

# From Psychological Theoretical Assumptions to New Research Perspectives in Sustainability and Sustainable Development: Motivation in the Workplace

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**Abstract:** This article proposes a framework that indicates opportunities for integrating psychology into research on sustainability and sustainable development. The central issue proposed is motivation in the workplace with a strong focus on employee health and optimal functioning. The main methodological issues are formulated in four assumptions: (1) Health from the perspective of health per se; (2) an individual seen as an agent; (3) an agent in the situation and context; (4) the life-span development perspective. The article refers in the narrative review to the most influential conceptualizations and research. This proposition shows a way forward and offers new opportunities to formulate challenging and important research questions in the psychology of sustainability and sustainable development.

**Keywords:** sustainability; sustainable development; motivation; health; agent; agency; job resources-demands model; empowerment; job crafting; lifespan

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## 1. Introduction

This article proposes a framework that provides the opportunities for integrating psychology into research on sustainability and sustainable development. The role and value of psychology in the construction of processes related to sustainable development has recently been described by Di Fabio and colleagues [1–4]. The aforementioned authors proposed several realizations of these ideas based on their expanded psychological view of sustainability in terms of promoting the well-being of all people: “The psychology of sustainability and sustainable development tries to contribute to the sustainability and sustainable development of every person, facilitating the flourishing of his/her talents, not only in terms of interpersonal but also intrapersonal talents, for the benefit of the community of belonging and progress. (...) is focused on the well-being of the person and of well-being of the environment, and also of the person in the environment, considering different kinds of environments: natural, personal, social, organizational, community, global and cross-cultural environments” [5] (p.2). Building on their postulate to expand sustainable goals to organizations [4], the central issue of our proposition is motivation in the workplace [6–8], with a strong focus on employee health and optimal functioning. Referring to the notion expressed in the above citation, the proposed framework includes four assumptions:

1. Health from the perspective of health per se;
2. An individual seen as an agent;
3. An agent in the situation and context;
4. The life-span development perspective.

The primary function of our framework is to relate to the immense potential of psychological and interdisciplinary research on sustainability and sustainable development. It might be used to develop future studies about the determinants and mechanisms of crucial civilizational outcomes, such as health and well-being. As proposed by Kanfer, motivation is defined as: "Psychological processes that determine (or energize) the direction, intensity, and persistence of action within the continuing stream of experiences that characterize the person in relation to his or her work." [9] (p.2). Accordingly, the analysis of motivation in the workplace needs to take into account both the characteristics of the employee seen as an agent as well as the situation and the context of his/her actions. Mechanisms of acting and motivation that obviously refer to the temporal dimension regarded as the situation of "here and now" as well as to the life span, describing the phases of life, opportunities, and limitations of people at different stages of age.

We believe that many elements of this proposition may be relevant to the design of future studies that should be considered in the cycle of "research, diagnosis, and primary prevention" in order to fulfill crucial goals of scientific investigation [10]. It is one of many other possible frameworks—such multiplicity and diversity of ideas is needed to fully exploit the potential of psychology in this area.

In the following sections, in the narrative review, the most influential conceptualizations and research are presented. We acknowledge at the outset that the analysis of the motivational process in the workplace requires the respect of local specificities, i.e., nation, language, culture, place, and occupation [10]. Thus, numerous empirically and/or theoretically supported relations from different samples and countries were integrated.

## 2. Health from the Perspective of Health per se

The first assumption refers to the increasing interdependence between work and health that has been recognized in almost all industrial societies [11]. Unhealthy work organizations can create enormous human and financial costs; for instance, absence from work due to sickness is related to workplace stress in almost half of cases [12] and costs organizations billions of dollars a year [13]. Therefore, from the theoretical and practical point of view, one of the central issues of sustainable organizations and sustainable society at large is the definition of health and its distinction from illness. The conceptualizations used to elaborate this assumption are presented in Table 1.

