Concept Paper

A Conceptual Framework to Promote the Transition to Positive Mental Health among Young Construction Workers

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Abstract: There is a need to promote the mental health and well-being of young people who work in the construction industry worldwide. Although research exists on young construction workers' mental health, it conceptualises mental health as a disease and focuses predominantly on issues connected with negative aspects of mental health. In contrast, research that can inform the promotion and protection of positive mental health, which is crucial to young construction workers' achievement of good mental health and well-being, is scarce. To improve this situation, it is necessary to develop frameworks that reconceptualise mental health as a positive phenomenon and provide a comprehensive picture of how positive mental health is achieved by young construction workers. In this study, therefore, we propose a conceptual framework and five testable propositions based on Meleis' middle-range theory of transitions and Keyes' Dual-Continuum Model, both of which focus on the attainment of well-being. The proposed framework wholistically captures the structure of the distal, intermediary, and proximal determinants of young construction workers' positive mental health and the relationships among them. The framework and its accompanying propositions provide a basis for undertaking multi-level and context-specific research that can adequately inform the development of interventions and policies for promoting and protecting young construction workers' positive mental health.

Keywords: youth; young construction workers; well-being; mental health promotion; positive mental health; construction industry; conceptual framework; transitions

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1. Introduction

The post-modern approach to promoting the mental health and well-being of young people highlights the need to view mental health as a broad range of positive "experiences and emotions inherent to life" and "a state of well-being" that enables young people to "achieve their full potential" for better life outcomes, instead of a range of psychiatric conditions [1,2]. Closely aligned with this view is the established fact that improving mental health involves not only the elimination of symptoms of negative mental health, such as anxiety and depression but also the promotion of positive mental health and the prevention of its loss [3]. It has, therefore, been recommended that any activity, including research, aimed at contributing to mental health and well-being promotion among young people should give attention to the "risk and protective factors" to which they are exposed; be responsive to the critical social, cultural, economic, political, and environmental situation of young people; allow meaningful input by multiple stakeholders, especially young people themselves; and prioritise the issue of positive mental health [1].

Despite this, mental health research on young construction workers, as well as the entire construction workforce, employs a "disease-based model" that views mental health as a symptom of mental illness [4,5]. As a result, research on the mental health of the

construction workforce, including young construction workers (i.e., those aged 35 years and below), continues to focus predominantly on conditions such as depression, anxiety, substance use disorder, suicidal ideation, and their associated risk factors [4,6]. The current body of research, despite contributing a good understanding of the negative aspects of mental health, falls short of answering vital questions such as "What constitutes positive mental health among young construction workers?", "What factors contribute to positive mental health?", and "How do young construction workers achieve positive mental health?". A lack of answers to these questions and others of a similar nature makes it a challenge to improve the mental health of young construction workers since, contrary to the concept of mental health promotion, available mental health interventions are based on the premise of reducing the symptoms of mental illness alone [3,5]. This situation is especially detrimental to young construction workers, who are known to have a higher susceptibility—compared with older construction workers and young workers in other industries—to mental ill-health and its attendant outcomes of poor quality of life and death [7–9].

To address this challenge, there is a need to develop conceptual frameworks that can help to reorient the current framing of mental health in the construction literature towards a positive view of mental health, in line with the post-modern approach to mental health promotion. Against this backdrop, we seek to develop a conceptual framework of young construction workers' transitions to positive mental health. Based on this framework, we seek to generate propositions for further research. To achieve this, we draw on concepts from Meleis' transitions theory [10,11] and the Dual-Continuum Model of mental health [3,12], both of which focus on the promotion of the well-being of vulnerable groups. The proposed framework and its associated propositions have the potential to inform research that can facilitate the prioritisation of investments towards intervention development and policy formulation towards the promotion of young construction workers' mental health [1].

The paper is structured as follows: First, we outline our research approach, after which we review the literature on the theoretical concepts on which the proposed conceptual framework is premised, and we present the justification for their selection. Next, we present and evaluate the proposed conceptual framework. We then discuss the constructs of the proposed framework, the relationships among them, and the emergent propositions. Finally, we conclude by presenting the implications of our framework for research and practice.

