



The Value of Autonomy for the Good Life. An Empirical Investigation of Autonomy and Life Satisfaction in Europe

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Abstract

This paper examines the association of opportunity and choice enhancing societal conditions and perceived autonomy with life satisfaction in Europe. Building on the capability approach, I investigate whether the positive effects of six basic functionings—safety, friendship, health, financial security, leisure, and respect—on people’s life satisfaction are weaker when people have more opportunity and choice. This paper addresses two main questions: (1) Are people more satisfied with their life when they have more opportunity and choice? (2) Do basic functionings play a smaller role for life satisfaction in societies that enable more opportunity and choice and for individuals with more perceived autonomy? The analyses are based on the European Quality of Life Survey (2016), covering 36,460 individuals in 33 European countries and using multilevel linear regressions. My study finds that both choice and opportunity enhancing societal conditions and individual’s perceived autonomy are positively associated with on life satisfaction. Further, all six basic functionings are conducive to individual life satisfaction. The positive effects of health, financial security, respect, and friendship are reduced when people experience a great deal of autonomy over their lives. Societal conditions that provide people with more opportunity and choice further lower the positive effects of financial security, leisure, respect, and safety on individual life satisfaction. This corroborates the importance the capability approach attributes to individual opportunities and freedom of choice.

Keywords Autonomy · Life satisfaction · Capability approach · Opportunity and choice · Basic functionings · Europe

1 Introduction

Autonomy, understood as the ability to decide how to live one’s own life, plays a fundamental role in shaping well-being. Individual perceived autonomy has been shown to be related to the three general components of subjective well-being (Diener 1984): perceived autonomy enhances *life satisfaction* (Conzo et al. 2017; Delhey and Steckermeier 2016; Maridal, 2017; Verme 2009; Welzel and Inglehart 2010); increases *positive affect*

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like happiness (Delhey and Steckermeier 2016; Maridal 2017); and protects from *negative affect* such as depressiveness (Chaves et al. 2018; Karim et al. 2015). Further, people who feel they have autonomy over their lives show a more positive future time perspective (Coudin and Lima 2011), are more trusting toward others (Chaves et al. 2018; Conzo et al. 2017; Karim et al. 2015), and are less prone to conflict thinking (Spruyt et al. 2018).

Increasing individual autonomy and its relevance for social change also constitutes a major component of modernization theory (Sztompka 1993, ch. 13). Through the lens of different disciplinary foci, autonomy has been viewed as a key element of cultural change and as necessary for individual self-actualization (Welzel and Inglehart 2010), as a basic psychological need for mental and physical development and functioning (Deci and Ryan 2002), and as the freedom to “do and achieve whatever in pursuit of whatever goals or values [a person] regards as important” (Sen 1985, pp. 203). One of the most comprehensive theoretical models revolving around individuals’ autonomy is provided by the capability approach (CA), as developed by Amartya Sen (1985, 2001, 2005) and further developed by Martha Nussbaum (2001b, 2002, 2014) and other scholars (Alkire 2005; Robeyns 2005). At the heart of the CA lies the idea of focusing on peoples’ capabilities—what they are able to be and do—instead of their achieved functioning—what they in fact are and do. By distinguishing between possible capability and actual functioning, individuals are understood as active agents with different prerequisites and conceptions of what constitutes a good life. The CA considers that two people with the same set of functionings might have completely different levels of well-being. This means that the individual relevance of an achieved functioning such as financial security or health on individual well-being varies depending on their autonomy—that is, whether they *choose* to achieve or not achieve this functioning. The CA further recognizes that individuals are embedded in socio-economic, environmental, and cultural contexts that can provide (or prohibit) opportunities as well as enable (or constrain) individual choice. These societal conditions range from public provision of health care and education to enforcements of human rights to the social norm to work or the importance of family values.

Despite a growing body of research on the relationship between various functionings—like being in good health—and subjective well-being (for a comprehensive overview, see Veenhoven 2010) and between autonomy and subjective well-being (e.g., Okulicz-Kozaryn 2015; Veenhoven 1999, 2000; Verme 2009; Welzel and Inglehart 2010), only a few studies have investigated how the relationship between functioning and well-being is shaped by individual autonomy (Eichhorn 2012; Steckermeier 2019; Welzel and Inglehart 2010). Likewise, while the relationship between subjective well-being and various societal conditions like national wealth, income inequality, or culture have been examined in detail (for comprehensive literature reviews see Ngamaba et al. 2018 and Steel et al. 2018), only a few studies have explored how these societal conditions influence the link between functionings and subjective well-being (Delhey 2010; Inglehart et al. 2008).

By incorporating elements of the CA into subjective well-being research, this article aims to shed light on the role both *individuals’ perceived autonomy* and *societal conditions that provide opportunities and enable choice* play in shaping the importance of achieved functionings for individuals’ well-being. It provides a comprehensive quantitative test of the effects of individual autonomy and societal opportunity for individuals’ subjective well-being, guided by the following two questions:

First, how do societal conditions that enable people’s opportunity and choice, as well as individual autonomy, relate to individuals’ subjective well-being?

Second, how is the relationship between achieved functionings and subjective well-being influenced by individual autonomy and by opportunity and choice enhancing societal conditions?

This article is composed as follows. In the next section, I provide a brief introduction to the CA and its main assumptions on the interplay between autonomy, functionings, and well-being. The second section discusses previous research that provides insights into the above mentioned research questions. Using data from the European Quality of Life Survey 2016, comprising 36,000 individuals in 33 European countries, I explore these empirical relationships, applying multilevel modeling to control for and incorporate the country-specific cultural and socioeconomic conditions in which individuals are embedded. Finally, I discuss the key findings against the background of the CA.

1.1 Conceptual Framework

Individual autonomy is an integral part of various concepts within the humanities and social sciences. Depending on the approach, autonomy is regarded, for example, as a universal value (Schwartz 2012), agency freedom (Sen 1985), or a dimension of psychological well-being (Deci and Ryan 1985). Some approaches consider individual autonomy as a *component* of their well-being and development: understood as the ability to act willingly and in accordance with one's interests and values, autonomy is seen as one of the basic needs that foster individual well-being (Chirkov et al. 2003; Doyal and Gough 1984; Ryan and Deci 2000). Autonomy is necessary for reaching the top of Maslow's pyramid—self-actualization—and it enhances people's ability to adapt to change (Welzel and Inglehart 2010, pp. 44, 48). In contrast, within the capability framework, autonomy and well-being are seen as two *separate* aspects of a person which “each also yield a corresponding notion of freedom” (Sen 1985, pp. 169). Whereas well-being freedom refers to the freedom to achieve something *specific*—namely well-being—agency freedom refers to the freedom to achieve *anything* a person autonomously chooses to achieve (Sen 1985, pp. 203–204). Thus, within the CA, autonomy refers to the ability to pursue the goals that a person values. Advancing one's goals *can* contribute to individual well-being, but it does *not necessarily* have to (Alkire 2008a, b). For example, if someone donates blood at the blood bank, his or her agency goals might be advanced, yet at the same time his or her immediate well-being might be impaired due to blood loss or a fear of needles. Therefore, from a CA perspective, autonomy is not only distinct from well-being but should also not solely be evaluated in terms of its influence on well-being (Nussbaum 2001b, pp. 87; Sen 1985, pp. 187; 2001, pp. 53).

Consistent with the CA, I understand autonomy as distinct from well-being. As people's autonomy cannot be observed directly, this article will rely on individuals' self-reported—that is, *perceived*—autonomy, as is the common practice in empirical research. How people evaluate the freedom they have to decide how to live their lives should reflect the opportunities they perceive themselves to have (opportunity freedom) as well as the amount of choice they experience (freedom of choice). Relying on self-evaluated autonomy has both advantages and disadvantages resulting from perception biases. On the one hand, people might over- or underestimate the autonomy they objectively have, or might factor in opportunity and choice to different extents. On the other hand, in accordance with the Thomas theorem (Thomas and Thomas 1928), when people experience their level of autonomy as very high (or very limited), this perception will shape their actions and thus will have real consequences for their well-being.

1.1.1 Capabilities and Functionings

The CA distinguishes between capabilities and functionings (Nussbaum 2001b, 2002, 2014; Robeyns 2005; Sen 1985, 2001, 2005). Functionings encompass all states an individual realizes and all activities he or she engages in. A functioning is descriptive, not normative: being well nourished is just as much a functioning as playing computer games. Nonetheless, some functionings, such as feeling safe or being educated and well nourished, are rather universally understood as desirable while others are not. Such evaluations should, however, only be made after taking into consideration the context (e.g., voluntary dieting vs. anorexia) and the normative framework (e.g., religious fasting). Capabilities, in contrast, can be understood as the realistic possibility to achieve a functioning. They comprise both the opportunity to choose and the ability to choose. For example, the capability to be well nourished requires a supply of and access to food (opportunity freedom), as well as the individual's actual freedom to choose whether or not to be nourished (freedom of choice). This allows us to distinguish between those who are starving and those who are fasting for health or religious reasons, for instance.

