up within distinct socio-

historical contexts that shape their life experiences, expectations, and resources (Hunt, 2017). As a result, the ways in which people interpret their health conditions and evaluate their well-being may vary across generations. For instance, research comparing Baby Boomers and Generation X has shown that SPH remains positively associated with SWB in both cohorts, although the social and relational factors linked to well-being may differ between generations (e.g., intergenerational support and family relationships) (Lin et al., 2025). These findings suggest that generational context may play a role in shaping the factors that contribute to individuals' evaluations of health and well-being.

Building on this perspective, the present study aimed to examine the relationship between SPH and SWB across generations. In addition to generational belonging, the study also considered the role of psychosocial factors that have been widely associated with health and well-being, namely perceived social support and perceived stress. By integrating these dimensions, this study seeks to provide a more comprehensive understanding of how individuals evaluate their health and overall well-being within different social and generational contexts.

Based on previous evidence, the following hypotheses were formulated:

H1. Significant differences in SPH and SWB were expected across generational cohorts (Badley et al., 2015; Botha and Vera-Toscano, 2022).

H2. SPH was expected to be positively associated with SWB, such that individuals reporting better perceived health would also report higher levels of well-being (Lin et al., 2025; Ngamaba et al., 2017).

H3. Perceived social support was expected to be positively associated with both SPH and SWB, whereas perceived stress was expected to be negatively associated with these variables (Gençöz et al., 2004; Teh et al., 2015).

H4. Perceived social support and perceived stress were expected to significantly predict SWB (Gülaçtı, 2010; Villanueva et al., 2022).

4.3. Method

4.3.1. Design

The present study adopted an observational, cross-sectional design to examine the relationship between SPH and SWB across different generational cohorts. Specifically, this study explored whether levels of SPH and SWB differ across four generational groups: Baby Boomers (1946-1964), Generation X (1965-1980), Generation Y or Millennials (1981-1996), and Generation Z (1997-2012). In addition, the study examined the relationship between SPH and SWB and investigated the potential role of perceived social support and perceived stress as psychosocial factors associated with these constructs.

4.3.2. Participants

Participants were recruited through an online questionnaire distributed via social media and other digital channels. Data collection took place between March and October 2025. The final sample consisted of 168 participants aged between 18 and 79 years ($M = 36.3$, $SD = 13.7$). The distribution of participants by gender and generation is reported in Table 1.

<i>Generation</i>	<i>M</i>	<i>F</i>	<i>Other</i>	<i>Total</i>
Baby Boomer	5	4	0	9
Gen X	6	26	0	32
Millennials	23	54	0	77
Gen Z	8	41	1	50

Table 1. Distribution of the sample by gender (M = male; F = female; Other) and generation.

The sample was unequally distributed across generational cohorts, with a particularly small number of Baby Boomer participants ($n = 9$), compared with Generation X ($n = 32$), Millennials ($n = 77$), and Generation Z ($n = 50$). This imbalance should be taken into account when interpreting the results,

as the small size of the Baby Boomer group may reduce the stability of comparisons across generations and requires caution in the interpretation of generational effects.

Eligibility criteria required participants to be at least 18 years old and to provide informed consent. Before completing the survey, participants were informed about the objectives of the study and about the confidential and anonymous handling of their data. The study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki.

4.4. Materials

4.4.1. Short Form Health Survey (SF-36)

The Short Form Health Survey (SF-36; Ware and Sherbourne, 1992) is a widely used self-report instrument designed to measure SPH. The questionnaire consists of 36 items assessing eight dimensions of health (PF = physical functioning, RP = role limitations due to physical health problems, BP = bodily pain, GH = general health perceptions, VI = vitality, SF = social functioning, RE = role limitations due to emotional problems, and MH = mental health). Items are rated on Likert-type scales with response formats that vary across dimensions. Scores were calculated for each of the eight SF-36 dimensions and transformed to a 0-100 scale, with higher scores indicating better perceived health status.

The Italian version of the SF-36 has been validated within the International Quality of Life Assessment (IQOLA) project and has demonstrated good psychometric properties. In particular, internal consistency reliability coefficients for the eight scales generally exceed the recommended threshold of .70 (range = .77-.93), supporting the reliability and validity of the Italian version of the instrument (Apolone and Mosconi, 1998).

Reliability coefficients were mostly acceptable to excellent (Physical functioning: Cronbach's $\alpha = 0.92$; Role limitations due to physical health problems: Cronbach's $\alpha = 0.86$; Bodily pain: Cronbach's $\alpha = 0.85$; Vitality: Cronbach's $\alpha = 0.78$; Social functioning: Cronbach's $\alpha = 0.75$; Role limitations due to

emotional problems: Cronbach's $\alpha = 0.80$; Mental health: Cronbach's $\alpha = 0.84$), with the exception of the General Health subscale, which showed slightly lower internal consistency (Cronbach's $\alpha = .66$).