**Table 1.** Conceptualizations for assumption 1: Health from the perspective of health per se.

Number	Conceptualization, author(s)	Key notions	Significant contributions
1	The early psychiatric conceptualization of health used in psychology [14]	Health as a lack of disorders and psychosomatic complaints	Dominance of psychopathology and psychopathological research
2	Enrichment of the early biomedical meaning of health, Jahoda [15]	The psychological content of positive mental health	Continuity between mental health and mental illness
3	The Salutogenic Model of Health, Antonovsky [16]	The salutogenesis as a constant learning process supporting health Resources used to enable development of an individual in difficult situations, e.g., sense of coherence	Emphasis on the origins and conditions of health
4	The two continua model, Keyes [17]	Mental health and mental illness as related but distinct dimensions	Distinction of mental health from lack of mental illness
5	Multidimensional concept of well-being, Keyes [18]	Mental health as a complete state consisting of emotional, psychological and social well-being	Complete and holistic definition of health

Source: Own elaboration.

An early conceptualization of health and, then, the description of two important subsequent conceptualizations which overcame the limitations of the early focus on pathology are presented: The salutogenetic perspective of Antonovsky [16] and the two-continua model of health and illness as well as a multidimensional model of health by Keyes [17,18]. Also, based on the review of Macik-

Frey, Quick, and Nelson [19], the trends in research to applicate a positive and holistic definition of health are shown.

The early conceptualization of health used in psychology was rooted in psychiatry and was focused on pathology. Accordingly, individuals are either mentally ill or presumed mentally healthy, which points to the conceptualization of health as a lack of disorders and psychosomatic complaints [14]. Notably, at the birth of the National Institute of Mental Health in 1949, the field of psychopathology was more advanced empirically than the mostly theoretical literature of clinical and personality psychology that informed conceptions of positive mental health at the time [15,20]. In summarizing the results of the discussion of the joint commission on mental health and illness, Jahoda [15] argued that one cannot accept a single definition of mental health because standards for healthy behaviors vary with the time, place, and culture. The discussion led to the emergence of areas that enriched the early biomedical meaning of health with the psychological content of positive mental health [15] and are still relevant:

1. Attitudes of the individual toward himself;
2. Degree to which a person realizes his potentialities through action;
3. Unification of function in an individual's personality;
4. Individual's degree of independence from social influences;
5. How an individual sees the world around him;
6. Ability to take life as it comes and master it.

The original Jahoda's review of scientific investigators' approaches to positive mental health leads to eight points. We present only six areas which are strictly related to the health definition.

Later psychological reflections focused on mental health and its conditions and assumed a continuity between mental health and mental illness. The Salutogenic Model of Health proposed by Antonovsky [16,21,22] is an important processual perspective of mental health, which is defined as movement on a continuum of health and disease. The ontological background of salutogenesis contains assumptions about man in interaction with his environment, in which chaos and change are perceived as a normal state of life. Next to that, salutogenesis can be conceived epistemologically as a constant learning process that supports movement towards health via the improvement of health literacy. In this perspective, difficult and stressful situations that evoke tensions, entropy, and inconsistencies might not lead to stress or negative emotional states, but can mobilize an individual and enable his or her development. According to Antonovsky [16], scholars should focus on the question "What are the origins of health?". His approach to this question was to search for answers in the joint effects of the generalized resistance resources, the sense of coherence, stressors, behaviors, and lifestyle. The main concept in Antonovsky's theory [21] is the sense of coherence that reflects a person's view of life and capacity to respond to stressful situations. The sense of coherence consists of three elements: Comprehensibility, manageability, and meaningfulness. It is a personal way of thinking, being, and acting with inner trust, which leads people to identify, benefit, use, and re-use the resources at their disposal [23].

The salutogenic paradigm challenges mainstream thought to explore why some people stay healthy despite difficult life events. In this line, in the review of various types of overworked employees, Malinowska and Tokarz [24] ascertained that the pathology perspective is a limited way of explaining the different manifestations and outcomes of excessive work. This claim was supported in further research, which showed that work addicted and work engaged employees differ in the type of motivation [8]. Work engaged employees have autonomous motivation. They are motivated by intrinsic reasons to get pleasure from their work, which might protect them from the negative consequences of working hard.

The next conceptualization of defining health per se presented in the paper was developed by Keyes [17], who expanded the model of salutogenesis and proposed the two-continua model of health and illness. In his research, he asked the following question: "Are all individuals without mental disorders leading equally productive and healthy lives, and are they leading more productive and healthier lives than the mentally ill?" [17] (p. 540). The aforementioned author empirically found that measures of the symptoms of mental illness correlated negatively and modestly with measures of

subjective well-being [18]. In confirmatory factor analyses based on Midlife in the United States data (a nationally representative sample of adults aged 24 to 75 years), it was shown that mental health and mental illness constitute two separate, correlated unipolar dimensions [17]. In other words, mental health and mental illness are not opposite ends of a single continuum.