All capabilities available to a person taken together make up their capability set, and all achieved functionings make up their functioning set. The capability set of a person and his or her functioning set need not be identical. When people have the opportunity and choice to live their lives according to their goals and values, their functioning set will be a reflection of the life they perceive to be worth living and thus will exclude the capabilities a person has but has autonomously decided not to transform into a functioning.

Despite the CA's general emphasis on capability, it recognizes that a life full of capability yet without any achieved functioning could hardly be considered a good life (Nussbaum 2001b). Still, the main emphasis of the CA lies on people's autonomy. A person who *chooses* to be a workaholic is likely more content with his or her life than when forced to slow down. If this work-oriented lifestyle is, however, the result of social norms or faulty work protection policies, the autonomy of this person is impaired. Nussbaum argues: "If people do not have choices, and do what they do because of requirements, their actions may no longer have the same worth, and may in effect be different functions. [...] Play is not play if it is enforced, love is not love if it is commanded" (Nussbaum 2001b, 88). In contrast, in exceptional cases it might even be considered desirable when public policy restricts choice to enable functioning—for example, enabling safety and health by "forcing" people to wear a seatbelt or a helmet (Nussbaum 2001b).

1.1.2 The Basic Capabilities

Which capabilities are relevant or even necessary to live a good life depends on context and is subject to change over time (Sen 2004, pp. 78). Although Sen (2004, 2005) is opposed to the idea of a fixed list of universal capabilities, he deems such lists useful when they are designed for a certain purpose (e.g., measuring human development) and take into account a society's social conditions and needs. In contrast, Nussbaum (2002, pp. 131) advocates a list of basic capabilities of cross-cultural adequacy. The current version of her list (Nussbaum 2006, pp. 76–78) encompasses, among others, the capabilities to be bodily healthy, have bodily integrity, live and engage with other people as well as respect and be respected, have leisure time filled with play and enjoyment, and have control over one's political and material environment. Similar compilations have been proposed, for example, by Allardt (1993), who, in the terminology of the CA, summarizes a range of functionings

and individual conversion factors under the categories of having, loving, and being (Allardt 1993, pp. 89). Other concepts, like Max-Neef's (1992) compilation of human needs and Skidelsky and Skidelsky's (2013) basic goods, summarize more or less the same capabilities compiled by Nussbaum under other terms. In practice, such compilations find their counterparts in aggregate-level indices, such as the Human Development Index (Anand and Sen 1994) or the OECD's Better Life Index (OECD 2011), as well as in individual-level indices, such as the Good Life Index (Delhey and Steckermeier 2016) or the domain satisfaction approach in subjective well-being research (Binder 2014; Diener and Diener 2009; Kaliterna Lipovčan and Prizmić-Larsen 2006; Rojas 2006).

1.1.3 Means and Conversion Factors

Capabilities and functionings are constrained by personal, social, and environmental means and conversion factors (Robeyns 2005; Sen 2005). Individual means encompass the goods and resources a person holds, such as income, real estate, or a bicycle. Societal means comprise goods and services owned or provided by collective actors, such as national wealth or health care. Conversion factors influence the relationship between means and functionings. Personal conversion factors encompass the abilities and characteristics tied to a person, such as physical condition, education, gender, or the ability to ride a bicycle. Social conversion factors include public policies, but also social norms and values—for example, the right to paternity leave or the standards of propriety governing whether women should ride a bicycle. Environmental conversion factors comprise climate and geographical conditions, such as the presence of certain diseases or the condition of the manmade environment, like bike paths. The CA thus takes into account that people's *ability* to transform an opportunity into a functioning is not merely a function of personal means and conversion factors, but also of societal means and socio-environmental conversion factors (Robeyns 2005).

1.1.4 Linking Achieved Functionings to Subjective Well-being

A functioning vector is thus a result of the capability set available to a person combined with his or her idea of what constitutes a good life—that is, which capabilities they choose to transform into functionings—as well as of the means invested to achieve these functionings and the societal conditions enabling (or restricting) opportunity and choice (Sen 1985, 1988, 1993). These differences in opportunity and choice in achieving certain functionings should be reflected by subjective evaluations of the functioning vectors: take two people who work overtime, nights, and weekends. One is a self-employed workaholic who voluntarily chooses to work as much as possible in pursuit of making her young business profitable, whereas the other is compelled to work overtime because he needs his job and is—due to poor employment protection in his country and an overarching norm to work long hours—afraid to contact his union representative. Both will report long working hours, a lack of free time and leisure, and a certain degree of financial insecurity, but they differ significantly regarding their opportunities and their autonomy. The second person's achieved functioning vector does not correspond to his idea of the good life. He would therefore suffer more from his work situation than the young entrepreneur who chose a work-centered life. Factoring in an individual's opportunities and choices when evaluating achieved functionings can therefore help to explain how people with identical functioning vectors end up with different levels of subjective well-being. The poorer the opportunities available and

the weaker an individual's autonomy is, the more strongly his or her subjective well-being will be affected by their achieved functioning; conversely, the better the opportunities and the more extensive a person's autonomy is, the less reflective their subjective well-being will be of their achieved functioning vector.

1.1.5 The Capability Approach and Subjective Well-being

The CA understands well-being as the “ability to achieve valuable functionings” (Sen 1985, pp. 200), which is neither reflected by the possession of goods nor by the achieved functionings nor by personal utility (Sen 1985, 1993). Equating resources with well-being neglects that individuals vary in their conversion abilities: people with disabilities, for example, might require different resources to achieve certain functionings. Equating achieved functioning with well-being neglects people's choice regarding their conception of what constitutes a good life (Nussbaum 2002). Finally, equating personal utility with well-being neglects that people's lives are not solely focused on maximizing happiness, that happiness can be a product of negative influences (e.g., drugs), and that people adapt to their circumstances (Nussbaum 2001a; Sen 1979, 1985). Therefore the CA opposes the evaluation of people's well-being *exclusively* on the basis of subjective well-being measures such as happiness (Sen 1979). This does not, however, exclude the possibility of complementing the CA concept of well-being with individuals' own sense of their well-being. In recent years there have been several efforts to integrate the CA and subjective well-being research conceptually (e.g., Binder 2014; Comim 2008; Schokkaert 2007) and empirically (Anand et al. 2005, 2009, 2011; Hasan and Khan 2015). Notwithstanding their differences in data base, operationalization, and methods, these analyses show that an individual's capabilities and functionings *are* statistically positively linked to subjective well-being. Following the CA, most of these studies reject the more hedonic measure of happiness and instead rely on the cognitive component of subjective well-being: life satisfaction. The works of Anand et al. (2005, 2009, 2011), especially, demonstrate that individuals' evaluation of their life is informed by self-reported capabilities beyond the effects of demographics and personality traits. The subsequent analyses will therefore also use individual life satisfaction as the outcome measure.

1.2 Conceptual Model of the Subsequent Analyses

To investigate the relationships between individuals' opportunity and choice, their functionings, and well-being, the above presented theoretical assumptions need to be transformed into empirically testable hypotheses. As already noted, individual autonomy cannot be measured directly, and I will therefore focus on *perceived autonomy* (controlled for a range of individual-level means and conversion factors). As individual opportunity and choice is further influenced by societal means and conversion factors, I will also include a selection of *societal conditions*—including economic factors (national wealth and income inequality), freedoms (civil liberties), and climate of cultural values (tolerance). These societal conditions are indicators of an environment that creates and warrants opportunity

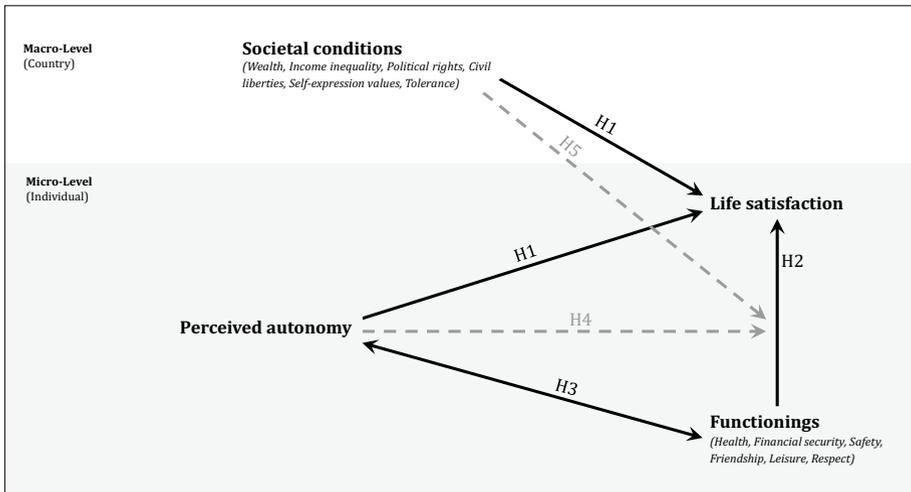


Fig. 1 Theoretical model with hypotheses. Black arrows present hypotheses for direct relationships, the double arrow presents the hypothesis for correlations, and dashed grey arrows present hypotheses for interaction terms

and enables or even empowers people to exercise their freedom of choice. From a capability point of view, individual well-being will be captured by six *basic functionings*: health, financial security, safety, friendship, leisure, and respect¹; individual subjective well-being will be captured by their *satisfaction with life*.