2. Research Methods

This research was undertaken using an integrated review and analysis of the literature. This research approach involves reviewing and synthesising the relevant literature on a topic in a way that leads to the generation of new frameworks and viewpoints on the topic under investigation [13]. Reasoning from the principle of system recombination, which specifies that parts of different systems can be combined and co-exist to form new and useful systems, was the underlying principle of this research [14,15]. We were of the view that the adoption of health promotion theories from other disciplines that had made advancements in health promotion could lead to innovations and improvements in the promotion of positive mental health in the construction industry. Thus, transitions theory and the Dual-Continuum Model, from nursing and psychology, respectively, were deemed promising because the applicability of their constructs to health promotion makes them suitable theoretical frameworks with the potential for guiding mental health promotion in the construction industry.

The integrated literature review and analysis were undertaken in four steps. First, we reviewed the relevant studies, both theoretical and empirical, on transitions theory and the Dual-Continuum Model. Thereafter, we examined each construct of the different theories as well as the possible connections between the two theories. Next, we combined the theories into a single framework and discussed their applicability in the context of mental health research in the construction industry. In the final step, we used deductive reasoning [16]

to examine the relationships between the constructs of the emergent framework and formulated a set of propositions based on the identified relationships. The next sections present the outcomes of these steps.

3. Theoretical Background

3.1. Transitions Theory

3.1.1. Background and Key Assumptions

Transition refers to the experiences individuals encounter as they face changing situations in life that can have a major impact on their health, relationships with others, life goals, or skills and abilities, causing either a state of "vulnerability" or "well-being" [10]. The concept of transitions has been extensively utilised in different disciplines (e.g., psychology, social welfare, etc.), notable of which is nursing. Within the nursing discipline, transitions focus mainly on the issues of "health", "illness", and the "health-related behaviours" of vulnerable populations such as new mothers, older adults under hospitalisation, migrant women, low-income migrant workers, and nursing students [10,17,18].

Meleis' transitions theory has its origins rooted in Benner's [19] Novice to Expert theory, which proposes five stages of a nurse's expected skills, viz, "novice", "advanced beginner", "competent", "proficient", and "expert". Benner operationalised the Novice to Expert theory to clarify the transitions that new nurses undergo in terms of the abilities they must develop and master during their clinical practice and professional lives. Over the last four decades, the theory of transitions, as part of its development, has undergone changes such as the identification and description of its constructs [17], expansion of its components [18], and an overall extension and refinement [10]. It is described as a middle-range theory because, unlike other types of theories (e.g., meta-theory, grand theory, and micro-range theory), it has relatively few constructs and propositions, applies to a specific situation, can be merged with other theories, and can help to propose interventions [20].

Transitions theory has several underlying assumptions. Firstly, a transition is a natural change process that occurs throughout a person's life and can lead to major changes in personality, responsibilities, skills, and behaviour [21]. Such change is time-bound, begins at or before a precipitating event, and has a flexible outcome [22,23]. Transition processes are complex and multi-dimensional processes that are both causes and outcomes of the associated changes [22]. Whether a person expects to undergo a transition or not, and whether the transition experience is short-lived or lengthy, how a person responds to the transition process is significantly determined by the type of interactions—usually complex—they have with multiple people and with their environment [23].

Although transitions usually involve periods of distress, they are essentially positive [10]. Thus, a person may feel a sense of disconnectedness during the transition process as a result of the experience of inconsistency between their needs, available resources, and their ability to use such resources in a beneficial way [11]. However, since the objective of transition is to overcome vulnerability, once a person has fully undergone the transition process, they are expected to have attained "greater stability", which they lacked before the onset of the transition process [10]. In furtherance of this, Meleis [11] argued that an ostensibly negative transition experience does not mean the absence of a positive transition outcome but is rather an indication that a person has experienced and overcome situations that threatened to disturb the transition process. The meanings attached to transitions vary between individuals, populations, and cultures and influence peoples' responses to transition events, thus implying that peoples' responses are "not random occurrences" [11].

