



Review

Systematic Review of Intervention Studies to Foster Sustainable Employability Core Components: Implications for Workplace Promotion

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Abstract: This review aims to outline the effectiveness of employer-initiated workplace interventions in promoting sustainable employability (SE), which means developing workers' capabilities to foster productivity, health, and valuable work in the long term. A systematic search of the literature is performed in three databases covering the period from January 1999 to February 2022. Fourteen studies are included. Considering SE core components, all interventions cover the valuable work component in terms of content, and the majority also cover the health component. Interventions addressing at least three SE components have more positive effects on SE outcomes. More positive effects are found for valuable work outcomes. Overall, the findings highlight the importance of developing workplace interventions considering a comprehensive model of SE and promoting an organizational culture for SE. Future directions and limits are discussed.

Keywords: sustainable employability; interventions; health; productivity; valuable work; long-term perspective; systematic review

1. Introduction

Over the last years, retaining aging employees at work as long as possible while simultaneously maintaining their vitality and productivity has become crucial for employers, social partners, and governments [1]. The COVID-19 outbreak around the world has significantly increased challenges related to, among others, employment stability and (psychological and physical) health and safety [2]. The coronavirus pandemic has also caused a shock to people's careers, highlighting the importance of building employability competencies and resilience appropriate to each career stage [3]. In this emerging adaptive and complex world of work, a new way of thinking about employability is needed now more than ever. Employability should concern not only competence development but also the actual possibility and ability to use those competencies to create concrete personally valuable work opportunities, promoting workers' wellbeing. This way of thinking takes shape in the concept of sustainable employability (SE). According to van der Klink et al. [4], the presence of resources, work-related (e.g., work demands and task structure) and personal (e.g., personal capacity, abilities, health, and education), as well as those of more general contextual and normative conditions (e.g., social context, legislation), lead to a set of capabilities that result in concrete personally valuable work opportunities. The achievement of such opportunities throughout one's working life is precisely what sustainable employability means, according to van der Klink et al. [4]. In this process, personal (e.g., motivation and attitude to acquire new skills) and work (e.g., Human Resources Management policy [HRM]) conversion factors need to be present to convert work and personal resources into exploitable capabilities or opportunities. Therefore, a facilitating



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work context and a workforce motivated to catch these opportunities are both required to obtain valuable outcomes, maintain health, and foster productivity in the long term [4,5].

Despite the growing importance of SE, the evidence for the effectiveness of employees' SE interventions is still unclear. In the domain of work and organizational psychology, many topics related to employability and sustainability have been raised in recent years. Some of these concepts are organizational sustainability [6], a sustainable career [7], sustainable HRM [8], and sustainable work/employment [9]. Based on the definition of SE by van der Klink et al. [4], Hazelzet et al. have suggested operationalizing SE into four core components—health, productivity, valuable work, and long-term perspective—in relation to SE interventions [5]. They also analyzed whether employer-initiated interventions framed as SE interventions addressed these components in content and outcome measures. Despite several reviews of the literature evaluating the effectiveness of workplace interventions already existing, this body of literature does not consider the combined effects of more than one of the SE components (e.g., [10]). So far, no review has aimed at evaluating the effectiveness of health, productivity, or valuable workplace interventions on corresponding SE outcomes considering all the four core components simultaneously. Nevertheless, theoretically, SE is the result of the joint action of all its core components and cannot be measured by only one of its core components. In this review, we attempt to capture how interventions that promote productivity, wellbeing, and valuable work simultaneously, throughout the working life, finally sustain employability.

Doing this, we primarily consider studies that address relevant SE core components even if not explicitly framed as SE studies. In order to advance research on SE promotion, this study aims to synthesize evidence on the effectiveness of employer-initiated workplace interventions that promote SE by developing workers' capabilities to foster productivity, health, and valuable work in a long-term perspective by means of a systematic review of the literature. To better clarify why promoting SE has quickly become a top priority, we first outline why the SE concept has been introduced and how it has mainly been conceptualized and operationalized thus far.

1.1. SE in a Development Context

The relevance of employability has gradually increased around the world. From an economic point of view, the link between wealth and a healthy working population has been significantly highlighted [11]. The Sustainability Goal Agenda-2030 from the United Nations has also stated the need for decent work for all to allow a sustainable future [12]. At the contemporary job market level, the dynamics of globalization have required organizations to pursue high performance while steadily investing in technology innovation and human resource quality [13], and workers have increasingly been expected to flexibly adapt to market demands and career transitions. In this context, successful workers identify and exploit career opportunities by means of a specific form of active adaptability, i.e., employability [14]. Recently, Lo Presti and Pluviano [15] defined employability as a mindset evolving over time (employability orientation), from which specific adaptative behaviors, called employability activities, derive (e.g., environmental monitoring and networking), proximally resulting in career success. In this conception, employees need to increasingly acquire new skills to be employable, and the employer has the primary responsibility to provide facilitating conditions. Better employment conditions and improved wellbeing should naturally follow this exchange. However, some recent theoretical and societal developments have shed light on the relevance of conceptualizing *sustainable* employability.