If—as the CA assumes—it makes a difference whether a functioning is or is not a result of choice, this difference should also be reflected in individual life satisfaction. Those who starve because of famine should be worse off than those who starve because they are dieting, and those who religiously fast because it is important to them personally should be better off than those who fast because they feel pressured by societal norms to engage in that practice. The subsequent analysis will thus investigate whether and how the relationship between life satisfaction and the six basic functionings is influenced by individuals' perceived autonomy and the societal conditions in which they are embedded. Figure 1 summarizes the central theoretical assumptions incorporating elements of both the CA and subjective well-being research.

As shown in Fig. 1, the theoretical model assumes that people's life satisfaction is positively and independently influenced by both their perceived autonomy and societal conditions that enable opportunity and choice (H1). An individual's achieved functionings exert a positive influence on their life satisfaction (H2) and are themselves positively correlated with perceived autonomy (H3). The positive influence of an individual's achieved functionings on life satisfaction is dampened by perceived autonomy (H4) as well as by societal conditions (H5).

¹ The basic functionings are largely derived from Skidelsky and Skidelsky's (2013) list of basic goods, which also draws on Nussbaum's (2000) list of central human capabilities. The final choice was largely driven by the data available.

1.3 Literature Review and Hypotheses

A growing body of empirical research has investigated the role of autonomy in people's lives, be it as a direct measure of perceived choice and control (e.g., Verme 2009) or as part of more comprehensive concepts such as eudaimonic well-being (*EWB*, e.g., Chaves et al. 2018), psychological well-being (*PWB*, e.g., Goswami and Pollock 2016), self-development (*SDV*, e.g., Delhey and Steckermeier 2016), life optimism (*LO*, e.g., Kafková, 2018) or psychological functioning (*PF*, e.g., Peralta et al. 2018). Whenever perceived autonomy is measured as part of an index (e.g., *SDV*, *EWB*, *PWB*, *LO*, or *PF*), this will be indicated accordingly. The literature review follows the above presented hypotheses.

H1 *Individual autonomy and societal conditions that enable both opportunity and choice individually have a positive impact on subjective well-being.*

Many studies have shown that autonomy enhances subjective well-being. This relationship has been found in cross-sectional individual-level analyses (Chaves et al. 2018 [EWB]; Delhey 2010; Delhey and Steckermeier 2016 [SDV]; Kara and Petrescu 2018; Karim et al. 2015; Maguire et al. 2019; Maridal 2017; Verme 2009) as well as in country-level (Conzo et al. 2017) and longitudinal analyses (Inglehart et al. 2008; Welzel and Inglehart 2010).

Societies and collective actors can further supply opportunities and choice, for example by providing services, guaranteeing freedoms, and creating and sustaining a value climate that enables individuals to make free choices. Wealthier societies have been shown to spend more on social welfare like health care or child and family support (Bahle et al. 2010; Chahoud et al. 2016); they also provide better access to public facilities such as public transportation (Whelan and Maître 2012) and protection from material deprivation (Bárcena-Martín et al. 2014; Whelan and Maître 2012). Income inequality, on the other hand, has been linked to lower public expenditure in social protection (Marrero and Rodríguez 2012), education (Manzano 2013), and health (Bhandari et al. 2015), and to insufficient protection from material deprivation (Bárcena-Martín et al. 2014; Whelan and Maître 2012). While a large number of studies found a positive effect for national wealth on life satisfaction over and above the effect of individual perceived autonomy (Chua et al. 2020; Delhey and Steckermeier 2016 [SDV]; Haller and Hadler 2004, 2006; Inglehart et al. 2008; Ng and Diener 2014; Ngamaba 2017; Nguyen et al. 2020; Verme 2009), the evidence with respect to income inequality is rather mixed: some find a negative impact (Pitlik et al. 2015; Nguyen et al. 2020), whereas others find a positive (Haller and Hadler 2006) or no significant impact at all (Delhey and Steckermeier 2016 [SDV]; Haller and Hadler 2004; Ngamaba 2017).

Regarding freedoms, political rights and civil liberties (Brulé and Veenhoven 2014; Chua et al. 2020; Haller and Hadler 2006; Maridal 2017), political freedom (Bavetta et al. 2017), and economic freedom (Brulé and Veenhoven 2014) have been shown to enhance life satisfaction beyond the positive effect of individual perceived autonomy.

Finally, positive value climates like high levels of tolerance and respect prevalent in a society (Inglehart et al. 2008; Lun and Bond 2016; Ng and Diener 2014) and a strong emphasis on self-expression values (Lun and Bond 2016) also exert a positive influence on life-satisfaction—again, when controlled for individuals' perceive autonomy.

H2 *All achieved basic functionings have a positive effect on subjective well-being.*

The positive effect of various functionings, such as health and financial security, on subjective well-being has been well established for individual functionings (for a comprehensive overview, see Veenhoven 2010) and combinations thereof (Anand et al. 2011; Delhey and Steckermeier 2016; Vladislavljevic and Mentus 2019; Western and Tomaszewski 2016).

H3 *Achieved functionings and individual autonomy are positively related.*

Regarding the functioning of health, autonomy has been linked to better subjective health (Chaves et al. 2018 [EWB]; Ervasti 2002; Karim et al. 2015), lower prevalence of depression (Chaves et al. 2018 [EWB]), and more physical activity (Goswami and Pollock 2016 [PWB]; Peralta et al. 2018 [PF]). The interplay between safety and autonomy is mostly studied for young and elderly people. For both groups, however, a positive relationship has been established (González et al. 2012; Meijering et al. 2019). Autonomous people are also found to have close social relationships (Chaves et al. 2018 [EWB]; Karim et al. 2015; Symoens et al. 2014), be more socially active, meet with other people more frequently (Ervasti 2002; Goswami and Pollock 2016 [PWB]; Symoens et al. 2014), and feel closer to people in their neighborhood (Symoens et al. 2014). There is also evidence that being treated with respect and experiencing autonomy over one's life are positively linked (Kafková 2018 [LO]). Regarding financial security, autonomy is negatively related to financial hardship (Ervasti 2002), the inability to make ends meet, and future financial worry (Goswami and Pollock 2016). The functioning of leisure time provides an opportunity to experience autonomy as an active agent outside restricted social roles (Lloyd and Little 2010).

Current research provides only scant insight into the interactions between autonomy and functionings on the one hand and societal conditions and functionings on the other.

H4 *The more autonomy a person perceives him- or herself to have over his or her life, the weaker the relationship between achieved functionings and subjective well-being will be.*

Only two studies could be identified that included an interaction between perceived autonomy and a measure of a functioning on individual level: Welzel and Inglehart (2010) have shown that the positive effect of financial satisfaction on life satisfaction is attenuated by perceived autonomy. Steckermeier (2019) found that the negative effect of perceived lack of neighborhood safety on subjective well-being is less for children who perceive their autonomy as appropriate.

H5 *In societies that provide individuals with more opportunities and choice, the positive effect of individuals' achieved functionings on their life satisfaction is weaker than in societies with few opportunities and little choice.*

The moderating effects of societal conditions on the relationship between functionings and subjective well-being have—to the best of my knowledge—only been investigated with respect to economic aspects: Delhey (2010) and Inglehart et al. (2008) have shown that financial satisfaction becomes less important for individuals' subjective well-being in more affluent societies, while Lun and Bond (2016) have found that financial satisfaction becomes less relevant in societies with more prevalent self-expression values. Carr and Chung (2014) further show that employment insecurity is less harmful to individuals' life satisfaction in societies with more generous labor market policies.

2 Data and Methods

2.1 Data

The following analyses are based on the fourth wave of the European Quality of Life Survey (EQLS) conducted in 2016 by Eurofound. The survey covers about 36,000 individuals in 33 European countries. It includes questions on the objective circumstances of people's lives and various aspects of their subjective well-being. Using this survey, I can operationalize both individuals' life satisfaction and their perceived life autonomy and basic functionings, while simultaneously controlling for a range of socio-demographic variables. As life satisfaction, perceived autonomy, and the basic functionings are self-evaluations, it is possible that they are partly influenced by latent personality traits. Unfortunately the EQLS dataset does not contain any measures of personality traits, so possible personality effects cannot be investigated.