4.4.2. Multidimensional Scale of Perceived Social Support (MSPSS)

The Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988) is a self-report instrument designed to measure individuals' subjective perception of social support. The scale consists of 12 items assessing perceived support from three distinct sources: family, friends, and significant other, with four items for each subscale. Items are rated on a 7-point Likert scale ranging from 1 (very strongly disagree) to 7 (very strongly agree), with higher scores indicating greater perceived social support.

Scores were calculated for each of the three MSPSS subscales – Family (FAM), Friends (FRI), and Significant Other (SO) – as well as for the total perceived social support score. Mean subscale scores were obtained by summing the four items corresponding to each source of support and dividing by four, while the total score was computed by summing all 12 items (range = 12-84), with higher scores reflecting higher levels of perceived social support.

The Italian version of the scale has also shown good reliability and validity, supporting the three-factor structure of the instrument and reporting high internal consistency coefficients for the total scale and subscales (Di Fabio and Palazzeschi, 2015).

The MSPSS demonstrated excellent internal consistency across its three subscales (Family: Cronbach's $\alpha = 0.94$; Friends: Cronbach's $\alpha = 0.95$; Significant other: Cronbach's $\alpha = 0.91$).

4.4.3. Perceived Stress Scale (PSS)

Perceived stress was measured using the 10-item version of the Perceived Stress Scale (PSS; Cohen et al., 1983), a self-report instrument designed to assess the degree to which individuals appraise

situations in their lives as stressful. The scale evaluates the extent to which respondents perceive their lives as unpredictable, uncontrollable, and overloaded during the previous month. Items are rated on a 5-point Likert scale ranging from 0 (never) to 4 (very often). A total perceived stress score was calculated by summing all item responses after reverse scoring the positively worded items, with higher scores indicating greater perceived stress.

The Italian versions of the scale have shown good psychometric properties, supporting the factorial structure of the instrument and reporting satisfactory reliability indices, particularly for the 10-item version (Mondo et al., 2021). In the present study, the PSS-10 showed good internal consistency (Cronbach's $\alpha = 0.88$).

4.4.5. Positive and Negative Affect Schedule (PANAS-T) and Satisfaction With Life Scale (SWLS)

SWB was assessed using two instruments. The Positive and Negative Affect Schedule (PANAS; Watson et al., 1988) is a self-report measure designed to assess two independent dimensions of affect: Positive Affect (PA) and Negative Affect (NA). PA reflects the extent to which an individual feels enthusiastic, active, and alert, whereas NA represents a general dimension of subjective distress and unpleasant emotional engagement, including emotions such as fear, nervousness, and guilt. The PANAS consists of two 10-item subscales measuring positive and negative affect. Participants rate the extent to which they generally experience each emotion using a 5-point Likert scale ranging from 1 (very slightly or not at all) to 5 (extremely). In the present study, the trait version of the scale (PANAS-T) was used, which requires participants to report how they generally feel. Scores were calculated separately for the two subscales by summing the 10 items of PA and the 10 items of NA, with higher scores indicating greater levels of positive and negative affect, respectively. The Italian version of the PANAS has demonstrated good psychometric properties, including satisfactory reliability and validity, supporting the two-factor structure of positive and negative affect (Terracciano et al., 2003). The instrument

demonstrated excellent reliability for both Positive Affect (Cronbach's $\alpha = 0.91$) and Negative Affect (Cronbach's $\alpha = 0.92$).

SWB was also assessed using the Satisfaction With Life Scale (SWLS; Diener et al., 1985), a self-report instrument designed to measure individuals' global cognitive evaluation of their life satisfaction. The scale consists of five items assessing overall satisfaction with life rather than satisfaction within specific domains. Items are rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). A total life satisfaction score was calculated by summing the responses to the five items, with total scores ranging from 5 to 35 and higher scores indicating greater life satisfaction. The Italian version of the scale has shown good psychometric properties, confirming the unidimensional structure of the instrument and supporting its reliability and validity for assessing life satisfaction in Italian population (Di Fabio and Gori, 2016). The SWLS also showed excellent internal consistency (Cronbach's $\alpha = 0.90$).

4.5. Procedure

Participants accessed the study through a link to an online questionnaire distributed via social media and other digital channels (e.g., WhatsApp). After accessing the survey, participants were first presented with an informed consent form describing the objectives of the study and the voluntary and anonymous nature of participation.

After providing consent, participants completed a questionnaire collecting sociodemographic information, including their generational group. Generational belonging was operationalized based on participants' birth year, and the corresponding year ranges were provided to facilitate identification of the appropriate generation. Participants then completed a battery of self-report questionnaires assessing SPH, perceived stress, and perceived social support, SWB, as described in the Materials section.

Completing the survey required approximately 15-20 minutes. Responses were collected anonymously and stored in a secure database accessible only to the researchers.

4.6. Data analysis

Descriptive statistics, including means, standard deviations, frequencies, and percentages, were computed to summarize the main characteristics of the sample and the distribution of the study variables.

To examine generational differences, one-way analyses of variance (ANOVAs) were conducted across the four generational groups on SPH, perceived social support, perceived stress, positive affect, negative affect, and life satisfaction.