3.1.2. Constructs of Transitions Theory

Four domain constructs define transitions theory, viz, (1) nature of transitions; (2) transition conditions; (3) patterns of response; and (4) nursing therapeutics [10,11]. The relationship between these constructs is illustrated in Figure 1.

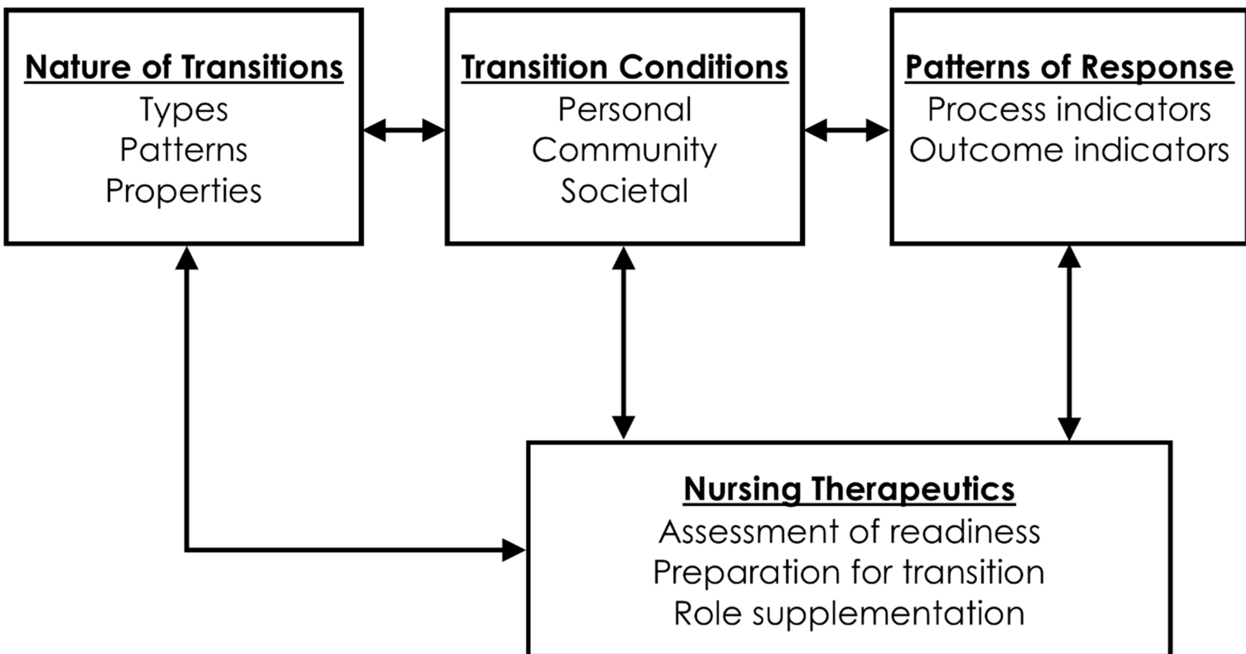

Figure 1. Constructs and components of transitions theory (adapted from [10,11]).

Nature of transitions: This construct includes types, patterns, and properties of transitions [11]. Five main types of transitions have been identified in the literature. Schumacher and Meleis [18] identified the first four types of transitions that nurses encounter, which are developmental, situational, health/illness-related, or organizational. The fifth is lifestyle transition which was recently identified by Munck et al. [24]. It focuses on a person's behavioural changes in relation to "lifestyle matters". Nurses also need to consider patterns of transitions, which can be described as multiple, simultaneous, sequential, and/or related [10,25]. Transitions may be multiple in the sense that different types of transitions may be experienced at once by the same person. Complexity as a pattern of transition indicates that the transition process does not occur in isolation but is rather caused by numerous factors which affect the experience, process, and outcomes for an individual in transition and others around them. Despite being unique, each transition has common properties, viz, awareness, engagement, change and difference, time span, and critical points and events [10]. These properties are interconnected, and alterations to one may influence the other [22]. It has been suggested that every transition has a beginning, which extends from "the first signs of anticipation", and a recognisable ending, which results in a phase of stability [11]. Despite this, it is important to note that it may be difficult, impossible, or even impractical to set temporal boundaries on a transition [10].