2.2 Operationalization

2.2.1 Dependent variable

I operationalize individuals' subjective well-being via their life satisfaction. Using life satisfaction as an outcome variable has been proven fruitful in the quantitative analysis of self-reported capabilities (Anand et al. 2005, 2009, 2011). Although life satisfaction has been found to be relatively stable over time and partly explained by personality traits (Lucas and Diener 2009; Schimmack et al. 2009), research shows that life satisfaction does also reflect contextual circumstances such as personal loss, unemployment or economic recession to some extent (Lucas and Donnellan 2007; Lucas et al. 2004; Luhmann et al. 2012; Mayer 2015). Life satisfaction is measured using individuals' ratings of their overall life satisfaction on a ten-point scale ranging from very dissatisfied (1) to very satisfied (10). With a mean value of 6.8 (SD: 2.21), life satisfaction is, overall, rather high in Europe.

2.2.2 Independent Variables

Perceived autonomy To examine the mechanisms outlined above, it would be desirable to measure perceived autonomy in various areas of life, as it is plausible that people who enjoy a lot of autonomy in one area, for example financial security, do not automatically experience a lot of autonomy in other areas, like their family life or leisure. Unfortunately, neither the EQLS nor other population surveys contain items on perceived domain-specific autonomy. However, I am confident that a lack of autonomy in any domain will be reflected in individuals' overall perceived autonomy, so that it can be used as a convenient proxy for domain-specific autonomy.

In accordance with existing research investigating the relationship between autonomy and subjective well-being (e.g., Delhey and Dragolov 2016; Kara and Petrescu 2018; Maguire et al. 2019), I operationalize individuals' perceived autonomy as their level of agreement with the statement "I feel I am free to decide how to live my life." This single-item measurement captures a feeling of overall freedom and choice in the shaping of one's own life. Unfortunately, the EQLS dataset offers no further questions on people's autonomy, neither specifically on perceived opportunities, nor on the goals and values that a person deems important. Perceived autonomy is measured on a five-point scale from strongly

disagree (0) to strongly agree (4). On average, European citizens feel they have a certain degree of autonomy over their lives (\bar{X} 2.88, SD: 0.98); only in Greece (\bar{X} 2.07) do people feel they are rather *not* free to decide how to live their lives.

Basic functionings Health is measured using individuals' self-assessment of their overall health on a five-point scale from very bad (0) to very good (4). Financial security is measured as a household's ability to make ends meet on a six-point scale from with great difficulty (0) to very easily (5). I operationalize individual safety as the unweighted mean of agreement with the statements "I feel safe when I walk alone in this area after dark" and "I feel safe from crime when I am at home alone at night," both measured on a five-point scale from strongly disagree (0) to strongly agree (4). The basic good of friendship is measured using the average frequency of having face-to-face contact with friends and having contact over the phone, by post, or over the Internet. Both items are measured on a five-point scale from never (0) to (almost) every day (4). Leisure is measured as the amount of time spent on things that interest the respondent, from at no time (0) to all of the time (5), and the level of disagreement with the statement "In my daily life, I seldom have time to do the things I really enjoy from strongly agree (0) to strongly disagree (4). Both items are rescaled to a range from 0 to 1 before averaging. Finally, respect is constructed as disagreement with the statements "I feel that the value of what I do is not recognised by others" and "Some people look down on me because of my job situation or income." Both items are measured on a five-point scale from strongly disagree (0) to strongly agree (4) and are averaged unweighted. All basic functionings are rescaled to range from 0 to 1, with higher values indicating better functioning. Overall, Europeans on average do well on most basic functionings (indicated by averages above the midpoint). Two functionings—safety (\bar{X} 0.76, SD: 0.23) and friendship (\bar{X} 0.76, SD: 0.21)—are especially well achieved. Only financial security is, overall, far below the midpoint of the scale (\bar{X} 0.53, SD: 0.27).

Control variables As vertical parameters influencing both the autonomy and subjective well-being of people, I include education (ISCED scale, ISCED 3–5 as reference), employment status (employed as reference, unemployed, unable to work, retired, house spouse, student, and other), and income (four quartiles of household equivalized income by country and an additional missing income information dummy). As horizontal parameters, I include gender (male as reference), family status (not living with a partner as reference), own children and minor children in the household (no (minor) children as reference), and age (five groups, 35–49 years old as reference). Table 1 provides the descriptive statistics of all individual-level variables.

Societal conditions that enable people's opportunities and choices are captured by four country-level measures that can be grouped in three topics: economic conditions, freedoms, and norms and values.

Economic conditions are captured by a nation's wealth—more affluent societies are more likely to provide individuals with more opportunities—and the (in)equality of income distribution, as more people can profit from these opportunities in more equal societies. National wealth is operationalized using GDP per capita in purchasing power parities (PPP). Income inequality is operationalized using the income quintile share ratio comparing the top 20% of incomes to the bottom 20%.² The data for both indicators stem from the World Bank.

² There are various ways to measure economic inequality, such as the Gini-coefficient, the S80/S20 ratio, the S90/S10 ratio, at-risk-of-poverty or poverty rate, or the share of national wealth held by the wealthiest 10%. Here, the income quintile share ratio (S80/S20) was used, as it is the only measure for which data for all countries are available. The income quintile share ratio correlates strongly with the S90/S10 ratio ($r=0.91$, $N=32$), the Gini-coefficient ($r=0.89$, $N=32$), and the at-risk-of-poverty-rate ($r=0.85$, $N=32$).

Table 1 Means, standard deviations, minima, and maxima of all individual-level variables

	Variable	Mean	Std. Dev	Min	Max	
<i>Functionings</i>	Autonomy	2.88	0.98	0	4	
	Life satisfaction	6.80	2.21	1	10	
	Health	0.70	0.23	0	1	
	Financial security	0.53	0.27	0	1	
	Safety	0.76	0.23	0	1	
	Friendship	0.76	0.21	0	1	
	Leisure	0.60	0.27	0	1	
<i>Horizontal parameters</i>	Respect	0.69	0.24	0	1	
	Gender (Ref. male)	0.52		0	1	
	Partner living in household	0.63		0	1	
	Never married	0.26		0	1	
	Married (Ref.)	0.57		0	1	
	Separated	0.02		0	1	
	Widowed	0.09		0	1	
	Divorced	0.06		0	1	
	Children living in household	0.59		0	1	
	Minor children living in household	0.27		0	1	
	Age group 18–24	0.11		0	1	
	Age group 25–34	0.17		0	1	
	Age group 35–49	0.26		0	1	
	Age group 50–64	0.24		0	1	
	Age group 65+	0.22		0	1	
	<i>Vertical parameters</i>	ISCED Levels 1–2	0.30		0	1
		ISCED Levels 3–5 (Ref.)	0.50		0	1
ISCED Levels 6–8		0.20		0	1	
Employed (Ref.)		0.50		0	1	
Unemployed		0.08		0	1	
Unable to work		0.02		0	1	
Retired		0.25		0	1	
Homemaker		0.08		0	1	
Student		0.07		0	1	
Other employment status		0.00		0	1	
Lowest income quartile		0.21		0	1	
Second income quartile		0.19		0	1	
Third income quartile		0.20		0	1	
Highest income quartile (Ref.)		0.20		0	1	
Missing income information		0.20		0	1	

EQLS 2016; N = 36,460; weighted means and standard deviations

Regarding freedoms, I make use of the Freedom House's measure of civil liberties, which is based on expert ratings. Civil liberties include freedom of expression and belief, associational and organizational rights, rule of law, and individual autonomy and individual

Table 2 Means, standard deviations, minima, and maxima of the societal conditions variables

Variable	Mean	Std. Dev	Min	Max
Log GDP	2.12	0.43	1.10	3.26
Income quintile share ratio	5.71	1.52	3.66	9.25
Civil liberties	51.81	7.81	29.00	60.00
Tolerance	14.04	5.46	1.40	26.40

All values for 2016 except income quintile share ratio and tolerance (2015)

rights. The civil liberties rating ranges from 0 to 60, with higher values indicating greater civil liberty.