Pearson's correlation coefficients were computed to explore the associations among SPH, perceived social support, perceived stress, positive affect, negative affect, and life satisfaction.

Finally, hierarchical multiple linear regression analyses were conducted to examine the incremental contribution of generational belonging, the eight dimensions of SPH assessed through the SF-36, perceived social support, and perceived stress to the prediction of SWB. Generational cohort was entered in the first block, the eight SF-36 dimensions in the second block, and perceived social support and perceived stress in the third block. All statistical analyses were performed using Jamovi (version 1.0.7.0).

4.7. Results

4.7.1. Descriptive statistics

Descriptive statistics for SF-36, MSPSS, PSS, PANAS-T, and SWLS are reported in Table 2. Overall, participants reported relatively high levels of physical functioning and perceived social support. General health perceptions and vitality showed moderate average values. The levels of perceived stress

were moderate, while SWB indicators indicated moderate levels of life satisfaction and affective experiences.

	<i>M</i>	<i>SD</i>	<i>95% CI</i>
SF-36			
Physical Functioning	88.24	19.21	85.32-91.17
Role limitations due to physical health problems	78.57	34.42	73.33-83.81
Bodily pain	77.11	22.53	73.68-80.54
General health	59.91	17.81	57.20-62.62
Vitality	50.54	19.59	47.55-53.52
Social functioning	65.10	23.92	61.46-68.75
Role limitations due to emotional problems	61.71	40.40	55.55-67.86
Mental health	59.62	19.16	56.70-62.54
MSPSS			
Family	5.41	1.62	5.16-5.66
Friends	5.40	1.50	5.17-5.63
Significant other	6.10	1.14	5.92-6.27
Total	5.64	1.14	5.46-5.81
PSS			
Total	19.51	8.28	18.25-20.77
PANAS-T			
Positive affect	26.74	7.74	25.56-27.92
Negative affect	15.35	9.51	13.90-16.80
SWLS			
Total	20.83	7.12	19.75-21.92

Table 2. Descriptive statistics for SF-36, MSPSS, PSS, PANAS-T, SWLS (N = 168).

4.7.2. *Generational differences*

Before presenting the main analyses, it is important to acknowledge that the sample was unevenly distributed across generational cohorts, particularly with respect to the Baby Boomer group ($n = 9$), which was markedly smaller than the other cohorts. Consequently, results concerning generational differences

should be interpreted cautiously, as the small and unbalanced group sizes may reduce the stability of comparisons and increase the likelihood that some observed differences reflect sampling variability rather than true generational effects.

Self-perceived health: To examine whether SPH differed across generations, a series of one-way analyses of variance (Welch ANOVA) were conducted on the eight domains of the SF-36. The analyses revealed statistically significant generational differences in several health domains. In particular, significant effects of generation emerged for physical functioning [$F(3, 30.9) = 5.33, p = .004$], vitality [$F(3, 34.2) = 5.99, p = .002$], role limitations due to emotional problems [$F(3, 34.9) = 4.57, p = .008$], and mental health [$F(3, 33.9) = 3.77, p = .019$].

Post-hoc comparisons indicated that Baby Boomers reported significantly lower levels of physical functioning compared with Millennials and Generation Z ($p < .001$). No statistically significant differences emerged between Millennials and Generation Z. Regarding vitality, Baby Boomers showed significantly higher vitality scores compared with Millennials ($p = .016$) and Generation Z ($p < .001$). For role limitations due to emotional problems, Generation Z reported significantly lower scores than both Baby Boomers ($p = .017$) and Generation X ($p = .025$). Finally, mental health scores were significantly higher among Baby Boomers compared with Generation Z ($p = .027$). No statistically significant generational differences emerged for other dimensions of SF-36. Given the small size of the Baby Boomer group, however, these findings should be interpreted with caution.

Perceived social support: A series of one-way analyses of variance (Welch ANOVA) revealed a significant effect of generation on perceived family support [$F(3, 36.5) = 4.65, p = .007$]. Post-hoc comparisons indicated that Generation X reported significantly higher levels of family support compared to Generation Z ($p = .007$). No additional significant effects emerged. Given the unequal distribution of participants across cohorts, this finding should be interpreted with caution.

Perceived stress: The one-way Welch ANOVA analysis did not reveal a significant effect of generation on perceived stress [$F(3, 32.6) = 2.14, p = .114$]. Therefore, no statistically significant differences in perceived stress emerged across generational cohorts.

Subjective well-being: To examine generational differences in SWB, a series of one-way Welch analyses of variance were conducted on positive and negative affect and life satisfaction. The analyses did not reveal statistically significant generational differences in positive affect [$F(3, 33.2) = 1.96, p = .140$], negative affect [$F(3, 33.5) = 2.24, p = .101$], or life satisfaction [$F(3, 33.0) = 0.92, p = .440$]. Therefore, no statistically significant differences in subjective well-being emerged across generational cohorts.