Among others, Amartya Sen's Capability Approach offers a suitable framework for interpreting employability [16]. According to this author, acquiring new competencies is not necessarily followed by an improvement in working conditions or added value at work. Sen instead proposed an alternative development model, expressed in the capability approach, according to which people can achieve more than one alternative combination of outcomes or functionings [16]. This means that no employment outcomes are naturally given because, as Sen contends, choices are sometimes constrained or limited and may

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not result in predetermined functionings or outcomes. Therefore, the realization of one functioning instead of another is the consequence of people's freedom to choose what is valuable for them and the opportunities they are or are not tangibly offered [16]. Therefore, the capability to be intended as the opportunity and potential to realize specific functionings is central to this conception.

Health is one of the capabilities that deserves special attention because of the way it is treated within this theoretical framework. Due to an aging society's economic and social challenges, awareness of the need for retaining aging employees and integrating or reintegrating people with disabilities or diseases at work has gradually arisen [17,18]. The coronavirus pandemic has further highlighted the link between work and health, as the impossibility of preserving workers' health suspended the majority of work activities. Therefore, a new approach to health has been developed: from output to a capability to help all people achieve valuable goals [19,20]. In this sense, health has to be considered an essential capability for adapting to work challenges [21]. In light of the capability approach, health can significantly influence whether employees can achieve valuable work outcomes [22]. Moreover, in achieving valuable work outcomes, both the employee and the employer are involved in balancing work and health demands and resources [23].

Following these theoretical and societal developments in Central Northern Europe, a new construct of SE has been introduced. Van der Klink et al.'s conception of SE is distinctively based on Amartya Sen's capability approach [4,22]. As already underlined, according to Sen [22], a capability is an ability and real opportunity of achieving diverse functionings in life that people can evaluate in terms of value. The focus is on a person's freedom to choose between a set of potential capabilities to do or be what he or she values doing or being [22]. Values are, therefore, a central component of contemporary work life and have to be emphasized in employability approaches. As functionings can be valuable for both the worker and the organization, both of them are responsible for building capabilities or opportunities to achieve valuable functionings [4]. In order to attain these outcomes, personal and work resources (e.g., employee capacity and work characteristics, respectively) have to play an input role in the process, whereas personal and work conversion factors (e.g., employee motivation to learn and HRM policy, respectively) must convert potentialities or capabilities into actual functionings [4].

1.2. SE as the Set of Four Classes of Capabilities

The SE model has been criticized for having poorly defined SE both as the set of capabilities or opportunities to achieve valuable functionings and the process of converting favorable conditions in this set [24–26]. According to Fleuren et al. [24,25], employability should indeed be considered only as an individual characteristic resulting from interactions among other individuals, work, and contextual characteristics, or considered as a multidimensional concept originated by different components and captured at a one-time point. The sustainability of the process can instead be captured by repeated measures at multiple time points [25]. In line with Hazelzet et al. [5], SE can therefore be considered only as a set of health, productivity, valuable work, and long-term capabilities. Such a definition addresses the main limitation of van der Klink et al.'s model, consisting of defining SE both as the set of capabilities and the process of converting capabilities in SE outcomes. It also helps to clarify that SE interventions should address these four classes of capabilities.

1.3. Towards the Definition of SE Interventions

Hazelzet et al. [5], in accordance with van der Klink et al.'s definition, have suggested operationalizing SE into four SE core components—health, productivity, valuable work, and long-term perspective—that constitute the main elements that SE interventions should address. SE interventions should indeed take both into account for employee health, in regard to wellbeing, work ability, and mood (health component), and for employee productivity, considering, for example, turnover issues and safety behaviors (productivity component). In light of Sen's capability approach [4,22], they also need to allow employ-

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ees to achieve value at work by developing skills, knowledge, personal resources, and capabilities (valuable work component). Finally, SE interventions should be considered from a long-term perspective, contemplating the long-term effects of interventions and the future health, productivity, and employability of employees of diverse ages (long-term perspective component) [5]. Therefore, SE interventions should take into account health and safety, productivity and ergonomics, lifestyle and stress management issues, and the sustainability of work in the long term. Moreover, SE interventions can be coherent with the theoretical framework considering these topics simultaneously, thus adopting a comprehensive approach.