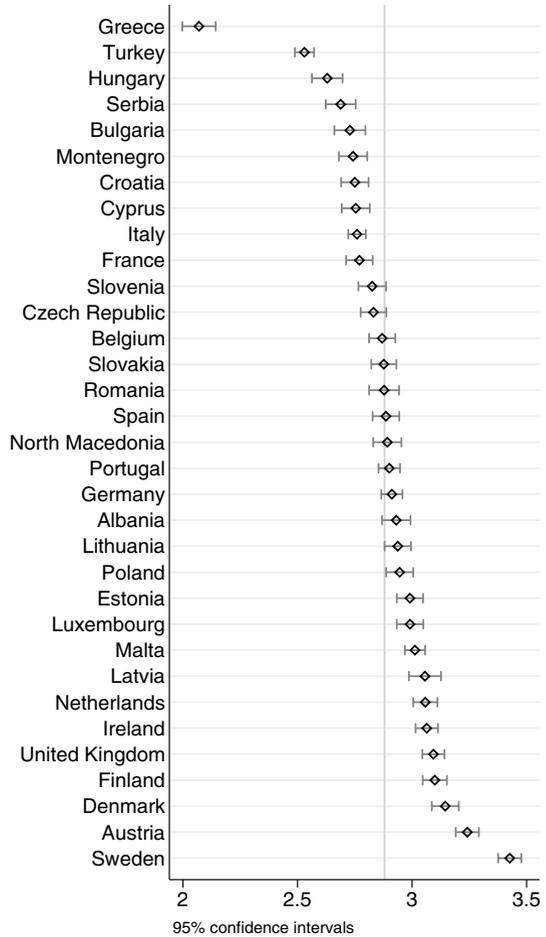
To capture a societal value climate that foster individuals' opportunity and choice, I use the significance attached to tolerance in a society. The importance of tolerance is measured as the percentage of people in a society who, out of a list of 12 values, deem tolerance as one of the three most relevant. These data stem from the Eurobarometer 83.3 from 2015. The macro-level variables are summarized in Table 2.

2.3 Missing Data Treatment and Methodological Procedure

Taking all variables together, the missing information leads to a dropout of about 10% of cases. This large number of missing values is largely driven by the basic functionings, especially leisure and respect, that each has more than 4% missing values in the overall sample. By replacing the missing values in the basic functionings with their country mean, further subdivided by gender, three age groups (18–34, 35–64, 65+), and three education categories (ISCED 0–2, 3–4, 5–8) missing data are reduced to 2%. This approach is chosen over multiple imputation (MI) methods such as predictive mean matching, as MI does not produce different results while vastly limiting graphical illustration options.

All univariate and bivariate statistics are weighted according to the recommendation of Eurofound. For all multivariate analyses on life satisfaction linear multilevel modeling is applied. In multilevel modeling, individual-level data for all countries are pooled in one dataset; country effects are not estimated as distinct values for each country, but the country level variance is estimated instead. I apply multilevel models for two reasons: first, to account for the nested structure of the data (individuals are nested within countries). This approach is necessary as the individuals of one country are likely to be more similar to one another than to other individuals from different countries, because they share similar characteristics and are affected by the same environment (within-cluster dependence). Second, to explain variance in intercepts and slopes between countries: Both the differences in life satisfaction and differences in individual-level factors, such as perceived autonomy, exert on life satisfaction might be explained by country-level conditions, such as national wealth or income inequality. Empirically, the variance of the dependent variable that is explained by the macro-level is measured using the intra-class-correlation coefficient (ICC). When the ICC is higher than 10% a multilevel approach is considered necessary. The ICC of the subsequent analyses shows that 14% of the variance in life satisfaction is explained by the country level. The subsequently applied multilevel approach makes it possible to control for these country-level differences; moreover, it allows me to investigate how strongly autonomy varies due to country-level characteristics and which societal conditions statistically explain this variation. For all analyses, including cross-level interactions, random

Fig. 2 Distribution of autonomy in Europe. EQLS 2016; N = 36,460; weighted means with 95% confidence intervals; grey vertical line indicates the weighted population average across all 30 countries (2.88). Autonomy is measured on a 5-point scale from “agree” (0) to “disagree” (4): *To what extent do you agree or disagree with the following statements? I feel I am free to decide how to live my life*



slopes are estimated for main effects and interaction terms, assuming an unstructured covariance.

2.4 Steps of the Analysis

Following the theoretical model, as shown in Fig. 1, I will first present descriptive statistics on the distribution of autonomy in Europe. Second, I will examine the effects of individual autonomy and societal conditions on life satisfaction (H1). Third, I will investigate the correlation between autonomy and the basic functionings (H3) and test how strongly the basic functionings contribute to individuals' life satisfaction (H2). Fourth, I will examine whether the positive influence of the basic functionings on life satisfaction is dampened by individual autonomy (H4). Finally, in a fifth step, I will investigate for each of the six basic functionings and each of the three societal conditions whether the basic functionings have a smaller impact on individual life satisfaction in societies that provide more opportunity and choice (H5).

Table 3 Multilevel regression of life satisfaction on individual autonomy and societal conditions

Societal condition included in the model	<i>Log GDP</i>	<i>Income quintile share ratio</i>	<i>Civil liberties</i>	<i>Tolerance</i>
Autonomy	0.589*** (0.010)	0.589*** (0.010)	0.589*** (0.010)	0.589*** (0.010)
Societal condition	1.399*** (0.151)	-0.224** (0.078)	0.079*** (0.012)	0.072*** (0.020)
Individual controls	✓	✓	✓	✓
F statistic	309.96	306.08	307.95	306.34
Chi ²	8058.96	7958.19	8006.82	7964.73
Log likelihood	-74,336.14	-74,353.53	-74,342.91	-74,351.64

EQLS 2016; N=36,460; unstandardized b-coefficients; standard errors in parentheses. The societal condition coefficient represents the effect of the societal condition specified in the top row controlled for the individual effect of perceived autonomy and the individual-level controls

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

3 Results

3.1 The Distribution of Autonomy in Europe

Figure 2 displays the distribution of individuals' perceived autonomy in Europe around the European mean of 2.88. With a mean of 2.07 on a five-point scale from 0 to 4, Greece is the only country around the midpoint of the scale; the next two countries in line, Turkey and Hungary, score above 2.50. In total, only ten countries report mean autonomy levels significantly below the weighted population average, twelve countries around the mean, and eleven significantly above, headed by Denmark (3.14), Austria (3.24), and Sweden (3.43). Overall, reported autonomy is lowest in the South Eastern European countries and highest in the Anglophone and Nordic countries.

3.2 The Role of Individual Autonomy and Societal Conditions for Life Satisfaction

How much of an influence do individual autonomy and the societal conditions that promote opportunity and choice exert on people's life satisfaction? Estimating multilevel regressions of life satisfaction on autonomy, the societal conditions, and the individual-level control variables, I find that both individuals' perceived autonomy and societal conditions exert significant effects on life satisfaction, lending support to hypothesis 1 (see Table 3).

The influence of perceived autonomy on individuals' life satisfaction is quite substantial. With a change in life satisfaction of 0.589 points per increase on the four-point autonomy scale, the difference between no autonomy and high autonomy accounts for more than two points on the ten-point scale of life satisfaction. Regarding the country-level economic conditions, income inequality is the strongest predictor within the analyzed European sample: with each increase of 1 in the income quintile share ratio, overall life satisfaction decreases by 0.224 points, which adds up to a difference of 5.6 points between the least unequal and the most unequal country in Europe. When comparing the countries with the lowest and highest values for each of the remaining indicators, the full difference in life satisfaction

Table 4 Correlations between autonomy and basic functionings

	Autonomy	Financial security	Health	Respect	Friendship	Leisure
Financial security	0.28	–				
Health	0.17	0.27	–			
Respect	0.28	0.31	0.18	–		
Friendship	0.10	0.03	0.16	0.10	–	
Leisure	0.23	0.24	0.16	0.26	0.10	–
Safety	0.22	0.20	0.16	0.21	0.09	0.16

EQLS 2016; N = 36,460; Spearman correlations; all correlations significant at $p < 0.001$

explained by the societal conditions ranges from 1.5 to nearly 3 points: national affluence (2.9), civil liberties (2.4), and tolerance (1.6).

3.3 The Interplay of Basic Functionings, Autonomy, and Life Satisfaction

As assumed in hypothesis 3, all basic functionings are positively related to autonomy (see Table 4.) While autonomy appears to be more closely related to financial security and respect than, for example, to health or friendship, the correlations are overall weak to moderate. Taken together with the rather weak yet significant correlations among the basic functionings, these results indicate that functionings and autonomy each capture independent aspects of people's lives and thus are not interchangeable.

Figure 3 reports the results of a multilevel regression of individual life satisfaction on autonomy and the six basic functionings while controlling for socio-demographic parameters. The graph plots unstandardized b-coefficients and 95%-confidence intervals. For easier readability, significant effects are shown in black and insignificant effects in grey. The results lend further support to the independent relevance of the basic functionings for life satisfaction, but also show that some functionings count more than others. While the difference between low and high financial security can explain a difference of nearly two points on the ten-point life satisfaction scale, physical safety and friendship can only explain about 0.2 points between a not achieved and a fully achieved functioning. Compared to being in bad health, being completely healthy increases life satisfaction by 1.4 points. Having time to do the things one really enjoys and filling one's life with interesting things adds another point to life satisfaction compared to a life that is lacking in leisure. Finally, feeling respected by others increases life satisfaction by a little less than one point (0.85), again compared to those who feel not respected at all. Altogether, the difference between a life fully lacking in all functionings and a life characterized by the full achievement of all six basic functionings statistically explains more than half of people's life satisfaction (5.52 points). In parallel to the strong contribution of the basic functionings, individual autonomy still exerts an independent positive effect that, comparing the extremes, can account for another 1.4 points on the 10-point life satisfaction scale.