4.7.3. Associations between self-perceived health, psychosocial factors, and subjective well-being

Pearson correlation analyses were conducted to examine the associations among SPH, perceived social support, perceived stress, and SWB (see Table 3).

The dimensions of the SF-36 were positively correlated with each other. Perceived social support was positively associated with most health dimensions, including general health ($r = .292, p < .001$), vitality ($r = .354, p < .001$), and mental health ($r = .353, p < .001$).

Perceived stress showed strong negative correlations with all health dimensions, particularly vitality ($r = -.651, p < .001$), social functioning ($r = -.626, p < .001$), and mental health ($r = -.769, p < .001$).

Regarding SWB, positive affect was positively associated with several health dimensions, including vitality ($r = .514, p < .001$) and mental health ($r = .593, p < .001$). At the same time, life satisfaction was positively associated with vitality ($r = .516, p < .001$) and mental health ($r = .583, p < .001$). In contrast, negative affect was negatively correlated with SPH, particularly vitality ($r = -.525, p < .001$) and mental health ($r = -.749, p < .001$).

Perceived stress was strongly associated with SWB, showing negative correlations with positive affect ($r = -.551, p < .001$) and life satisfaction ($r = -.584, p < .001$), and a strong positive correlation with negative affect ($r = .806, p < .001$).

		SF36_ PF	SF36_ RP	SF36_ BP	SF36_ GH	SF36_ VI	SF36_ SF	SF36_ RE	SF36_ MH	MSPSS TOT	PSS_ TOT	PA_ TOT	NA_ TOT	SWLS TOT
SF36_PF	r di	—												
	Pearson	—												
	gdl	—												
	valore p	—												
SF36_RP	r di	0.378***	—											
	Pearson	0.378***	—											
	gdl	166	—											
	valore p	<.001	—											
SF36_BP	r di	0.545***	0.561***	—										
	Pearson	0.545***	0.561***	—										
	gdl	166	166	—										
	valore p	<.001	<.001	—										
SF36_GH	r di	0.524***	0.450***	0.559***	—									
	Pearson	0.524***	0.450***	0.559***	—									
	gdl	166	166	166	—									
	valore p	<.001	<.001	<.001	—									
SF36_VI	r di	0.147	0.328***	0.321***	0.438***	—								
	Pearson	0.147	0.328***	0.321***	0.438***	—								
	gdl	166	166	166	166	—								
	valore p	0.057	<.001	<.001	<.001	—								
SF36_SF	r di	0.199**	0.423***	0.389***	0.399***	0.605***	—							
	Pearson	0.199**	0.423***	0.389***	0.399***	0.605***	—							
	gdl	166	166	166	166	166	—							
	valore p	0.010	<.001	<.001	<.001	<.001	—							
SF36_RE	r di	-0.005	0.440***	0.194*	0.248**	0.442***	0.599***	—						
	Pearson	-0.005	0.440***	0.194*	0.248**	0.442***	0.599***	—						
	gdl	166	166	166	166	166	166	—						
	valore p	0.950	<.001	0.012	0.001	<.001	<.001	—						

		SF36_ PF	SF36_ RP	SF36_ BP	SF36_ GH	SF36_ VI	SF36_ SF	SF36_ RE	SF36_ MH	MSPSS TOT	PSS_ TOT	PA_ TOT	NA_ TOT	SWLS TOT
SF36_MH	r di Pearson	0.243**	0.302***	0.347***	0.496***	0.745***	0.629***	0.488***	—					
	gdl	166	166	166	166	166	166	166	—					
	valore p	0.001	<.001	<.001	<.001	<.001	<.001	<.001	—					
MSPSS_ TOT	r di Pearson	0.159*	0.275***	0.340***	0.292***	0.354***	0.287***	0.266***	0.353***	—				
	gdl	166	166	166	166	166	166	166	166	—				
	valore p	0.040	<.001	<.001	<.001	<.001	<.001	<.001	<.001	—				
PSS_TOT	r di Pearson	-0.190*	-0.307***	-0.340***	-0.482***	-0.651***	-0.626***	-0.497***	-0.769***	-0.352***	—			
	gdl	166	166	166	166	166	166	166	166	166	—			
	valore p	0.014	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	—			
PA_TOT	r di Pearson	0.177*	0.237**	0.261***	0.439***	0.514***	0.383***	0.388***	0.593***	0.427***	-0.551***	—		
	gdl	166	166	166	166	166	166	166	166	166	166	—		
	valore p	0.022	0.002	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	—		
NA_TOT	r di Pearson	-0.220**	-0.250**	-0.276***	-0.427***	-0.525***	-0.540***	-0.447***	-0.749***	-0.301***	0.806***	-0.442***	—	
	gdl	166	166	166	166	166	166	166	166	166	166	166	—	
	valore p	0.004	0.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	—	
SWLS_ TOT	r di Pearson	0.240**	0.229**	0.330***	0.419***	0.516***	0.426***	0.319***	0.583***	0.418***	-0.584***	0.655***	-0.462***	—
	gdl	166	166	166	166	166	166	166	166	166	166	166	166	—
	valore p	0.002	0.003	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	—

Note. PF = Physical Functioning; RP = Role limitations due to physical health problems; BP = Bodily Pain; GH = General Health; VI = Vitality; SF = Social Functioning; RE = Role limitations due to emotional problems; MH = Mental Health; MSPSS = Multidimensional Scale of Perceived Social Support; PSS = Perceived Stress Scale; PA = Positive Affect; NA = Negative Affect; SWLS = Satisfaction With Life Scale. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3. Pearson correlation matrix among SPH dimensions (SF-36), perceived social support (MSPSS), perceived stress (PSS), and SWB indicators (PANAS and SWLS).