The two continua model, which holds that mental health and mental illness are related, but distinct dimensions, has been validated in other research within a European sample [25]. It gives rationale to assume that the treatment and prevention of mental illness, which at first glance appears to be an urgent public health issue, is not enough. If society can treat mental illness effectively, it does not mean that more individuals will become more mentally healthy. Their research shows that mental health is best viewed as a complete multidimensional state consisting of three core components: (1) Feelings of happiness and satisfaction with life (emotional well-being), (2) positive individual functioning in terms of self-actualization (psychological well-being), and (3) positive societal functioning in terms of being of social value (social well-being). Thus, mental health is a summum bonum consisting of the opposite Greek philosophical traditions of hedonism and eudaimonism. Emotional well-being is a cluster of symptoms that includes the presence of positive affects and the absence of negative affects, the presence or absence of positive feelings about life, and evaluations of life in general in emotional terms (i.e., life satisfaction) [26–28]. In addition, subjective well-being refers in general to individual strivings and optimal functioning [29,30] and consists of six dimensions: (1) Self-acceptance, (2) purpose in life, (3) autonomy, (4) positive relations with others, (5) environmental mastery, and (6) personal growth. The multidimensional concept of well-being is in line with Diener and colleagues' studies [26,27,31,32], showing that it includes evaluations of life in general (i.e., life satisfaction), the presence of positive affects, and the absence of negative affects. Next, social well-being consists of five dimensions that describe a person who is functioning optimally in society: (1) Social coherence, (2) social acceptance, (3) social actualization, (4) social contribution, and (5) social integration. As it can be seen, social well-being represents more public and social criteria for evaluation of an individual's functioning in comparison to the private and personal criteria of psychological well-being.

In their review of the literature on occupational health, Macik-Frey, Quick, and Nelson [19] identified two sets of emerging trends, one of which concerns positive advances. For instance, they observed a shift toward studying positive outcomes and analyzing their antecedents in the area of human strengths, e.g., hardiness [33], vigor [34], engagement [35], and resilience [36]. Moreover, they noticed a move toward studying discrete emotions, emotional processes, such as emotional labor, and emotional competence or emotional intelligence [37]. In addition, studies about the links between leadership and positive outcomes are emerging: The well-being and the development of followers [38], and followers' job engagement [39]. Lastly, they recognized that although interventions have evolved, there is still a need to develop them by introducing a positive and holistic view of health and addressing not only the individual level of intervention, but also the organizational one.

The first assumption to define health as health per se presents many fertile areas for future research incorporating psychology into sustainability and sustainable development. It guides researchers to use a more holistic paradigm and study diverse predictors, manifestations, and outcomes of health viewed as a complete multidimensional state.

### 3. An Individual Seen as an Agent

The starting point for the second assumption is that action is directed by an individual who is an agent. Prototype qualities of an agent have been comprehensively elaborated in the psychological theory of acting proposed by Tomaszewski [40]. At present, empowerment and job crafting researched in organizations represent, to some extent, the structural and processual aspects of an agency, thus research on these constructs is discussed next. The conceptualizations used to elaborate this assumption are presented in Table 2.

**Table 2.** Conceptualizations for assumption 2: An individual seen as an agent.

Number	Conceptualization, author(s)	Key notions	Significant contributions
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1	Psychological theory of acting, Tomaszewski [40] and its further elaboration [41–43]	Prototype qualities of an agent, e.g., individuality; autonomous activity; social status; ability to recognize place, status, and situation	Linking the development of an agency with maturity of personality, life stage, morality, the area of acting, level of insight
2	Agent and agency, Bandura [44]	Human agency is considered from the perspective of cognitive, vicarious, self-reflective, and self-regulatory processes	Rich theoretical context with related constructs, e.g., self-efficacy
3	Empowerment, Abel, Hand [45]	Empowerment as active orientation to work represented in cognitions (e.g., meaning, competence) and structural components (e.g., access to resources, support)	Broad range of variables which might be used as antecedents as well as outcomes of the special importance for sustainable organizations (e.g., effectiveness, innovative behavior)
4	Job crafting, Tims, Bakker [46]	Job crafting as active job redesign initiated by the individual	Proactive role of an employee in the construction of the meaning of their work and themselves Inclusion of the psychological processes, e.g., promotion and prevention focus

Source: Own elaboration.