Transition conditions: These are the factors that promote or obstruct progress towards achieving a "healthy" transition [11]. These are personal, community, and societal factors that influence an individual's response to a transition. Personal conditions include meanings attached to transition, socio-cultural attitudes and beliefs, socio-economic status, and the level of preparation or knowledge that a person has in relation to the transition [10]. Community conditions may include the resources within the community where a person lives [26]. Typical community conditions that influence transitions are community resources, support from family and friends, availability of relevant information, and the presence of role models [23,27]. Community inhibitors include insufficient social support, misleading learning programs, conflicting information, negative advice, and negative treatment from others [27]. Societal conditions refer to social norms, including stigma and stereotypes attached to the transition marginalisation of certain groups, and cultural attitudes towards certain conditions and people [10,11].

Patterns of response: This construct characterises a healthy transition process and comprises two main components, viz, process indicators and outcome indicators [11,28]. Process indicators are the factors that signify whether a person is either approaching well-being or “vulnerability and risk” when undergoing transitions [11]. Process indicators include interacting well with others, feeling connected to significant people and the environment, and developing healthy confidence and coping skills [10]. Outcome indicators signify the overall results of the transition process. Examples include developing confidence and coping [27], being able to interact with others [18], and perceiving oneself as being in a good location or being ideally situated in space, time, and relationship [21,25]. These experiences signify a mastery of new skills and the emergence of a “fluid, yet integrative identity” resulting from identity reformulation during the transition process [11] (pp. 62–63). According to Meleis [10] (p. 63), the entire transition process culminates in a person’s development of “a subjective sense of balance” or well-being.

Nursing therapeutics: These are the ideal actions, care strategies, or provisions from caregivers that are aimed at helping to facilitate the achievement of the desired well-being outcomes during the transition process. Examples include “preparation for transition”, “role clarification”, identifying milestones, and mobilising support ([11], p. 46, and [23]). Such actions can be preventive or therapeutic and are specifically aimed at preventing the negative consequences of transitions and improving health outcomes [11]. Nursing therapeutics are informed by an understanding of transition conditions, the nature of transitions, and patterns of response [18] (p. 125) and suggest that nurses can influence different aspects of a transition in a positive way if they develop healthy relationships with the person undergoing the transition [22].

3.2. The Dual-Continuum Model of Mental Health

3.2.1. Background

The Dual-Continuum Model of mental health, also known as the “complete state model”, conceptualises mental illness and mental health as related but separate constructs [12,29]. It, therefore, merges the pathogenic perspective (as stipulated by clinical psychology) with the salutogenic perspective of mental health [30]. The pathogenic perspective derives from theories that focus on symptoms of mental illness and therefore views mental health as the absence of disease, without considering the significance of mental well-being [12,31,32]. This was the predominant conceptualisation of mental health until the emergence of seminal research on the salutogenic perspective (e.g., [33–35]), which frames mental health as subjective well-being. According to the Dual-Continuum Model of mental health, an individual can have poor mental well-being and still not be mentally ill, or a person can exhibit high levels of mental well-being amidst mental illness, meaning that people with low levels of mental illness or even an absence of it do not necessarily have good mental health [31]. The Dual-Continuum Model has led to the construct of positive mental health, which is a tripartite combination of emotional well-being [33], psychological well-being [34], and social well-being [35]. Although each is different, these aspects of positive mental health are sub-factors that originate from generalised well-being [36]. In line with the aim of this study, we limit our discussion to the Dual-Continuum Model to the construct of positive mental health.