Now, does autonomy weaken this positive relationship between basic functionings and life satisfaction? To answer this question, Table 5 reports the results of six linear multilevel regression models of life satisfaction on interactions between autonomy and each of the basic functionings. For four out of six basic functionings, a dampening effect of autonomy is found, as assumed in hypothesis 5. Financial security, health, respect, and friendship

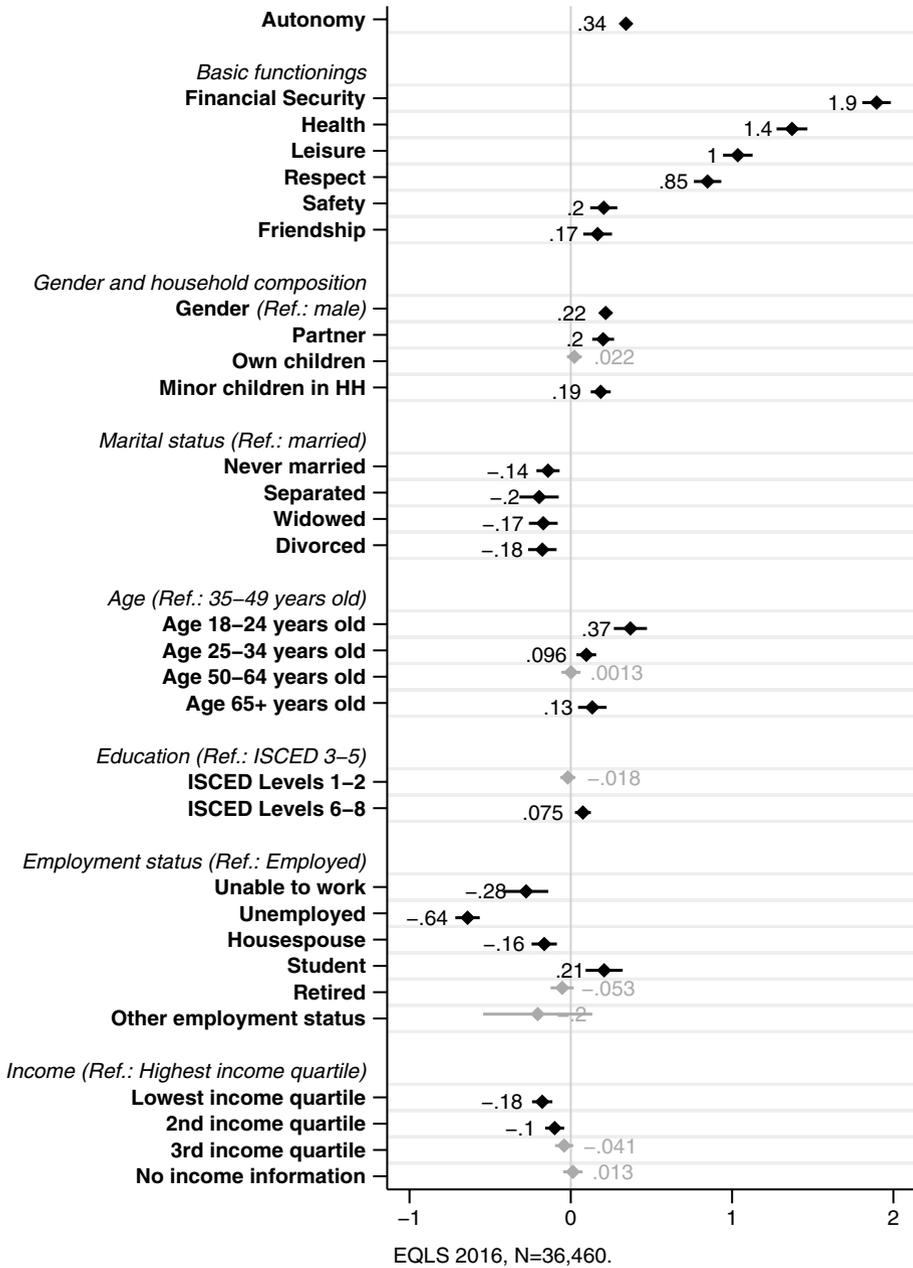


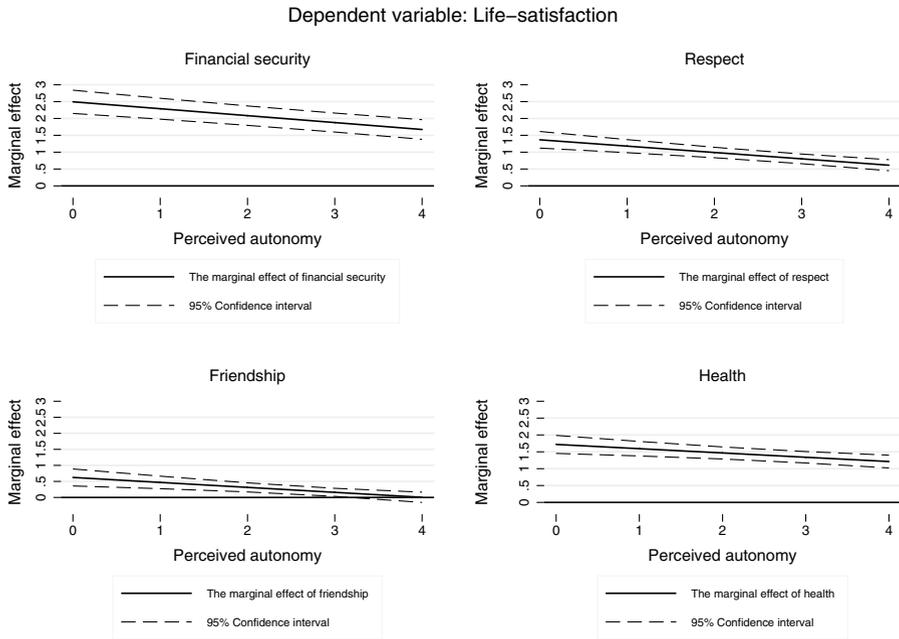
Fig. 3 The effects of basic functionings and autonomy on life satisfaction. EQLS 2016; N=36,460; unstandardized b-coefficients with confidence intervals; significant effects at $p < 0.05$ shown in black, insignificant effects in grey. Multilevel regression of life satisfaction on the basic functionings and autonomy (with individual-level controls). Random intercept only model. Full model in Table 7

Table 5 Multilevel regression of life satisfaction on individual autonomy, basic functionalities, and their interaction

Functioning included in the interaction	Financial Security	Health	Leisure	Respect	Safety	Friendship
Autonomy	0.436*** (0.022)	0.421*** (0.030)	0.371*** (0.028)	0.463*** (0.028)	0.383*** (0.033)	0.453*** (0.036)
Functioning	2.495*** (0.176)	1.721*** (0.136)	1.203*** (0.135)	1.368*** (0.126)	0.346** (0.118)	0.624*** (0.135)
Interaction autonomy* functioning	-0.205*** (0.035)	-0.127*** (0.038)	-0.055 (0.041)	-0.189*** (0.036)	-0.057 (0.037)	-0.155*** (0.043)
Other basic functionalities	✓	✓	✓	✓	✓	✓
Individual controls	✓	✓	✓	✓	✓	✓
F statistic	178.80	254.79	322.63	299.59	347.49	345.63
Chi ²	5721.45	8153.44	10,324.17	9586.74	11,119.65	11,060.23
Log likelihood	-71,590.65	-71,749.96	-71,779.65	-71,751.01	-71,780.27	-71,769.84

EQLS 2016; N = 36,460; unstandardized b-coefficients; standard errors in parentheses. Multilevel regression of life satisfaction on the basic functionalities and autonomy (with individual-level controls). Random slopes for autonomy and the functioning that is part of the interaction. The functioning included in the interaction between perceived autonomy and functioning is specified in the top row; this effect is controlled for the effects of perceived autonomy and the respective functioning, as well as the remaining five functionalities and the individual-level controls

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$



EQLS 2016, N=36,460.

Fig. 4 The marginal effects of the basic functionings on life satisfaction. EQLS 2016; N=36,460; unstandardized b-coefficients. Random slopes for autonomy and the functioning that is part of the interaction

all still have a positive effect on life satisfaction, but this effect weakens with increasing autonomy, as the negative interaction term between autonomy and the respective functioning shows.