According to Tomaszewski [40], an acting agent is characterized by the following: (1)

He/she presents internal consistency, which is stronger than the consistency of his/her links with reality; (2) has his/her own identity; (3) has well defined individuality; (4) his/her activity depends mostly on him/her; (5) has his/her own social status; (6) has different relationships with other people and reality; (7) his/her acting influences the environment; (8) he/she is able to recognize and understand his/her own place, status, and situation; and (9) he/she understands and selects new information and stimulus based on his/her tasks and goals. The qualities of an agent and agency within Tomaszewski's conceptualization indicate both structural and processual aspects. It is remarkable that not every person can present such qualities—it depends on the maturity of personality, the individual moment of development, and the developmental phase.

Being a full, real agent or acting self leads to universal restrictions [41]. The qualities described above are in a constant process of development; they are always forming and changing. Therefore, it is not easy to predicate what degree of maturity an individual has already reached. Moreover, being an agent depends on the area of acting. For instance, a person who is self-reliant and independent at work can show instability and immaturity in his/her personal life. The main limitations of being a real agent are related to the lack of insight into one's own experience and emotions. It is caused most often by primary and secondary self-centeredness and ego-defense mechanisms. These relate to the dominance of basic self-adapting needs, which force an individual to focus on threats. The ability of self-reflection, which leads to deeper insight, is necessary, but still insufficient for the requirement of overcoming the limitations of development of one's agency.

The development of one's agency is strongly related to the development of morality [41], which stimulates reaching a full and aware state of directing own actions. It should be noted that some of the regulation mechanisms used to direct one's action are inherently automatic—only some are more reflective and aware [41–43]. Therefore, the complexity of the associations and dependencies between agency and morality are even more complicated. However, reflective presumptions of action impact the course of automatic and unconscious processes; and thus, the development of agency is based on changes in one's reflectivity and a deepening of insight.

It is worth noting that Bandura [44] proposed his own conceptualization of an agent and agency, which is focused mostly on processual aspects. Within his social cognitive theory, human agency is considered from the perspective of cognitive, vicarious, self-reflective, and self-regulatory processes. This conceptualization offers a rich theoretical context with related constructs, such as self-efficacy, and can still stimulate conceptualizations and research in the area of the psychological aspects of a sustained agent and agency, and their sustainable development.

The concept of empowerment and job crafting can be seen as an important, but incomplete concretization of an agent and agency, as was presented above. This is particularly true if the main



issue of the analysis is motivation in the workplace. Originally, the conceptualization and research on empowerment was interpreted as a motivational concept focused on self-efficacy, as was referred to by Bandura and McClelland's need for power and by the self-determination theory in its contemporary version [47–49]. Empowerment is a multi-faceted construct, in whose psychological understanding the emphasis was put on active orientation to a work role expressed in four cognitions: Meaning, competence, self-determination, and impact [50]. These qualities are still crucial and are applied in research; however, as noted by Abel and Hand [45], the content of this concept is ambiguous, and some difficulties exist in its translation into other languages. On the other hand, the aforementioned authors refer directly to the publications of Conger and Kanungo [49] and Spreitzer's [51,52] research. More specifically, they made the following assumptions: First, empowerment is not an enduring personality trait that can be generalized across situations, but rather a set of cognitions shaped by a work environment [44]; second, empowerment is a continuous variable, thus people can be viewed as more or less empowered; third, empowerment is not a global construct that is generalizable across the whole experience, but rather is specific to the work domain [51,52].

In her conceptualization, Spreitzer [51,52] hypothesized that several personality traits and other aspects (self-esteem, locus of control, information, and reward) are antecedents of empowerment because they all shape the way individuals see themselves in relation to their work environments. Empowerment brings about at least two important consequences for sustainable organizations: Effectiveness and innovative behavior. These hypothetical characteristics of empowerment have received empirical evidence in a work context [51,52].