4.7.4. Hierarchical regression analyses predicting subjective well-being

Before presenting the regression analyses, it should be noted that the eight SF-36 dimensions were entered separately in the hierarchical regression models in order to preserve the multidimensional nature of SPH and to examine the specific contribution of each health domain to SWB, rather than relying on a single global indicator. This choice was considered theoretically relevant, as the use of an overall health score could have obscured potentially meaningful domain-specific effects. Given the relatively large number of predictors included in the models, multicollinearity diagnostics were examined. Across the regression models, VIF values ranged from 1.10 to 1.90 and tolerance values from .525 to .913, indicating no problematic multicollinearity among predictors.

Positive affect (PA): To examine the contribution of generation, SPH, perceived social support, and perceived stress in predicting positive affect (the first dimension of SWB), a hierarchical multiple linear regression analysis was conducted. In the first block, generation was entered (with Millennials as the reference category). In the second block, the eight dimensions of the SF-36 were included. Finally, in the third block, perceived social support (MSPSS) and perceived stress (PSS) were added.

Model 1, including only generation, was not statistically significant [$F(3,164) = 1.89, p = .134$], accounted for 3.3% of the variance in PA ($R^2 = .033$). In this model, a statistically significant difference emerged between Generation Z and Millennials ($\beta = -.38, p = .035$), indicating lower levels of positive affect among Generation Z participants. However, this effect did not remain significant in the other models.

The inclusion of SPH dimensions in Model 2 significantly improved the model, explaining an additional 37.5% of the variance ($\Delta R^2 = .375, p < .001$). Overall, Model 2 accounted for 40.9% of the variance in positive affect ($R^2 = .409$). Within this model, general health ($\beta = .21, p = .017$) and mental health ($\beta = .38, p < .001$) emerged as significant predictors.

In Model 3, the addition of perceived social support and perceived stress further improved the model, explaining an additional 4.6% of the variance ($\Delta R^2 = .046, p = .002$). The final model accounted for 45.5% of the variance in positive affect ($R^2 = .455$). In the final model, general health ($\beta = .19, p = .032$), mental health ($\beta = .28, p = .016$), and perceived social support ($\beta = .22, p = .002$) were significant predictors of positive affect. Conversely, perceived stress did not significantly predict positive affect ($p = .155$).

Negative affect (NA): To examine the contribution of generation, SPH, perceived social support, and perceived stress in predicting negative affect (the second dimension of SWB), a hierarchical multiple linear regression analysis was conducted. In the first block, generation was entered (with Millennials as the reference category). In the second block, the eight dimensions of the SF-36 were included. Finally, in the third block, perceived social support (MSPSS) and perceived stress (PSS) were added.

Model 1, including only generation, was not statistically significant [$F(3,164) = 2.39, p = .071$], and accounted for 4.2% of the variance in NA ($R^2 = .042$). In this model, a statistically significant difference emerged between Generation Z and Millennials ($\beta = .42, p = .022$), indicating higher levels of negative affect among participants from Generation Z. However, this effect did not remain significant in the subsequent models.

The inclusion of the SPH dimensions in Model 2 significantly improved the model, explaining an additional 54.6% of the variance ($\Delta R^2 = .546, p < .001$). Overall, Model 2 accounted for 58.8% of the variance in NA ($R^2 = .588$). In this model, mental health emerged as the only significant predictor ($\beta = -.69, p < .001$).

Finally, in Model 3, the addition of perceived social support and perceived stress further improved the model, explaining an additional 12.2% of the variance ($\Delta R^2 = .122, p < .001$). The final model accounted for 71.0% of the variance in NA ($R^2 = .710$). In the final model, mental health ($\beta = -.39, p < .001$), vitality ($\beta = .18, p = .013$), and perceived stress ($\beta = .59, p < .001$) emerged as significant predictors. Higher perceived stress was associated with higher levels of

NA, whereas better perceived mental health was associated with lower NA. Conversely, perceived social support did not significantly predict negative affect ($p = .799$).

Life satisfaction: To examine the contribution of generation, SPH, perceived social support, and perceived stress in predicting life satisfaction (the third dimension of SWB), a hierarchical multiple linear regression analysis was conducted. In the first block, generation was considered (with Millennials as the reference category). In the second block, the eight dimensions of the SF-36 were included. Finally, in the third block, perceived social support (MSPSS) and perceived stress (PSS) were added.