3.2.2. Domain Concepts of Positive Mental Health

Emotional well-being: As an aspect of subjective well-being, this concept equates well-being with happiness (hedonism) and is made up of three dimensions, viz, avowed happiness (good feelings), life satisfaction (satisfaction with life), and affective balance (the harmonisation of positive and negative affect), all of which lead to a residual effect of positive emotions [30]. Whereas happiness stems from planned and unplanned experiences that may have pleasurable and unpleasurable impacts that occur at certain points in a person’s life, satisfaction with life reflects the long-term outlook of a person’s life [3].

Psychological well-being: This aspect of positive mental health equates well-being with happiness, not as feelings towards life, but as the human potential that involves the pursuit of excellence, which when achieved results in positive functioning in life (or eudaimonia) [3]. It, therefore, involves how a person perceives the quality of functioning in their personal life. Psychological well-being has six dimensions that are reflective of the hurdles that a person must deal with in the process of pursuing and achieving a fully functional life [34,37]. The six dimensions include self-acceptance (a positive appraisal of oneself and one's life overall), positive relations (the ability to enjoy good relationships with other people), autonomy (the ability to make decisions for oneself), personal growth (a feeling of sustained growth and personal development), purpose in life (the belief that one's life has direction and meaning), and environmental mastery (the capability of managing one's life and environment effectively) [3,37].

Social well-being: This dimension is premised on the fact that humans are members of social groups, and that some aspect of a person's well-being emanates from the perceived harmonisation between the self and society [35]. Thus, although it is also an aspect of eudaimonic well-being, social well-being differs from psychological well-being (which is primarily a personal phenomenon) in that, it focuses more on forms of positive functioning linked with an individual's contribution to, integration with, intimacy, acceptance, and mastery of issues at the societal level ("social structures" and "communities") [3,35]. The five dimensions of social well-being include social integration (how much a person has in common with others or feels they belong to the community or society in which they live), social contribution (having something valuable to offer others, the community, or the world), social coherence (the extent to which a person sees how well society makes sense or is functioning), social growth (the overall feeling that despite people, the community, or the society at large having problems, positive social outcomes can be expected), and social acceptance (acknowledgement that despite their shortcomings, the average person in society is serious and is good towards others) [3].

3.3. Reasons for the Selection of Transitions Theory and the Dual-Continuum Model

We chose transitions theory and the Dual-Continuum Model primarily because they align well with the post-modern approach to mental health promotion, as well as the aims and objectives of this study.

Four reasons exist for the selection of transitions theory. Engaging in construction work is a form of professional transition for young people because it brings changes to their occupational roles, expectations, and relationships. However, young construction workers, in addition to their professional development, are still undergoing physical, emotional, mental, and social development [8]. This could indicate the possible simultaneous occurrence of situational, developmental, lifestyle, and most important health–illness transitions. Transitions theory, therefore, allows consideration of the different types of transition experiences of young construction workers. As already noted, there is a need to refocus the existing body of construction mental health literature from the "symptomology of poor mental health" to "positive mental health" [4]. Transitions theory focuses on positive health outcomes of the transition process and is therefore an ideal framework for guiding this research. Transitions theory is concerned with understanding vulnerability and the promotion of healthy transitions among vulnerable populations. Vulnerable populations refer to "social groups" that are prone to adverse health conditions [38] because of inadequate economic resources, social status, age, gender, etc. Young construction workers can, therefore, be classified as a vulnerable population because of their age and other personal characteristics [8]. Finally, because transitions theory assumes that people's experiences of transitions are largely subjective and determined by the meanings they attach to their experiences [11,18], it is useful for exploring transitions from the viewpoint of those directly undergoing the transition (in this case young construction workers) and can help to propose interventions and policies that are compatible with their specific situation.