Abel and Hand [45] (p. 580) proposed the current theoretical and operational definition of empowerment. They enumerated the following psychological components: Meaning, choice, competence, and impact. Moreover, they formulated structural empowerment components: Access to resources, support, opportunities, and information. The componential definition of empowerment regarded its elements as antecedents and revealed that empowerment operates through processes, such as shared decision-making, options, power/control, influence, access, growth, and motivational dispositions. Since these processes are interconnected, they are presented in a circular model. This synthetic model of empowerment has been used in a lot of longitudinal research, thus confirming that structural characteristics lead to psychological empowerment and, consequently, predict personal and organizational outcomes (e.g., high job satisfaction, organizational commitment, task and contextual performance, and low employee strain and turnover intentions). The conceptualization of empowerment generates new research questions and areas. In addition, it can be successfully applied to the individual and team levels, as was shown in a recent meta-analysis [53].

The second concretization of the concept of an agent and agency in the workplace is job crafting. Its meaning is inspired by the classic motivational job characteristic theory of Hackman and Oldham [54] and includes "(...) the active changes employees make to their own job designs in ways that can bring about numerous positive outcomes, including engagement, job satisfaction, resilience, and thriving" [55] (p. 1). This conceptualization was illustrated by a case study describing the techniques and outcomes of job re-design.

Tims and Bakker [46] presented a relatively new perspective on job crafting that defined it as active job redesign that is initiated by the individual. This perspective is richer than classical job design theories and has important implications for addressing the proactivity of employees in the construction of the meaning of their work and themselves [56]. The authors clearly showed the basic psychological processes and traits that regulate active job crafting, among which the most important are the mechanisms of promotion focus (i.e., ideal self-regulation) and prevention focus (i.e., ought self-regulation) [57]. They used the well-known job demands–resources model [58] to frame job crafting; thus, although the model is complex, it is ready for empirical examination.

The presented assumption places an individual who is active due to his/her tasks and roles in the center; an agent operates in a specific environment and shapes it. The conceptualizations discussed in this section define specific characteristics and possibilities of acting that lead to the

strengthening of agency. In turn, a real agent is an indispensable aspect in the context of the stimulation of sustainability and sustainable development.

#### 4. An Agent in the Situation and Context

The third assumption concerns the interaction between an agent and the characteristics of a situation and environment, which should also be expanded to the social and cultural context. Different conceptualizations, presenting the interplay between an individual and the environment, can be provided; among which, at the meta-theory level, the social cognitive theory of Bandura and Mischel [59] was accepted. However, within the context of sustainable organizations and sustainable development, we want to focus on the job demands–resources model (JD-R model) [58]. It can be used to examine the wide spectrum of both individual and contextual factors, e.g., psychological, social, organizational, and physical. A conceptual overview of the JD-R model that is shared mainly with the Hobfoll's conservation of resources theory [60,61] is provided; next, some improvements that have been applied into the original version [62] are discussed. The conceptualizations used to formulate this assumption are presented in Table 3.

**Table 3.** Conceptualizations for assumption 3: An agent in the situation and context.

Number	Conceptualization, author(s)	Key notions	Significant contributions
1	The Conservation of Resources Theory, Hobfoll [60,61]	Resources defined as objects, personal characteristics, conditions, or energies	Emphasis on the role of resources in dealing with stress
2	Job Demands–Resources model (JD-R model), Bakker, Demerouti [58] and its further elaboration by the authors [62]	Job resources and job demands as work and organizational characteristics, leading, respectively, to motivation and the health impairment process	Simple categorization of environmental factors, which is heuristic and useful for various organizations
		Personal resources and demands as individual positive or vulnerability psychological characteristics	Inclusion of individual characteristics and their interaction with the situation
3	Further elaboration on the JD-R model of Crawford, LePine, Roch [63]	Redefinition of demands into challenge or hindrance demands based on their function in the specific work context	Better contextualization of job demands, which can stimulate and hinder motivation
4	Further elaboration on the JD-R model of Schaufeli, Taris [64]	Redefinition of job resources and job demands based on employees' evaluations	Individualized evaluation of job resources and job demands

Source: Own elaboration.