1.4. Interventions for SE

As SE is still being defined, there are few SE intervention studies and studies evaluating the effectiveness of SE interventions. Oakman et al. [10] reviewed workplace interventions to promote work ability, considering the latter as a relevant proxy for SE; they found only moderate evidence for a positive effect of interventions on work ability, stressing the need for more high-quality studies. Cloostermans et al. [27], while reviewing the literature, narrowed the SE perspective to the effectiveness of interventions on work ability, productivity, and retirement of aging workers. Evidence for the positive effects of workplace interventions on these outcomes was insufficient, and additional studies are needed [27]. Van der Mark-Reeuwijk et al. [28] searched for randomized controlled trials (RCTs) evaluating interventions to improve four outcomes (i.e., need for recovery, work ability, sickness absence, or exit from paid work) of interest for SE. The few interventions that were found had a small positive effect on the considered SE outcomes but largely differed among them, with the result that it was not clear which interventions were most effective for whom and in which working conditions [28]. Hazelzet et al. [5] reviewed the literature on employer-initiated interventions framed as SE interventions; they found very few studies with, at best, a moderate level of evidence for a positive effect on the valuable work SE component. Therefore, it is still unclear if interventions which include all SE core components are more effective.

1.5. Rationale for a Systematic Review

This paper aims to find evidence for the effectiveness of employer-initiated workplace interventions aimed at fostering employees' SE intended as the set of four classes of capabilities (health, productivity, valuable work, and long-term perspective capabilities). In doing so, we consider interventions whose effectiveness is assessed by measuring outcomes related to this set. Previous reviews and studies have covered mainly SE proxies, have focused on only some of these valuable outcomes, have targeted only aging workers, and have found unclear or only moderate effectiveness of interventions [10,27–29]. Reviewing the literature in a systematic manner is important for integrating different approaches to SE promotion in the workplace, understanding which intervention elements are (in)effective, and moving forward in the conceptualization, measurement, and practice of SE. Our research questions in this review, therefore, include the following:

- 1. In intervention content and outcome measures, are there employer-initiated work-place interventions simultaneously addressing all SE core components: health, productivity, valuable work, and long-term perspective? Or, in other words, are there employer-initiated workplace interventions aiming to simultaneously build all SE core capabilities?
- 2. Is there any evidence for the effectiveness of SE interventions on fostering the achievement of valuable functionings? Is the intervention effectiveness higher when more classes of capabilities are addressed?

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2. Materials and Methods

2.1. Search Strategy and Study Selection

Three electronic databases were searched: EconLit (Ebsco), PsycInfo (Ebsco), and Web of Science. The search was limited to full-text scientific articles and conference proceedings published between January 1999 and February 2022. As research into SE is comparatively recent, this period appears to be sufficiently broad to retrieve the most recent results on interventions covering SE issues. Databases were searched using a combination of keywords, such as 'intervention' OR 'training' AND 'worker*' OR 'personnel*' AND 'capability' OR 'productiv*' OR 'wellbeing.' The last group of these terms was related to the four core components of SE, which are considered the main aspects to be addressed in SE interventions [5]. The search excluded terms such as 'child*' OR 'self-employed' OR 'student*.' The search strategy with the extended list of the keywords used is available in Table S1. We searched for studies embracing these terms in the title, abstract, or text body. Studies were only included if they evaluated the effectiveness of workplace interventions initiated by employers or promoted by trade unions among currently active employees (including employees on sick leave and employees with apprenticeship contracts). Studies embracing national or regional public initiatives, public policies and programs, and public campaigns addressed by several companies were excluded. Studies covering interventions initiated among unemployed, self-employed, and voluntary workers were also excluded. We excluded process evaluations. Studies were included if all four classes of SE capabilities (i.e., health, productivity, valuable work in the sense of competencies and skills, and longterm perspective referring to long-term effects of interventions) were evaluated as outcome measures. As health and long-term effects are two of the four components of SE, studies evaluating return-to-work, rehabilitation, and job retention interventions were included for evaluation. We included quantitative, mixed methods, and qualitative studies. The first author initially selected studies, screening titles, and abstracts. We estimated the articles lost in this phase due to the single screening procedure in the following manner. Three hundred of 15,588 articles were double-checked by the first and third author, and lost articles were estimated by comparing the number of articles included in the single screening with the number of included articles in the double screening. Disagreement was below 4 percent of the total number of double-checked articles. Full-text articles that were assessed for eligibility were selected by the first author, a tenth of these articles was double-checked by the last author, and, in case of disagreement about study inclusion, a consensus was achieved in discussion meetings.