Figure 4 displays the marginal effects of financial security, respect, health, and friendship on life satisfaction at different levels of autonomy. As can be seen, the four basic functionings have a positive impact on life satisfaction, but with increasing perceived autonomy this effect becomes smaller. This indicates that the more autonomy people perceive they have over their lives, the weaker the relationship between achieved functionings and life satisfaction becomes. The difference in life satisfaction gains at the varying levels of perceived autonomy is greatest for financial security, followed by respect and friendship, and smallest for health. When comparing people with low (0) and high (4) perceived autonomy, the maximum gain in life satisfaction from financial security ranges from 2.5 to 1.7 points on the 10-point scale. The functioning of being respected by others increases the life satisfaction of people with low perceived autonomy by 1.4 points, yet only by 0.6 points when people perceive full autonomy over their lives. The positive effect of friendship can explain around 0.6 points of life satisfaction for people with low perceived autonomy; but decreases to practically zero for people with high perceived autonomy. Finally, the difference between poor health and very good health explains around 1.7 points in life satisfaction among people with low and 1.2 points for people with high perceived autonomy.

Table 6 Cross-level interactions between basic functionings and societal conditions

	Financial security	Health	Leisure	Respect	Safety	Friendship
Log GDP	✓	n.s	✓	✓	n.s	n.s
Income quintile share ratio	✓	n.s	n.s	✓	✓	n.s
Civil liberties	✓	n.s	✓	✓	✓	n.s
Tolerance	✓	n.s	n.s	✓	n.s	n.s

EQLS 2016; N=36,460. Multilevel regression of life satisfaction on the basic functionings and societal conditions (with autonomy and individual-level controls). Random slopes for the functioning that is part of the interaction. Variables included in the interaction are grand-mean centered. Check marks indicate interactions are significant at least at $p < 0.05$

3.4 The Interplay of Basic Functionings, Societal Conditions, and Life Satisfaction

The final step of the analysis investigates whether societal conditions also weaken the relationship between the basic functionings and individuals' life satisfaction. Table 6 shows, in a reduced form, the results of multilevel regressions of life satisfaction on the four societal conditions, the basic functionings, and their interaction (full models available on request). In all models, the basic functionings exert a positive and significant influence on life satisfaction, as do the societal conditions (naturally, the effect of income inequality is negative). Whenever the positive effect of a basic functioning on life satisfaction is weakened by a societal condition (significant interaction effect), this is indicated by a check mark in Table 6. The results of this final step of the analysis are quite mixed.

Starting with economic conditions, in more affluent countries financial security, leisure, and respect exert a weaker influence on life satisfaction; in societies with a more equal income distribution, financial security, respect, and safety contribute less to individual life satisfaction than in more unequal societies. Moving on to guaranteed freedoms, in countries with strong civil liberties, four of the six basic functionings—financial security, leisure, respect, and safety—have a lesser impact on life satisfaction than in countries with weaker civil liberties. Finally, the results show that in societies that place a higher value on tolerance financial security and respect are less important for individuals' life satisfaction than in societies where tolerance is valued less. The positive effects of health and friendship are not influenced at all by any of the societal conditions.

The assumption made in hypothesis 5 can therefore only partly be supported: the relevance of financial security and respect for people's life satisfaction decreases where economic conditions are better, where freedoms are granted, and a positive value climate prevails; leisure and security decrease in relevance where the economic situation is better and freedoms are guaranteed, but are unaffected by the value climate. Overall, a society's economic conditions, freedoms, and value climates can level the relationship between functionings and people's subjective well-being, but the relevance of some functionings, like health and friendship, remain unaffected by societal conditions.

4 Conclusion

By incorporating elements of the CA into subjective well-being research, this article provides first empirical insights on how the relationship between six basic functionings and individual well-being is affected by *individuals' perceived autonomy* on the one hand and *societal conditions that provide opportunities and enable choice* on the other. Although the positive contribution of basic functionalities such as health, respect, and safety to subjective well-being is well documented, very little is known about how this relationship varies depending on the different levels of autonomy individuals perceive themselves as having over their lives and on the prevalence of societal opportunity and choice. This is surprising given the significance attributed to opportunity and choice in the capability framework. That basic functionings contribute less to people's life satisfaction when they have more options and more autonomy may seem counterintuitive, but is in line with the theoretical assumptions of CA: only when people have sufficient opportunity and choice are they able to choose freely which capabilities to transform into functionings that correspond to their notion of a good life. When opportunity and choice are poor, individuals' subjective well-being depends much more on their achieved functionings.

Using survey data from 33 European societies, I applied multilevel modeling to address three empirical relationships: (1) the contribution of individuals' perceived autonomy and the opportunity and choice enhancing societal conditions in which they are embedded to life satisfaction, (2) the contribution of six basic functionings to individual satisfaction, and (3) the moderating effect of perceived autonomy and societal conditions on the relationship between functionings and life satisfaction.

The first key finding of the article is that both individual perceived autonomy and opportunity and choice enhancing societal conditions increase individual life satisfaction. Even when controlling for a broad range of individual-level characteristics and societal conditions, perceived autonomy always strongly positively influences Europeans' life satisfaction, which is consistent with other existing evidence of this relationship (e.g. Hojman and Miranda 2018; Maridal 2017; Ng 2015). Additionally, independently from their level of perceived autonomy, individuals are significantly more satisfied with their lives in countries that provide better economic conditions, offer more civil freedoms, and are characterized by a more tolerant value climate. These results agree with other observations on the life satisfaction—enhancing effect of national wealth (e.g. Chua et al. 2020; Ngamaba 2017; Nguyen et al. 2020) and lend further support for a *negative* impact of income inequality, which was also found by Pitlik et al. (2015) and Nguyen et al. (2020). My results further support previous research findings that civil liberties and political rights add to individual life satisfaction irrespective of how much choice people perceive themselves to have over their lives (Brulé and Veenhoven 2014; Chua et al. 2020; Maridal 2017) and corroborates previous findings on the conducive effect of living in a tolerant society (Inglehart et al. 2008; Lun and Bond 2016).

Second, all six basic functionings exert a positive influence on individual life satisfaction. This shows that individuals' overall evaluation of their lives does indeed reflect their well-being when quantified as a multidimensional vector of achieved functionings, which accords with the findings of previous research (Delhey and Steckermeier 2016; Vladisavljevic and Mentus 2019; Western and Tomaszewski 2016). That only six basic functionings together can statistically explain more than half of people's life satisfaction is also a good indicator that lists of basic universal capabilities as provided by Nussbaum (2002)

capture quality of life elements that are significant to individuals and can be applied cross-culturally.

Third, and most importantly, the relationship between functionings and subjective well-being is attenuated by perceived autonomy and societal conditions. Taken together, this paper provides both more encompassing and more detailed support than previous research for one of the fundamental assumptions of the CA: a person's functioning vector can only be evaluated when taking into account their opportunity freedom and freedom of choice. When people experience high levels of autonomy over their life, the basic functionings of financial security, respect, health, and friendship are of less relevance for their individual life satisfaction. Conversely, a lack in one of those four basic functionings is much more detrimental to someone with low than for someone with high perceived autonomy: despite their identical functioning vector, they differ in their life evaluation because they differ in the autonomy they perceive over their lives. The comprehensive investigation of interactions between perceived autonomy and six different functionings indicates a general dampening effect of perceived autonomy, for which so far only scarce evidence exists (Steckermeier 2019; Welzel and Inglehart 2010). However, two functionings, namely leisure and safety, remain unaffected by individual autonomy, indicating that some functionings maintain a rather universal importance for life satisfaction independent from people's autonomy or lack thereof.

Alongside the dampening effect of individual autonomy, societal conditions that promote people's opportunities and choices also weaken the relationship between functionings and well-being. The civil freedoms and rights guaranteed by the state shape the relationship between functionings and life satisfaction most broadly. Four of the six functionings—financial satisfaction, leisure, respect, and safety—are less relevant to peoples' life satisfaction when they live in a country with more civil liberties. One reason why the effects of so many functionings are dampened by civil liberties could be that their scope is so far-reaching: among many others, they encompass freedom of speech and beliefs, the right to own property, the right to privacy, the right to live, and the right to bodily integrity. When these are not guaranteed or not enforced, individuals suffer when aspired functionings are not—or not sufficiently—achieved. In more affluent societies, which are known to provide people with public goods and services, such as education, health care, and social security, the relevance of financial security, leisure, and respect for individuals' life satisfaction is reduced. Regarding financial security, the results match those found by Delhey (2010) and Inglehart et al. (2008). The expected reverse effect is evident for income inequality, which is associated with insufficient provision of public goods and services. In societies with a more equal income distribution, financial security, respect, and safety are less important for life satisfaction, and vice versa, in societies with high income inequality, individuals' life satisfaction is much more dependent on their financial security, the respect they receive from others, and the safety they enjoy. Finally, a societal value climate characterized by tolerance attenuates the effects of financial security and respect. Regarding financial security, this finding is consistent with those of Lun and Bond (2016), who found a similar effect for societies with higher self-expression values. Individuals who experience financial insecurity and disrespect thus suffer even more when their society is characterized by a low level of tolerance towards others than when they lived in a more tolerant society.