Model 1, including only generation, was not statistically significant [$F(3,164) = 0.93, p = .426$], and accounted for 1.7% of the variance in life satisfaction ($R^2 = .017$). No statistically significant differences between generations emerged in this model.

The inclusion of the SPH dimensions in Model 2 significantly improved the model, explaining an additional 36.9% of the variance ($\Delta R^2 = .369, p < .001$). Overall, Model 2 accounted for 38.6% of the variance in life satisfaction ($R^2 = .386$). In this model, mental health emerged as a significant positive predictor ($\beta = .35, p = .001$).

In Model 3, the addition of perceived social support and perceived stress further improved the model, explaining an additional 6.0% of the variance ($\Delta R^2 = .060, p < .001$). The final model accounted for 44.6% of the variance in life satisfaction ($R^2 = .446$). In the final model, perceived social support ($\beta = .21, p = .003$) and perceived stress ($\beta = -.26, p = .012$) emerged as significant predictors of life satisfaction. Higher perceived social support was associated with greater life satisfaction, whereas higher perceived stress was associated with lower life satisfaction.

4.8. Discussion

The present study aimed to examine the relationship between self-perceived health (SPH) and subjective well-being (SWB) across generations, while also considering the

contribution of perceived social support and perceived stress. In doing so, the study sought to provide a more comprehensive understanding of how individuals evaluate their health and overall well-being within different social and generational contexts. From this perspective, examining SPH and SWB through a generational lens may help clarify whether subjective evaluations of health and well-being vary across cohorts shaped by different socio-historical experiences. At the same time, given the unequal distribution of participants across generations, and particularly the small size of the Baby Boomer group, generational findings should be interpreted with caution.

To address these objectives, the study adopted an observational, cross-sectional design and compared different generational cohorts (Baby Boomers, Generation X, Millennials, and Generation Z). In addition to examining generational differences, the study also examined the relationship between SPH and SWB and investigated the potential role of perceived social support and perceived stress as psychosocial factors associated with these constructs. Overall, the findings partially support the study hypotheses and provide insight into how health perceptions and psychosocial resources, such as social support and stress, are associated with well-being outcomes.

First, the hypothesis (H1) that SPH and SWB would differ across generations received only partial support. Significant differences emerged in some dimensions of SPH, namely physical functioning, vitality, role limitations due to emotional problems, and mental health, as well as in perceived family support. By contrast, no statistically significant generational differences were found for perceived stress or for any of the three indicators of SWB.

More specifically, the Baby Boomer group reported lower physical functioning than Millennials and Generation Z. This pattern may be broadly consistent with previous literature documenting age-related declines in physical functioning and health-related quality of life in older adults (Buckley et al., 2013). However, the same group also reported higher vitality than Millennials and Generation Z, as well as higher mental health scores than Generation Z. In

addition, Generation Z reported lower scores on role limitations due to emotional problems than both Baby Boomers and Generation X, suggesting greater interference of emotional difficulties with everyday functioning (Pesau, 2025). Although these findings may be tentatively interpreted in light of cohort-specific differences in life stage, social pressures, and psychological challenges (Hartman-Stein and Potkanowicz, 2003; Pesau, 2025), such interpretations should remain cautious. In the present study, the markedly small size of the Baby Boomer group makes it difficult to determine whether these differences reflect stable generational patterns or sampling variability.

A similar caution applies to the finding that Generation X reported higher perceived family support than Generation Z. This result may be consistent with literature suggesting that social relationships tend to become more stable and emotionally meaningful across adulthood (Coventry et al., 2004; Luong et al., 2011). At the same time, younger individuals may experience more fluid or less consolidated family and social relationships. Nevertheless, given the imbalance across cohorts, this finding should be interpreted as preliminary rather than conclusive.

However, contrary to expectations, no statistically significant generational differences emerged in the three indicators of SWB when examined through group comparisons. Positive affect, negative affect, and life satisfaction did not significantly differ across generations. This result suggests that, in the present sample, generational belonging was not associated with overall differences in SWB at the group-comparison level. This finding does not necessarily rule out the importance of socio-historical context, but it does indicate that generational membership alone may be insufficient to account for variability in well-being outcomes. Rather, more proximal health-related and psychosocial factors may be more relevant in explaining individual differences in SWB, as demonstrated in the following results.

A similar pattern emerged in the hierarchical multiple regression analyses. In the first-step models, generation showed some limited associations with affective well-being, as

Generation Z reported lower positive affect and higher negative affect than Millennials. However, these effects disappeared once SPH and psychosocial variables were entered into the models. In the final models, generation was no longer a statistically significant predictor of positive affect, negative affect, or life satisfaction. Although these findings should again be interpreted cautiously in light of the small and uneven generational groups, they suggest that the association between generational belonging and well-being may be attenuated once more proximal individual and psychosocial variables are taken into account. In this sense, the results do not support a strong independent role of generational membership in predicting SWB within the present sample. From a theoretical perspective, this pattern is more consistent with the relevance of proximal health-related and psychosocial factors than with a strong independent effect of generational membership. In this sense, the results are consistent with a biopsychosocial perspective, according to which well-being emerges from the interplay between health status, psychological processes, and social resources rather than from demographic characteristics alone (Engel, 1977).