2.2. Methodological Quality Assessment

The Quality Assessment Tool for Quantitative Studies by the Effective Public Health Practice Project (EPHPP) was used to assess the methodological quality of the included quantitative articles [30]. Other studies have already used this tool, which is usable in systematic literature reviews with a wide variety of quantitative studies [5,31,32]. The tool comprises seven criteria: selection bias at baseline, study design, confounders (differences between groups prior to the intervention), blinding (assessors' awareness of the intervention or exposure status of participants and study participants' awareness of the research questions), data collection methods, withdrawals and dropout, and data analysis. As per the EPHPP protocol, we assessed each criterion as "strong", "moderate", or "weak", except for the adequacy of the statistical analysis, which was evaluated separately as "yes" or "no".

The summary criteria for appraising qualitative research studies developed by Walsh and Downe [33] were used to assess the methodological quality of the included qualitative articles. This checklist was chosen because it facilitates a systematic, concise, and precise analysis of the articles [33]. It is usable in literature reviews (see, for example, [34]). The tool comprises eight criteria: scope and purpose, study design, sampling strategy, analysis, interpretation, reflexivity, ethical dimension, and relevance and transferability. As per the summary criteria protocol, we assessed each criterion as "strong", "moderate", or "weak".

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The appraisal of mixed methods studies was conducted through the guidance developed by Moorley and Cathala [35], which is suitable for assessing the quality of studies combining quantitative and qualitative data sets. This list includes six generic criteria: scope and purpose, theoretical framework, sampling strategy, analysis, interpretation, and inferences and implications for practice, and it includes four specific criteria: justification and value for the mixed methods approach, research design, quality, and integration [35]. As per the guidance protocol, we assessed each criterion as "strong", "moderate", or "weak".

2.3. Data Extraction

A categorize form was created to extract the data from the intervention studies. The form included the following captions: study population, content of the interventions, outcome variables used, and effectiveness of interventions. The intervention content and set of outcome measures used in each study to evaluate the effectiveness of interventions were categorized in one of the four SE core components according to an adaptation of Hazelzet et al.'s description in Table 1 [5]. Interventions' effects were assessed as "positive", "negative", or "no effect" based on statistical analyses or qualitative evaluations reported in each study. We used the term "contradictory" results when different indicators of the same outcome were simultaneously "positive" and "negative" or had "no effect". Confidence in the interventions' effectiveness was assessed as "weak", "moderate", or "strong" based on the methodological quality of each study.

Table 1. Operationalization of intervention content and outcome measures in sustainable employability (SE) core components.

SE Core Component	Intervention Content	Outcome Measures and Long-Term Perspective
health	The intervention covers health aspects, such as wellbeing, vitality, lifestyle, mental or physical health, quality of working life, work ability, work functioning, and mood.	e.g., wellbeing, vitality, lifestyle, mental or physical health, quality of working life, work ability, work functioning, and mood
productivity	The intervention covers productivity aspects, such as productivity, presenteeism, absenteeism, turnover, cost-effectiveness, intention to make changes, safety behavior, injuries, and accidents.	e.g., productivity, presenteeism, absenteeism, turnover, cost-effectiveness, intention to make changes, safety behavior, injuries, and accidents
valuable work	The intervention covers valuable work aspects, such as perceived positive attitude, job motivation, skills, knowledge, and personal resources.	e.g., perceived positive attitude, job motivation, skills, knowledge, and personal resources
long-term perspective	The intervention considers all work ages or explicitly focuses on long-term effects.	Use of a follow-up period (at least one year)

3. Results

3.1. Selection of Articles

There were 15,588 retrieved references, and after the removal of duplicates, 13,411 unique records were screened. Figure 1 shows the results of the search strategy with a PRISMA flowchart. Fourteen articles were included: 11 quantitative studies, 2 mixed methods studies, and 1 qualitative study. The reference lists of these 14 articles and the studies in which these 14 articles were cited (n = 1082) were also screened. No additional articles were identified through this search.

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Screening and eligibility

Included

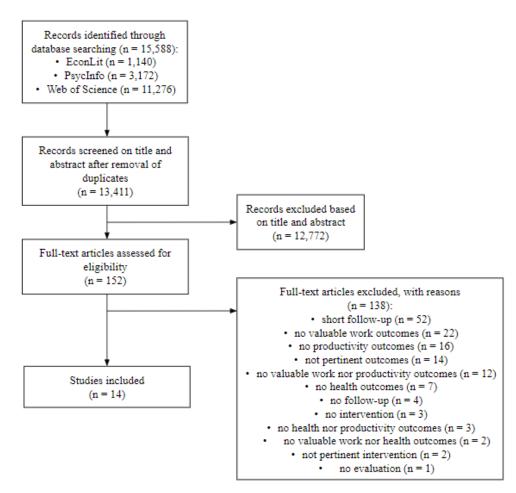


Figure 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart.