Financial security and the respect individuals receive from others are the two basic functionings that become less relevant for individual life satisfaction with both increasing individual perceived autonomy and increasing societal opportunities and choice. Leisure and safety are less important in societies with better economic conditions and more encompassing civil liberties, yet do not vary among individuals according to their perceived

autonomy. Conversely, health and friendship do differ in their positive effect on life satisfaction among individuals with different levels of perceived autonomy but are equally important notwithstanding societal conditions.

A different reading of the results could conclude that people whose needs for good health, safety, belonging, and respect are met enjoy higher levels of autonomy. This would be in line with Maslow's pyramid of needs. However, this reading overlooks two important aspects. First, empirically, need fulfillment does not strictly follow Maslow's hierarchy of needs, but instead people sometimes attend to fulfilling psychosocial needs *before* their basic needs are met (Tay and Diener 2011). Second, whereas autonomy in Maslow's theory is an independent need in addition to other needs, within the capability framework it is not another functioning but instead the freedom necessary to achieve the functionings one values. The difference can be well illustrated using the example of health. The prominent Whitehall (II) study examining the health of 10,000 British civil servants found that deficient autonomy at work and at home strikingly increased the risk of certain illnesses, such as depression and heart diseases (Bosma et al. 1997; Marmot 2015). This finding contradicts the idea of needs strictly based on each other and indicates instead that the (continuously) unfulfilled need at the tip of the need pyramid impairs the lower tiers.

Overall, the results of this paper strongly support the notion of the CA including individuals' autonomy and capability instead of focusing on their functionings alone. Some limitations, however, need to be addressed. One of the main limitations of this research is that the only available item to capture individuals' autonomy only asks people about the overall freedom they perceive in deciding how to live their lives. It is plausible to assume that people consider opportunities and choice alike when evaluating their perceived autonomy, but it remains unclear to what extent the two aspects are taken into account. Asking people specifically about the opportunities they (perceive themselves to) have could help to distinguish the distinct effects of freedom of choice and opportunity freedom, as well as to investigate their interplay. Further, the autonomy item used here captures a general evaluation of people's life autonomy and thus gives no information on the autonomy perceived in different life domains—for example, at work or within the family (for a comprehensive analysis of individuals' understanding of choice and control see Burchardt and Holder 2012).

A second major limitation of this analysis is that the measures of basic functionings, perceived autonomy, and life satisfaction are all derived from interviewees' self-evaluations and thus might be influenced by latent personality traits that influence how people answer such questions. Psychological research shows that self-rated functionings such as health (Löckenhoff et al. 2012) and health behavior (Hampson et al. 2006), financial satisfaction (Tharp et al. 2020), or leisure involvement and leisure satisfaction (Lu and Hu 2005) are partly influenced by certain personality traits. Unfortunately, the EQLS dataset does not include any information on personality traits, so these effects could not be considered. However, there is also evidence that autonomy (Hojman and Miranda 2018; Ng 2015), as well as self-evaluated functionings like respect (Ng et al. 2019), friendship (Ng et al. 2019), health (Budría and Ferrer-I-Carbonell, 2019), or financial satisfaction (Ng 2015), have independent effects on life satisfaction when controlled for personality traits. These are shortcomings enforced by the data available. Future research should seek to shed light on opportunity freedom and autonomy in different domains, ideally while controlling for personality traits. As my dataset encompasses only European Societies and only at one point in time, looking at more global sample and for a longer period of time could further provide valuable information on the universality of the findings.

For subjective well-being research, the results of this paper indicate that when societal conditions improve and overall individual autonomy increases over time, subjective well-being will become less reflective of well-being operationalized as achieved functionings. For now, while societal conditions and individuals' (perceived) autonomy still vary between countries and people, my results advise caution: Omitting autonomy from analyses of subjective well-being might lead to the false conclusion that basic functionings such as good health or financial security are no longer beneficial, even though this would by no means be true for those who do not perceive themselves as autonomous agents. With regard to the macro-level, a valuable next step would be to investigate who benefits from societal means, freedoms, and a positive value climate—and who might “fall through the cracks.”

A further area for research that could benefit from my findings is research surrounding the income inequality hypothesis or status anxiety hypothesis advanced, among others, by Marmot (2015) or Wilkinson and Pickett (2010), which assumes that more unequal societies suffer from social malaise because the people in these societies experience higher levels of stress, disrespect, and status anxiety, and lower levels of control over their lives. Whereas this mediation has empirically been investigated at the individual (Delhey and Dragolov 2016) and country levels (Delhey and Steckermeier 2020), my findings suggest taking a closer look at the *moderation*, instead of the mediating effects. The lack in respect people experience when suffering from status anxiety not only is more common in more unequal and more competitive societies (Delhey et al. 2017; Layte and Whelan, 2014; Steckermeier and Delhey 2018), but also impairs individual life satisfaction more strongly when opportunity and choice are limited.

A further promising step would be to shed light on the role of individual means and conversion factors. Investigating the social stratification of individuals' (perceived) autonomy—by vertical parameters such as income and education as well as horizontal parameters like gender, family status, and age—might allow us to expose inequalities in the distribution of autonomy and identify resources that would help people to develop more freedom of choice over their own lives. Factors related to people's financial situation, such as employment status, income, and education, have been shown to be especially conducive to supporting individuals' perceived autonomy (Delhey and Steckermeier 2016; Ervasti 2002; Symoens et al. 2014). This points to a strong connection between financial resources and autonomy, which could be supported, policy-wise, by a stable economy, social security, or even an unconditional basic income, for example. Yet clearly, individual autonomy cannot be reduced to economic independence. How autonomously individuals experience themselves contributes to their subjective well-being alongside income, employment status, and financial security.

In sum, this paper attempts to build a bridge between the multidimensional understanding of well-being proposed by the CA and individual life evaluation investigated in subjective well-being research. Factoring in the opportunities and choices people have in shaping their lives recognizes that achieved functionings are the result not only of societal and socio-economic conditions, but also of people's preferences and their ability to act accordingly. This recognition of individuals as active agents of their own lives thus helps to reveal the paternalism inherent in quantified empirical well-being. Despite constituting a pivotal part of human development, the significance of individual autonomy has so far been undervalued in the investigation of subjective well-being. As a direct driver of subjective well-being and as a condition for the achievement of an aspired functioning, autonomy deserves a more prominent role.

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Appendix

See Table 7

Table 7 The effects of the basic functionings and autonomy on life satisfaction

	b	se
Autonomy	0.342***	(0.010)
Financial security	1.896***	(0.045)
Health	1.372***	(0.049)
Leisure	1.036***	(0.047)
Respect	0.848***	(0.043)
Safety	0.204***	(0.043)
Friendship	0.166***	(0.045)
Gender (Ref.: male)	0.216***	(0.020)
Partner	0.201***	(0.035)
Own children	0.022	(0.023)
Minor children in HH	0.186***	(0.032)
Never married	-0.141***	(0.037)
Separated	-0.196**	(0.062)
Widowed	-0.170***	(0.046)
Divorced	-0.176***	(0.045)
Age 18–24 years	0.370***	(0.052)
Age 25–34 years	0.096**	(0.031)
Age 50–64 years	0.001	(0.030)
Age 65 + years	0.133**	(0.045)
ISCED Levels 1–2	-0.018	(0.023)
ISCED Levels 6–8	0.075**	(0.025)
Unable to work	-0.277***	(0.070)
Unemployed	-0.640***	(0.039)
Homemaker	-0.165***	(0.040)
Student	0.207***	(0.059)
Retired	-0.053	(0.037)
Other employment status	-0.205	(0.173)
Lowest income quartile	-0.177***	(0.032)
2nd income quartile	-0.100***	(0.030)
3rd income quartile	-0.041	(0.029)
No income information	0.013	(0.030)
Constant	2.196***	(0.115)
Countries		33
F statistic		472.75
Chi ²		14,655.21
Log likelihood		-71,798.89

EQLS 2016; N=36,460; Multilevel analysis of the basic functionings and autonomy on life satisfaction (with individual-level control variables). Reference categories: No partner in household (partner), no own children/ minor children in household (own/minor children in household), Married (family status), Age 35–44 years (Age), ISCED Levels 3–5 (education), employed (employment status), highest income quartile (income); unstandardized b-coefficients; standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$;

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