It should be noted that the job demands-resources model [58] reflects and combines research traditions of stress and motivation. In line with the basic tenet of the conservation of resources theory (COR) [60,61,65], people strive to retain, protect, and build resources, which are defined as “(...) those objects, personal characteristics, conditions, or energies that are valued by an individual or that serves as means for attainment of these objects, personal characteristics, conditions, or energies.” [60] (p. 516). What is threatening to them is the perceived or actual (1) threat of a net loss of resources, (2) net loss of resources, and (3) lack of resource gains following an investment of resources. The aforementioned situations produce psychological stress, and when faced with this stress, individuals strive to protect their resources or, in the case of a loss of resources, may employ other resources to offset the net loss. The JD-R model enriches these assumptions and derives a notion which stems from classic job design theories, e.g., [66], namely that particular work characteristics lead to intrinsic or extrinsic motivational states, which in turn enhance performance.

Accordingly, research within the JD-R model has focused on the inherently motivational qualities of positively evaluated physical, social, or organizational aspects of the work context, all of which has been labeled job resources [58]. Their motivational potential, which has been demonstrated in several studies, e.g., [67–69], is contrasted with the health impairment process. It is produced by demands that represent aspects of the work context that require sustained physical and/or

psychological effort or skills, e.g., [70,71]. This simple JD-R classification of work features into two categories of job resources and job demands can be identified easily in organizations and used to (re)design jobs or to develop primary interventions.

The JD-R model has been expanded by the role of the individual in modifying the impact of job demands and job resources on motivation and the health impairment process [62,72]. The proposed category of personal resources, which can play a similar role as job resources, is also consistent with Hobfoll's [60] notion that personal characteristics, such as personality traits and skills, act as resources when they aid stress resistance. Research within the JD-R framework that used personal resources defined as positive psychological characteristics or aspects of the self, e.g., [73,74], or, more concretely, as people's beliefs regarding how much control they have over their environment [72], confirmed that the individual differences perspective should be incorporated into the model. More specifically, in previous studies, personal resources were integrated in five ways [64] (p. 49–50): (1) They directly impact well-being; (2) they moderate the relation between job characteristics and well-being; (3), they mediate the relation between job characteristics and well-being; (4) they influence the perception of job characteristics; and (5) they act as a "third variable" that may affect job characteristics and well-being. Next to personal resources, personal demands should be considered [64,72]. The results of the study on a sample of outsourcing sector employees showed that the positive relationship between job resources and work engagement is weaker for strongly rather than weakly impersonal-oriented employees [75]. Individuals who score high in impersonal orientation may be especially predisposed to avoid job-related instruments related to goal accomplishment due to their deep sense of incompetence, anxiety, and helplessness. Future studies are necessary to analyze other personal vulnerability factors that prevent employees using the resources available in work environments, e.g., [76].

This discussion raises the question of whether the JD-R model might capture and unify conditions in all occupational sectors, hierarchical levels, occupational statuses (employees on the pay-role vs. self-employed), as well as differences in cultural values and socio-economic status, along with the differences in religion between countries where organizations are located [77]. Although a negative impact between job demands and work engagement was found in most research, in some studies, the relationships were positive. In addition, it was shown that workload is positively related to vigor and dedication and, in the long term, elicits engagement [78–80]. Similarly, Demerouti and colleagues [81] showed in a sample of insurance company employees that high job demands and high control were associated with higher work engagement. The JD-R assumes that every occupation has its own specific motivation- and stress-related risk factors, which should be specified by further research within the universal JD-R framework of job resources and job demands, while taking into account the local context.

Using meta-analytic structural equation modeling, Crawford, LePine, and Roch [63] refined and extended the JD-R model with a theory regarding the appraisal of stressors and differentiated demands. According to the authors, challenge demands are those that lead to mastery and future outcomes, particularly when people have access to sufficient job resources [82]; hindrance demands are seen as obstacles that prevent progress. The inconsistent findings in relationships between demands and other outcomes can be explained by this differentiation. For instance, cognitive demands were found to predict workaholism; moreover, they played a crucial role in the health impairment process in a sample of Italian workers who were employed or self-employed in several different sectors [83]. In contrast, in a study of outsourcing sector employees, it was found that information processing enhances the level of work engagement [84]. Thus, information processing, which is a cognitive demand, might be seen as a challenge or hindrance demand based on the nature of the job itself. Although some job characteristics produce some discomfort, they are seen by outsourcing employees, who have a limited number of motivational factors in their mostly routine and simple jobs, as work experience that is rewarding and motivating [85].