3.2. Methodological Quality of the Studies

The overall methodological quality of the fourteen studies ranged from moderate to weak. Among quantitative studies, four out of eleven studies had a moderate overall methodological quality [36–39], whereas the remaining studies had only a weak overall quality [40–46]. Blinding of participants and researchers was not possible in any of the quantitative studies; however, in the majority of the quantitative studies, analyses were adjusted for relevant confounders. Most of the data collection tools used in the quantitative studies were valid and reliable. The qualitative study had a moderate overall methodological quality [47], whereas both mixed methods studies had a weak overall methodological quality [48,49]. In the qualitative and mixed methods studies, the purpose of the studies was clear, but the impact of the researchers on each study was not sufficiently transparent. Further information about the rating of each tool criterion is available from the authors upon request.

3.3. Content of SE Interventions in Fostering SE Core Components

Tables S2–S4 summarize the intervention content and effectiveness of studies covering all, three, and no more than two SE core components in the content of the intervention, respectively. Figure 2 highlights the overall frequencies of occurrence of SE outcome measures in intervention studies included in this review. Health outcome measures were altogether addressed 49% of the time, whereas Productivity and Valuable outcome measures were addressed 32% and 19% of the time, respectively.

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Figure 2. Word cloud of SE outcomes measured in the included intervention studies. Note: Each word size indicates its relative frequency of appearance. The biggest words, such as work ability and health, occurred five times, whereas the smallest ones, such as resilience and efficiency, occurred only once. Word cloud obtained using WordleTM.

Only two out of the fourteen studies focused on all four SE components in their intervention content (Research question 1). Three studies focused on three SE core components in the content of their interventions, and they never addressed the productivity component. The remaining nine studies covered no more than two SE core components in their intervention content. Overall, all interventions covering no more than two SE core components addressed the valuable work component in their intervention content. The majority of these studies were primarily occupational health interventions. The productivity [44,45] and the long-term perspective [41,49] components were addressed only twice in the intervention content.

Regarding the characteristics of the interventions, among the studies covering all SE core components in the intervention content, the study exhibiting overall moderate quality by Schelvis et al. [37] evaluated a participatory organizational intervention targeting employees older than 45 years (long-term perspective component), and the study by Anderzén and Arnetz [39] reported a psychophysiological intervention conducted at the work unit level that targeted employees of all working ages (long-term perspective component). Both interventions consisted of an assessment phase and an implementation phase. In the needs assessment phase, as described in the study by Schelvis et al. [37] that exhibited moderate quality, the workers (mainly teachers) developed actions to work happily and healthily (health component) with the help of a facilitator and through interviews, a questionnaire, and group sessions (valuable work component). In the implementation phase, intervention activities suggested by the facilitator based on the previous phase findings were implemented [37]. The implementation of a specific activity—e.g., staff room creation or assessment of performance policy implementation (productivity component)—was supported by an action plan [37]. In the study by Anderzén and Arnetz [39], an assessment of the psychosocial working conditions among each work unit was first conducted. Based on this evaluation, no more than three enhancement areas—e.g., leadership, participatory management, employeeship, in the sense of openness to work changes (productivity component), management performance feedback (productivity component), organizational efficiency (productivity component), stress and work-related exhaustion (health component)—were selected for each unit. Through group meetings, implementation plans were developed by employees and managers of each work unit to enhance each specific area. Employees also received results from a blood analysis (health component). They took part in a presentation on the relationship between psychosocial work conditions and biological stress markers (health and valuable work components). At the same time, managers obtained some instructions on how to identify the most relevant enhancement areas to work on in each unit and discussed problems with consultants from the research team (valuable work component) [39].

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Among the studies focusing on three SE core components in intervention content, in a study of overall moderate quality, Hadgraft et al. [47] evaluated the perceived effects of an intervention aimed at decreasing workplace sitting that targeted employees older than 45 years (long-term perspective component) and consisted of individual- (sit-stand workstations and 3 months of health coaching, health component) and organizational-level (participatory brainstorming sessions, valuable work component) strategies. Similarly, the study by Van Holland et al. [46] that exhibited overall weak quality focused on employees with an average age above 45 years (long-term perspective component) and consisted of an employee health risk assessment (health component) followed by a counseling session with a physiotherapist (valuable work component) and specific recommendations, such as visits to a general practitioner [46]. In a study of overall moderate quality, Koolhaas et al. [36] evaluated a problem-solving-based intervention with the main aim of making employees aware of their responsibilities in building a motivating and healthy work environment that supports life-long learning (valuable work and health components). The intervention targeted employees older than 50 years (long-term perspective component) and was delivered in three stages: an assessment, a dialogue between the employee and a trained supervisor, and an action plan that aimed to outline solutions [36].