In the case of the Dual-Continuum Model, the three dimensions of emotional, psychological, and social health, all of which are theoretical constructs of the higher-order factor of subjective well-being, have consistently been linked with outcomes such as effective coping, job satisfaction, and positive mental health [39–41]. Moreover, the Dual-Continuum Model conceptualises mental well-being as a modifiable construct for the purpose of improving overall mental health [5]. Another important contribution of the Dual-Continuum Model is that its inclusion of the construct of mental well-being improves the understanding of the relationship between mental health and level of functioning. It is the Dual-Continuum Model that makes it possible to understand that positive mental health is very crucial to a person's overall mental health to the extent that high levels of positive mental health protect against mental illness and help to achieve increased levels of functioning across different aspects of life, irrespective of the presence or absence of mental illness, and that low levels of positive mental health adversely impact levels of functioning [12,41–43]. All these characteristics and contributions of the Dual-Continuum Model allow for a perfect fit with transitions theory, which itself focuses on positive life outcomes and also conceptualises the outcomes of a healthy transition as a subjective sense of well-being.

4. Proposed Conceptual Framework

The relevant constructs, components, and variables associated with the proposed conceptual framework are presented in Table 1. The patterns of response connected with a transition process are determined by the nature of transitions, transition conditions, and nursing therapeutics [44]. Based on this hypothesis, we developed a basic model of the proposed conceptual framework (Figure 2). Each aspect of the framework is briefly discussed, and testable propositions are outlined.

Table 1. Overview of constructs, components, and relevant study variables.

Construct	Components	Study Variables	Exemplar Studies
Nature of transitions (what the transition looks like)	Types Patterns Properties	Personal, socio-economic, and organisational/industrial domains of psychosocial factors	[6,45–47]
Transition conditions (what makes the transition easier or difficult)	Personal Community Societal	Personal, socio-cultural, and organisational/industry determinants of young construction workers' coping strategies	[48]
Nursing therapeutics (care strategies)	Assessment of readiness	Assessment of mental health literacy	[49]
	Preparation for transition	Educational interventions (professional and mental health)	[50,51]
(other peoples' actions aimed at ensuring a healthy transition process)	Role supplementation	Role model interventions for workplace and non-workplace support	[52,53]
Patterns of response	Process indicators	Effective coping (adaptive) Coping difficulty (maladaptive)	[48,54–56]
(actions that signify the progress of a transition and a healthy transition outcome)	Outcome indicators	Positive mental health (emotional, psychological, and social)	[3,12]