Regarding H2, the hypothesis that SPH would be positively associated with SWB was supported. Correlational analyses showed that several dimensions of the SF-36 were significantly associated with positive affect, negative affect, and life satisfaction. In particular, mental health emerged as the most consistent health-related correlate across all three SWB dimensions. Better perceived mental health was associated with higher positive affect and life satisfaction, and with lower negative affect. This finding is consistent with previous literature showing that subjective evaluations of health are closely intertwined with individuals' overall quality of life and emotional functioning (Angner et al., 2013; Graham et al., 2011; Helliwell, 2011; Mizobuchi, 2017). More specifically, the present results suggest that among the different dimensions of SPH, the psychological component may be especially relevant in explaining how people evaluate their well-being (Keller, 2020).

The regression analyses further reinforced this interpretation. In the model predicting positive affect, both mental health and general health emerged as significant predictors in the final model, suggesting that both a positive psychological condition and a more general positive evaluation of one's health may contribute to more frequent positive emotional experiences (Richman et al., 2005). In the model predicting negative affect, mental health again emerged as a significant predictor, this time in the expected negative direction. In the model predicting life satisfaction, mental health was significant in the second step, although in the final model its effect was no longer significant once perceived social support and perceived stress were added. Taken together, these findings support the view that SPH is meaningfully associated with SWB (Monden, 2024), while also indicating that different health domains may relate differently to its affective and cognitive components.

One result that deserves a more cautious interpretation concerns vitality in the prediction of negative affect. In the final model, vitality emerged as a significant positive predictor of negative affect, a pattern that appears less intuitive from a theoretical standpoint. This finding may reflect a more complex relationship among health dimensions and psychosocial variables within the multivariate model, rather than a straightforward substantive effect. Accordingly, this result should be interpreted prudently and may warrant further investigation in future studies.

With regard to H3, the findings supported the expected associations between psychosocial variables, SPH, and SWB. Perceived social support was positively associated with most health dimensions and with positive affect and life satisfaction, whereas perceived stress was negatively associated with all health dimensions and showed strong negative correlations with positive affect and life satisfaction, together with a strong positive correlation with negative affect. Particularly notable was the strong association between perceived stress and mental health, as well as between perceived stress and negative affect, suggesting that stress may be especially relevant for the more distress-related aspects of well-being (Ng et al., 2009).

Finally, H4 was also supported, as perceived social support and perceived stress contributed significantly to the prediction of SWB, although their effects differed depending on the outcome considered. Perceived social support significantly predicted positive affect and life satisfaction in the final model, but it did not significantly predict negative affect. This suggests that social support may function more as a promotive factor for the positive dimensions of well-being than as a direct buffer against negative emotional states. This interpretation is coherent with previous studies highlighting the beneficial role of supportive relationships in fostering well-being and adaptive functioning (Gençöz et al., 2004; Teh et al., 2015).

By contrast, perceived stress emerged as a particularly important predictor of the more maladaptive side of well-being. In the final regression model, perceived stress significantly predicted higher negative affect and was also associated with lower life satisfaction, whereas it did not significantly predict positive affect once the other variables were controlled. These findings suggested that perceived stress may be especially relevant in explaining distress-related and evaluative components of well-being, rather than the experience of positive emotionality *per se*. Notably, the model predicting negative affect explained the largest proportion of variance among the three outcomes, indicating that negative emotional states may be particularly sensitive to the combined influence of mental health and perceived stress (Feng et al., 2023; Moreta-Herrera et al., 2023).

Taken together, the findings reveal a coherent overall pattern. Positive affect was primarily associated with mental health, general health, and perceived social support. Negative affect was mainly explained by perceived stress and mental health, with vitality also contributing significantly. Life satisfaction, in turn, was primarily associated with social support and perceived stress. Thus, although the three components of SWB were related, they appeared to be associated with partly distinct combinations of health-related and psychosocial factors. This result supports the multidimensional conceptualization of SWB and suggests that its affective and cognitive components should be examined separately (Diener et al., 2018).

In conclusion, the present study suggests that SWB was more closely linked to perceived mental health, perceived social support, and perceived stress than to generational membership itself. Although some generational differences emerged in specific dimensions of SPH, generation did not independently predict positive affect, negative affect, or life satisfaction once health-related and psychosocial variables were considered. Taken together, these findings indicate that SWB may be more meaningfully explained by proximal health-related and psychosocial factors than by generational belonging alone. Thus, contrary to expectations, generational membership did not emerge as a particularly relevant factor in explaining SWB in the present study.