Some studies addressing no more than two SE core components in their intervention content were primarily based on the health component. The study of moderate overall quality by Sun et al. [38] evaluated a workplace-based intervention program aimed at improving mental health among employees by means of individual health promotion activities, organizational policies, health services, and training delivered to both managers and employees. In a study of weak overall quality, Haslam et al. [43] evaluated an occupational physical activity intervention based on the provision of health information and healthy activities. Similarly, in a study of overall weak quality, Blake et al. [40] evaluated a workplace wellness intervention consisting of exercise sessions, screening, therapies, education, and competitions. In a study of overall weak quality, Cervai and Polo [48] evaluated a participatory ergonomics intervention based on involving the worker in a decision process with managers to choose appropriate ergonomics interventions. Finally, Hansen et al. [42], in a study of weak overall quality, evaluated a leader-based health intervention in which advisors from occupational health services implemented two different models to improve health and psychosocial conditions in the workplace utilizing education activities, networking, and health activities.

Other studies addressing no more than two SE core components in their intervention content focused on problem-solving strategies or relationship improvement (valuable work component). Among the weak quality studies, DeJoy et al. [41] evaluated a participatory healthy work organization intervention based on expanding the organization's capacity to address critical problems through facilitated problem-solving teams. This intervention targeted employees of all working ages [41]. In a study of overall weak quality, Vinberg [49] evaluated and compared workplace health interventions in small enterprises for employees of all working ages consisting of a broad or an expert/problem-based strategy, the latter focusing on a smaller number of problems and a lower degree of participation. Finally, Leiter et al. [44,45], in two studies of weak overall quality, evaluated two Civility, Respect, and Engagement in the Workplace (CREW) interventions that aimed to encourage organizational value and relationships.

3.4. Effectiveness of SE Interventions in Fostering SE Core Components

Overall, the effects of interventions (Research question 2) targeting all four SE components on health outcomes were absent [37] or contradictory [39]. Effects on valuable work outcomes were absent [37] or, with a moderate quality of evidence, positive [39]. Effects on productivity outcomes were found to be contrasting [37,39].

Regarding studies focused on three SE core components in their intervention content, positive effects were mainly found for valuable work outcomes [36,46,47]. Effects on health outcomes were found to be positive [47,50], absent, or negative [36,46]. The productivity

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component was never addressed in the intervention content of these studies, and, coherently, the effects for productivity outcomes were found to be contrasting [47], absent [36], or, with a weaker quality of evidence, negative [46].

With a weak quality of evidence, a positive effect for valuable work outcomes was found only in four out of nine interventions covering no more than two SE core components in their intervention content [44,45,48,51]. Only three out of five studies addressing the health component in their intervention content found positive health outcome effects [38,40,43]. The productivity component was addressed twice in the intervention content of these studies, with a positive [44,45] and a negative [45] effect on productivity outcomes. In some cases, even if the intervention content did not address the productivity component, a positive effect on productivity outcomes was found [38,43,48]. Similarly, positive effects on health outcomes were found in two cases, even if the interventions did not address the health component in their content [44,45]. With a weak quality of evidence, one intervention had a negative effect on the valuable, health, and productivity components [49].

4. Discussion

This systematic literature review aimed to outline evidence concerning the effectiveness of employer-initiated workplace interventions in fostering SE core components—health, productivity, valuable work, and long-term perspective—as shaped by Hazelzet et al. [5] and to advance research on SE promotion. A comprehensive perspective for SE interventions simultaneously evaluating all core SE outcomes is only starting to emerge. Therefore, our primary goal was to evaluate the effectiveness of health, productivity, or valuable workplace interventions on all four corresponding SE outcomes evaluated simultaneously. The content of the interventions was also analyzed in light of the four SE core components. Few of the included studies evaluated workplace interventions targeting all the four SE core components simultaneously. Among the included studies, even fewer covered all of the SE core components in their intervention content (Research question 1). Some studies that were explicitly framed as SE interventions could not be included, as they did not address all the SE core components in their outcome measures [52–56]. All the interventions covered the valuable work component in their content, and the majority also covered the health component, whereas the productivity component was rarely addressed in the intervention content. Concerning the long-term perspective component, each intervention was evaluated over at least 12 months. Half of the interventions also targeted employees of all working ages or those with an average age above 45 years. The interventions varied in content and in three cases targeted employees as well as leaders or managers [38,42,49].

A moderate to weak quality of evidence regarding the overall effectiveness of work-place interventions in fostering the SE core components was found (Research question 2). The effects found were mixed, with a substantially higher number of positive effects of the valuable work component of interventions on valuable work outcomes. In a relatively small number of studies, a negative effect of the health component of interventions on health outcomes was found. These findings are in line with an earlier review on the effectiveness of SE interventions [5].