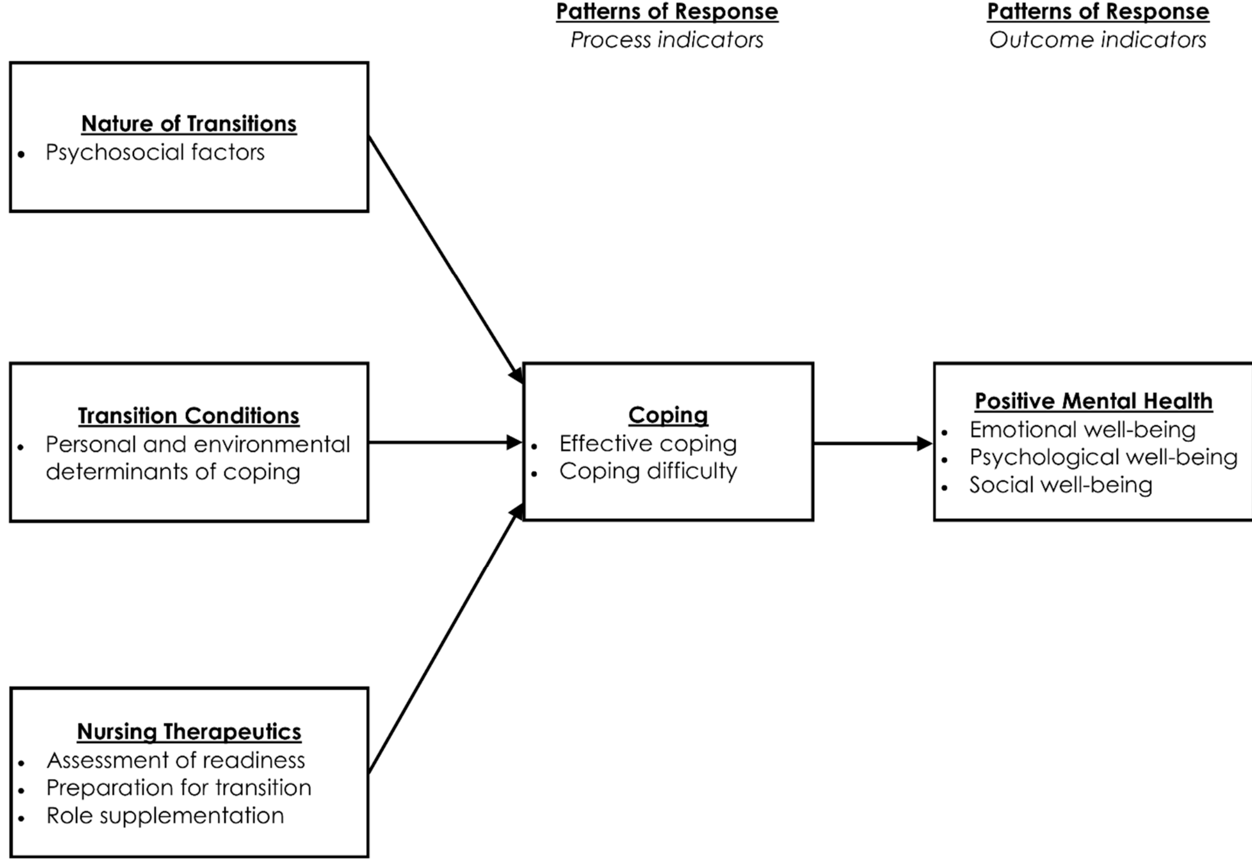

Figure 2. Proposed conceptual model of young construction workers' transitions to positive mental health.

5. Evaluation of Framework

In this section, we draw on the principles espoused by Chinn and Kramer [57] (i.e., clarity and consistency, generalisability, simplicity, accessibility, and importance) to evaluate the strengths and limitations of utilising transitions theory and the Dual-Continuum Model) for the proposed conceptual framework for mental health research in the construction industry.

5.1. Clarity and Consistency

Overall, the semantic clarity and consistency of the proposed framework are high, as is the case with transitions theory, the concepts of which are easy to understand and apply to mental health [58]. For example, the assumption of multiplicity and complexity underlying transitions theory is observed in the proposed framework from the nature of the psychosocial factors to which young construction workers are exposed, indicating that complex and multiple transitions (e.g., situational, developmental, lifestyle, health-illness) occur simultaneously in the process of attaining positive mental health. However, just like transitions theory, the framework is limited in its structural clarity and consistency because the relationships between its constructs and between its components are not explicitly explained; much depends on the researcher to establish these relationships. Furthermore, the original transitions model depicts "linear and bi-directional" relationships [58], a feature that is inevitably imposed on our proposed conceptual framework, as evidenced by the structure of the propositions we have specified. Significant overlap between the components and constructs of the model is also possible [58]. For example, some of the factors captured under transition conditions, e.g., workplace policies and family support [48], can also qualify as components of care strategies. Thus, the ability to effectively use the proposed model depends to a large extent on having a better understanding of the relationships between constructs and their respective components, with the researcher knowing where to place

each variable, as dictated by the aim and objectives of a study. This may necessitate the use of qualitative techniques and confirmatory factor analysis when applying the framework to topics on which little research exists.

5.2. Generalisability

The higher a theory's generalisability, the more applicable it is to many different populations, contexts, or situations [57]. Although intended for a wide range of vulnerable populations, transitions theory has been criticised for the limited generalisability of some of its outcome indicators. Li and Strachan [58], for example, have argued that the outcome indicator of "fluid integrative identities" may not be a realistic outcome indicator expected of young people, especially since they are still undergoing development. To overcome this problem of limited generalisability, we have ensured that both the process (coping) and outcome (positive mental health) indicators specified in our proposed conceptual framework are universally generalisable and achievable constructs. For example, the concept of positive mental health drawn from the Dual-Continuum Model is a basic aspect of the well-being of people from all backgrounds who are at different stages of their development, whether they are mentally ill or not [12,59]. Thus, despite being developed with young construction workers in mind, the proposed framework has generalisability across different categories of construction workers in different contexts.