4.9. Limitations and conclusive remarks

Some limitations should be acknowledged. First, the cross-sectional design does not allow causal conclusions to be drawn. Although the findings show statistically significant associations between SPH, psychosocial variables, and SWB, it is not possible to determine the direction of these relationships. For example, better perceived health may promote higher well-being, but it is also plausible that individuals with greater well-being evaluate their health more positively. Second, the sample size across generational groups was unbalanced, with a relatively small number of participants in the Baby Boomer group. This may have reduced the power to detect between-group differences and may limit the stability of some generational comparisons. Third, all variables were assessed through self-report measures.

Despite these limitations, the study offers several relevant contributions. It adds to previous literature by jointly examining SPH, perceived social support, perceived stress, and SWB, while also considering generational differences as a contextual framework. Importantly, the results suggest that, although some differences in health perceptions emerged across cohorts, SWB was more closely associated with perceived mental health and psychosocial resources than with generational belonging itself. These findings may have practical implications, as they

suggest that efforts to promote well-being may benefit more from focusing on mental health, supportive social relationships, and perceived stress than from relying on generational labels alone.

CONCLUSION

The present thesis set out to examine how health and well-being can be understood in ways that account for their complexity and contextual embeddedness. Rather than reiterating their multidimensional nature, the findings of this work demonstrate how this complexity operates in practice, showing that health and well-being emerge from the dynamic interplay between individual, relational, and structural factors, in line with the biopsychosocial framework (Engel, 1977).

Across the studies, a central result concerns the role of multiple determinants in shaping both the experience and the representation of health and well-being. Personal, social, economic, and socio-historical factors do not act independently, but interact in ways that influence how individuals interpret, regulate, and make sense of their well-being across contexts and life stages. In particular, the findings highlight the importance of subjective representations as a key mechanism through which structural conditions are translated into lived experience.

The integrative roadmap proposed in this thesis provides a way of making these interactions analytically visible. By connecting theoretical models, intervention contexts, and subjective meanings within a single framework, it allows for the interpretation of health and well-being across different levels of analysis, moving from general conceptualizations to situated experiences. In doing so, the roadmap makes it possible to examine how determinants operate simultaneously at multiple levels, rather than being treated as isolated or additive influences.

The four chapters of the thesis can be understood as complementary steps within this process. Chapter 1 establishes the theoretical foundations, framing health and well-being as multidimensional and evolving constructs. Chapter 2 focuses on personal determinants within an intervention context, showing how psychological well-being, emotion regulation, and self-efficacy can be supported and transformed through counseling processes. Chapter 3 shifts attention to social and economic determinants, highlighting how individuals construct multiple

and coexisting meanings of health and well-being within their everyday environments. Finally, Chapter 4 examines socio-historical determinants through the lens of generational differences, showing that variability in subjective well-being is more strongly associated with proximal factors – such as mental health, perceived stress, and social support – than with generational membership alone.

Taken together, these findings both align with and extend existing literature. On the one hand, they confirm the relevance of well-established psychosocial factors in explaining health and well-being. On the other hand, they offer a more nuanced understanding of how these factors operate in interaction, and how their effects are mediated by subjective meaning-making processes. In particular, the results suggest that broad categorical distinctions, such as generational belonging, may be less informative than the specific configurations of psychological and social determinants through which individuals experience their well-being.

These insights also have important implications for research, practice, and policy, which are closely interconnected. They suggest that studying health and well-being requires approaches capable of capturing interactions between levels, rather than isolating single predictors, and that interpreting results demands attention not only to structural conditions but also to how these are subjectively understood. From an applied perspective, the findings highlight the importance of designing interventions that address both psychological resources and the meanings individuals attribute to their health and well-being, particularly in contexts of transition and vulnerability. At the same time, they point to the need for policies that focus on key psychosocial determinants – such as mental health, social support, and stress – while remaining sensitive to the variability of individual experiences and to the contextual nature of well-being.

At the same time, this work is not without limitations. The reliance on self-reported measures, while coherent with the focus on subjective representations, may have introduced biases related to individual interpretation and response tendencies. In addition, the

characteristics of the samples and the contextual specificity of the studies limit the generalizability of the findings. Furthermore, the cross-sectional nature of part of the research design constrains the possibility of capturing changes over time and drawing causal conclusions.

However, these limitations open up meaningful directions for future research. Longitudinal designs would allow for a better understanding of how health and well-being evolve across life transitions and changing contexts. Further studies could explore these processes in more diverse socio-cultural settings, in order to examine how different configurations of determinants shape both experiences and representations. Moreover, integrating qualitative and quantitative approaches may provide a richer account of how structural conditions are translated into subjective meanings. Finally, future research may further investigate how different determinants interact over time, rather than considering them as independent influences.

In conclusion, this thesis contributes to the literature by proposing an integrative framework that connects structural determinants, intervention processes, and subjective representations of health and well-being. What distinguishes this work is its attempt to show how these dimensions operate together across different levels of analysis, offering a process-oriented understanding of health and well-being as dynamic, relational, and context-dependent phenomena. By doing so, it provides a foundation for more integrated approaches to studying and promoting health and well-being that remain grounded in both structural conditions and lived experience.

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