In fact, whether working conditions are positively or negatively valued is basically an empirical question. Thus, the paper points to the suggestion of Schaufeli and Taris [64] (p. 56) to redefine the concepts of job resources and job demands: "(1) Job demands are negatively valued physical, social,



or organizational aspects of the job that require sustained physical or psychological effort and are therefore associated with certain physiological and psychological costs, and (2) job resources are positively valued physical, social, or organizational aspects of the job that are functional in achieving work goals, reduce job demands, or stimulate personal growth and development.” In their conceptualization, “challenging job demands” are job resources and “hindrances” are job demands.

Models and studies discussed in this section offer insights into the complexities of person–environment interactions. The analysis of the agent in the situation and context provides greater empirical clarity that should be obtained to overcome the limitations of reactive approaches focused on treatment services to troubled workers. As such, it enhances the primary interventions focused on both individual and organizational factors promoting and threatening health in sustainable organizations.

## 5. The Life-Span Development Perspective

The life-span development perspective [86,87] is of obvious concern when research on motivation in the workplace is considered. Moreover, a few underlying rationales cannot be ignored, as they change labor markets: The demographic situation in Europe, the UK, and North American countries, as well as the growing dynamics of employment and migration. Therefore, the assumption was made that the life-span perspective should have the status of a very important scientific tool which helps not only in research, but also in building a model of the specificity of functioning in subsequent stages of development (age groups) and generations (cohorts) [88–90].

According to the conception of life-span development, an individual changes and can develop himself/herself throughout their life through activities aimed at maximizing benefits (desired goals and results) and minimizing losses. Selectivity, optimization, and compensation are the regulatory processes that enable the implementation of these developmental trends. Their dynamics depend on personality, the current position of the individual, and socio-cultural factors [91].

In this section, the motivational theory of life-span development of Heckhausen, Wrosch, and Schultz [92] and the 3C’s (content, context, change) model by Kanfer and colleagues [93,94] are presented. There are also two conceptualizations explaining the developmental aspects associated with age [90]: The Dual-Process Model of Developmental Regulation [95,96] and the Socioemotional Selectivity Theory [97]. The conceptualizations used to formulate this assumption are presented in Table 4.

**Table 4.** Conceptualizations for assumption 4: The life-span development perspective.

Number	Conceptualization, author(s)	Key notions	Significant contributions
1	Motivational Theory of Life-Span Development, Heckhausen, Wrosch, Schultz [92]	Optimization of development by formulating more appropriate personal goals	Adaptive capacity of an individual to changes in life-course opportunities
2	The 3C’s model, Kanfer et al. [93,94]	Content (individual differences) Context (cultural surrounding, a socio-technical work context) Change (time-related aspects)	Synthetical framework with three heuristic categories organizing theory, research, and practical concerns on motivation
3	The Dual-Process Model of Developmental Regulation, Brandtstädter [95], Brandtstädter, Renner [96]	Two automatic modes of information: Assimilative vs accommodative orientation	Adaptation to changes across life time and compensation of losses
4	The Socioemotional Selectivity Theory, Carstensen, Isaacowitz, Charles [97]	Two main life psychological mechanisms: Obtaining information and affect regulation	Adaptation to aging by maximizing gains and minimizing risks

Source: Own elaboration.

The Motivational Theory of Life-Span Development [92] indicates the main motivational mechanisms in the life course of an individual. The authors assume that the main regulation of life-span development concentrates on the dominant adaptive capacity of individuals. In this way, the

optimization of development occurs across major changes in the course of life. The regulation of motivation is a core process in the adaptive capacity and potential. The regulating motivation processes function by formulating more appropriate personal goals through selection, pursuit, and adaptation in order to reflect changes in life-course opportunities. Referring to the Motivational Theory of Life-Span Development [92], a very important statement congruent with the second proposition can be cited: “Most developmental scientists would agree that individual agency plays a crucial role in human development across the life span.” (p. 3). This statement can be found in the work of other life-span development researchers, e.g., [86,95,98,99]. In other words, in accordance with the organismic model of development, the assumption that individuals have an active and goal-oriented role in their development [100,101] is proposed.