The higher number of positive effects of the valuable work component of interventions is consistent with the growing attention that the scientific literature has been paying to the concept of the perceived value of work. Hovbrandt et al. have underlined how, when talking about occupational balance, i.e., the mix of both mandatory and chosen social, mental, and physical occupations a person is involved in, the most crucial indicator of a harmonious mix is the congruence with personal values and meaning that people feel in an occupation [57]. Interestingly, a high congruence determined by meaningful occupations in which personal needs, values, and resources are respected also relates to wellbeing and retirement choices [57]. Individual and contextual resources and abilities not exceeded by work demands can also concur with occupational balance. Additionally, Smids et al. have underlined the relevance of assessing the impact that technological changes at the

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workplace, such as increasing robotization, have on meaningful work [58]. In particular, they described meaningful work as characterized by the development and exercise of skills, the pursuit of a purpose, autonomy and recognition, and social relationships [58]. The importance of some of these elements was also well highlighted by Lo Presti et al. [59]. These authors delineated a project manager career as a prototype example of a sustainable career in terms of, among the other dimensions, agency and meaning [59]. Indeed, project managers can usually attach high meaning, fulfillment, growth tuned with personal values, and awareness to their work. This attachment can be especially useful in implementing specific enriching career paths [59]. Taken together, these contributions and our result shed light on the need for further research to explore how significant the value and meaning of work are for SE and sustainable career promotion.

Overall, the studies included in this review reported few positive effects and, more frequently, no effects or negative effects on health outcomes. Similarly, productivity issues were addressed a few times in the intervention content of the included studies, and when addressed, few corresponding positive effects on productivity outcomes were reported. This finding of mixed and sometimes contradictory effectiveness of interventions on SE outcomes calls for further research on integrating SE core components in SE interventions. As the valuable work component was effective a greater number of times on valuable work outcomes, it is essential to understand its impact on health and productive outcomes. Evidence of interventions that have impacted more than one SE core component simultaneously is still needed. For example, a recent meta-analysis of RCTs has found evidence for the effectiveness of workplace health interventions for absenteeism but could not make a conclusion about the effectiveness of these interventions for work ability and productivity [60]. Even if absenteeism could impact employee productivity, the connections between the two are still to be acknowledged.

Remarkably, the interventions covering at least three SE core components in their content had more positive effects and fewer negative effects on SE outcomes than the interventions covering one or two SE core components when considering the outcomes aligned with the intervention content. This finding supports the importance of adopting a comprehensive approach to SE in conceptualization and practice. Further research on how workplace interventions should promote and balance health, competencies, and productivity from a long-term perspective, in line with employees' and organizations' valuable choices, is thus needed [26].

4.1. Practical and Societal Implications

In order to better define good practices for SE, it is helpful to take a closer look at the effective interventions included in this review that had a positive effect on SE work outcomes. In the study by Koolhaas et al., employees were provided with a booklet to assess their career and development opportunities, and they discussed solutions with their supervisors, who were previously trained in providing employee resources [36]. In the study by Hadgraft et al., some valuable work intervention ingredients—coaching, group brainstorming, and support by leaders—might have contributed to building new awareness regarding the workers' health behavior [47]. We argue that these effective intervention elements have contributed to enhancing specific capabilities among employees, resulting in positive effects on valuable work outcomes. As the valuable work component had positive effects on related outcomes in more than half of the included studies, in line with Sen's capability approach [22], our results suggest that it is essential to address the valuable work component in intervention content to enable an intrinsically valuable work life [5,61]. This implication is supported by the recent promising scientific literature that overall underlines the importance of enabling valuable work practices for SE. These practices mainly take shapes in a dialogue-based toolkit [62,63]; health and safety monitoring routines [64]; tailormade development programs [65]; the promotion of opportunities and employee development fitted with personal wishes and needs [66]; negotiation and discussion about Ideals and systematic training as well as structured conversation processes and coaches [67]; Sustainability **2022**, 14, 3300 12 of 16

the improvement of the employee psychological capital [68]; job crafting and continuous sustainable changes [69]; continuous routines of conditions' assessments and shared action plans [70]; career development discussions as well as regular dialogue and organizational culture [71]; and counseling, coaching, mentoring and motivational interviewing [60]. Therefore, developing capabilities in the form of competencies and health resources should be considered a key action in SE promotion and requires further practical advancement.

It is crucial to consider and conduct intervention process evaluations [72]. The previous literature explains how program failure regarding health outcomes could be related to many factors, such as the incomprehensiveness of interventions or insufficient employee participation [5,36,73,74]. Regarding productivity, the previous literature underlines how this construct is complex to measure, and—regarding intervention effectiveness on productivity outcomes—in some cases, employees do not have low levels of productivity that can be improved through an intervention, or intervention attendance is too low [75,76]. Intervention effects, those on outcomes in line with intervention content or not, may be explained with complex mediating and moderating processes [77]. In our review of studies, only five out of fourteen studies included an intervention process evaluation [36,37,41,51,78]. When the program failed, the authors reported reasons such as a short duration, a lack of training frequency, an inadequate level of skills, or low adherence to the program [34,35,39,49,78]. However, further attention to understanding what happens in the workplace is crucial to orient SE interventions and practices [79].

As this review points out, SE interventions should simultaneously promote and cover health, productivity, valuable work, and long-term perspective issues through their content. Therefore, the first step toward promoting the interventions' effectiveness is to consider, at the level of HRM, the possible interrelations among intervention elements that boost productivity, health, and safety in creating transversal capabilities. At the employee level, as employee choices are central in the SE perspective, it is essential to encourage employee participation in intervention planning that is in line with their work life stage, considering the full value that employees can obtain from the intervention [66]. The need to adopt a synergistic and comprehensive perspective of SE is also strongly encouraged because of population aging, technological developments, and uncertain career trajectories [13]. Additionally, this need has been accelerated by the COVID-19 pandemic, which is quickly and increasingly changing the ways of working and competencies required [80]. The pandemic is disrupting people's careers, health, and finances, making clear the relevance of developing new career and proactive competencies and employability resources according to each life stage [3]. Within organizations, this implies creating a solid culture of SE. Thus, the COVID-19 pandemic could help clarify the need to address productivity, competencies, and health issues together at work [26]. As this review shows, SE interventions still tend to limit their focus to individual conversion factors rather than including organizational factors. Particular attention should also be given to relevant organizational conversion factors, such as employee work-health balance or changing leadership [26]. Paying attention to these factors could be considered the first step to building an organizational culture of SE.

On the level of national labor policies, developing a participatory culture for SE implies developing active SE policies strongly aligned to workforce needs as well as allocating working hours for the acquirement of new healthy capabilities [71], in line with decent work United Nations' Sustainability Goal Agenda 2030 [12]. Societies also need to provide adequate incentives to companies for employee retention and plan community-level measures while considering societal, mental, and biological aging [70].

4.2. Study Strengths and Limitations

One strength of this study is the broad search strategy adopted. This strategy aimed to detect different types of workplace interventions with diverse theoretical frameworks, delivered to employees or managers. Different types of study designs—quasi-experimental trials, cohort studies, and longitudinal studies—were included in this review. Even though

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RCTs are the gold standard for evaluating what elements of interventions work, in the domain of workplace interventions, randomization, control, and blinding are often very difficult, so other study designs must be considered [81]. As a result of these difficulties, none of the studies included in this review had a high methodological quality as assessed with the EPHPP. The inclusion of qualitative and mixed methods studies was beneficial to address questions such as why and how an intervention works [82]. Our included studies mainly described interventions conducted in industrialized countries—Australia, the USA, Canada, the Netherlands, Norway, Sweden, the UK, and Italy—and an intervention delivered in a developing and emerging country (China) worksite was included [38]. Two intervention studies conducted in small companies, where resources are often lacking and on which the literature is still fragmented [83], were also included [42,49].

Despite our broad search strategy, only 14 intervention studies were included. As we excluded studies that did not evaluate the effectiveness of their intervention on all the SE core outcomes, some studies that were framed as SE interventions could not be included [52–56]. This choice was made to include only those interventions employing a comprehensive SE perspective in terms of outcome measurement. As we included diverse interventions, detecting the effectiveness of interventions was also complicated. The four SE core components were systematically assessed in the intervention content and in the outcome measures. However, different operationalizations of the SE core components are also possible.

5. Conclusions

As a result of theoretical considerations and the findings of this review regarding the greater effectiveness of interventions integrating more SE core components into their content, future SE interventions should focus on comprehensively promoting all the SE core components. More research on integrating the SE components into intervention content is needed. Accordingly, interventions should be evaluated on corresponding SE outcomes. Interventions should be developed in light of a comprehensive perspective of SE. This means that interventions need to build capabilities, work on needed personal and contextual resources and conversion factors, and, finally, develop an organizational culture for SE.

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/su14063300/s1, Table S1: Full list of search terms; Table S2: Data extraction of quantitative (QT) studies covering all SE core components in intervention content, Table S3: Data extraction of qualitative (QL) and quantitative (QT) studies covering three SE core components in intervention content; Table S4: Data extraction of quantitative (QT) and mixed methods (MM) studies covering no more than two SE core components in intervention content.

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