In the next step, the 3C's model (content, context, and change) is offered, which can be used as a heuristic framework for work motivation research [93,94]. According to the 3C's, content relates to individual differences, i.e., biological and psychological factors, such as motives, cognitive abilities, traits, skills, and affective states; context is conceptualized as a cultural context/surrounding and a socio-technical work context; change is the dimension involving the dynamic and time-related aspects of work motivation, which is regarded as a process. This model is relevant to the understanding of the work motivation of different age groups. It allows the identification of both personal and contextual factors, which can be uniquely meaningful and significant for each age category and, to a great extent, are crucial in initiating, guiding, and maintaining goal-oriented behavior in the workplace [6].

The Dual-Process Model of Developmental Regulation [95,96] arose from the research on goal orientation and readiness to adjust goals and ambitions to current opportunities in adulthood and later age. This proposition is focused on a convergent distinction between two automatic modes of information that are functionally adapted to the assimilative orientation to the pursuit of goals versus the accommodative orientation to goal adjustment and disengagement. The goal of assimilation activities is to shape one's life and personal development in accordance with one's personal goals, i.e., considering later life, including efforts to protect or compensate for functional deficits. The accommodative processes, led by losses in the various fields of life, affect one's ambitions and goals in such a way as to adapt them to situational constraints and changes in vital resources. Brandtstädter and Greve [102] stated that while an individual faces losses over time and limitations at the physical, cognitive, or social level of functioning, he/she nevertheless possesses certain mechanisms that help him/her to adapt to these changes and compensate for them.

The results of the four studies of Brandtstädter and colleagues [103] on a sample of almost 900 respondents of different ages (from students to seniors aged 84) indicated that the importance of external goals associated with power, achievement, and competence decreases with age. The aforementioned authors' explanation of this finding was that the narrowing experience of a lifetime activates an accommodative process that helps an individual to give up their goals and tasks that are concentrated on the self. From the perspective of death, external and instrumental goals are less important and the opposite trend emerges: A person is more concentrated on values, rationality, or autonomy—authenticity, altruism, and spirituality. To sum up, with advancing age, ego-transcending goals tend to gain priority over extrinsic-instrumental goals.

The fourth conceptualization that is proposed, the Socioemotional Selectivity Theory [97], can be considered as complementary and consistent with the Dual-Process Model of Developmental Regulation. It addresses the effects of developmental changes in the perspective of time and suggests that people consciously and subconsciously monitor the remaining time in their life [97,104]. In late adulthood, the choice of goals and interactions is mainly motivated by the need for emotional closure and emotional significance. This theory proposes that a person adapts to aging by maximizing their social and emotional gains and minimizing their social and emotional risks [97]. The authors claim that the main motive of social interaction changes with age from obtaining information to regulating affect. The overall emotionality of a person changes and negative emotions are reduced, thus positive emotions become more pronounced/salient. Older people actively regulate their affect by choosing the right activity. Therefore, they are more involved in activities that bring them emotional benefits,

not in the sense of hedonistic satisfaction of needs, but in obtaining a higher level of satisfaction with activities in line with their preferred values that, for older people, refer to the wider social context. In their meta-analysis, Ng and Feldman [87] confirmed these theoretical claims and showed that older workers are more likely than younger ones to be motivated by socially supportive environments and emotionally rewarding tasks, and consequently, they have more positive job attitudes.

In this section, the life-span perspective was proposed to increase the potential of psychology in research on sustainability and sustainable development. This assumption indicates the need to study individuals at different stages of their life. The life-span perspective suggests that the temporal dimension is an indispensable explanation of differences in employee motivation and that longitudinal studies are needed. When it comes to application, this assumption is important to the design and implementation of organizational projects which should take into account the age composition of workers.

## 6. Final Remarks

The paper provides a framework for incorporating psychological theoretical assumptions into research on sustainability and sustainable development. It refers to the new definition of sustainability which focuses on promoting (enrichment, growth, and flexible change) instead of avoiding (exploitation, depletion, and irreversible alteration) [4]. Importantly, the infusion of psychological assumptions into sustainability and sustainable development provides lenses of improving the quality of life of every human being.

The four assumptions proposed in the article are centered on motivation in the workplace with a strong focus on employee health and optimal functioning. They provide an impulse for future studies to measure values, needs, and motives, as well as their content, meanings, and evaluations. These individual characteristics—along with the qualities of an agent operationalized in the work context as empowerment and job crafting—should be assessed in the interplay with the context. In this vein, developmental changes in motivation occurring over the life span cannot be ignored. This perspective requires specific research methodologies and a wide range of statistical techniques.

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