5.3. Simplicity

This criterion refers to the total of concepts and relationships that a theory has [57]. Although a feature of middle range theories is that they contain very few concepts, Li and Strachan [58] argue that transitions theory contains many concepts and relationships and can therefore be considered a rather complex theory. They however argue that such complexity is not a weakness but is instead commensurate with the phenomenon of transition, which they say is complex and so deserves wholistic examination. This implies that to obtain the best understanding of young construction workers' transitions to positive mental health, researchers must make efforts to utilise the proposed framework as a whole instead of operationalising its different constructs and components in isolation.

5.4. Accessibility

Accessibility is the extent to which a theory's concepts and relationships are observable or can be experienced in the realworld; more complexity means more accessibility and vice versa [57]. Since transitions theory is a relatively complex theory, with concepts that focus on real-life variables consistently observed in vulnerable populations, e.g., adult medical–surgical patients [44], young people with chronic physical health conditions [60], and refugee women [61], it is highly accessible for practice and research applications. This is also true of the Dual-Continuum Model, which has aided the development of different dimensions of positive mental health, all of which are observable and measurable using different scales, both for research and clinical purposes [3]. Past studies show that positive mental health is exhibited by all kinds of people and is present at varying levels in those who have symptoms of mental illness as well as those who do not [12,59]. These features are also transferred onto the proposed conceptual framework, endowing it with a high level of theoretical and empirical accessibility.

5.5. Importance

This criterion refers to the perceived or proven significance that a theory has for its users, e.g., researchers, a particular discipline, or the wider society [57]. The need to promote the mental health of young construction workers, and for that matter that of the entire construction workforce, is an issue of global significance [4,8,62]. Considering the ongoing global advocacy to adopt a post-modern approach to mental health promotion [1], we argue that theories developed for this purpose must have constructs and variables that holistically incorporate factors that are reflective of the specific situation of young

construction workers, encourage a diverse and inclusive approach (i.e., combine the effort of multiple stakeholders, including young construction workers), and focus on positive mental health as its outcome. With its foundations in transitions theory and the Dual-Continuum Model, both of which meet the aforementioned criteria, the proposed conceptual framework can be considered important for research aimed at promoting well-being in the construction industry and the wider society.

6. Discussion of Framework and Development of Propositions

6.1. Nature of Transitions

Due to the stage of their physical and professional development, young construction workers may experience developmental, situational, and lifestyle transitions, and health–illness transitions. They may also be affected by organisational transitions due to workplace and/or industry changes. The complexity and multi-dimensionality of these transitions may give rise to changes to their mental well-being [22]. A full understanding of the complete transition experience of young construction workers' experiences can be obtained by exploring the types, patterns, and properties of the transition experiences [11,25] and their relationships and impacts with other constructs connected with the transition to positive mental health. Relevant variables for study under the nature of transitions include the different psychosocial factors that have been identified by researchers (e.g., [6,45–47]). These psychosocial factors are reflective of the types, patterns, and properties of transitions that young construction workers undergo and have a link with patterns of response to a transition [11]. Psychosocial factors are therefore made an essential component of the proposed conceptual framework.

6.2. Transition Conditions

Obtaining a good understanding of the transition experiences of people requires the identification of the key personal, community, and societal factors that promote or obstruct progress towards achieving healthy transition outcomes [11,26]. Transition conditions affect the indicators of the transition process, and thus the link between the two should always be established. A classical indicator of the progress of the transition process is the development and use of coping strategies [10]. Thus, classical variables of interest under transition conditions would include the multitude of factors that influence young construction workers' development and use of coping strategies. The literature on these factors has recently been systematically reviewed, and the individual factors have been classified as personal and environmental (socio-cultural and organisational/industry) (see [48]). The personal and environmental determinants of coping are, therefore, included under transition conditions in the proposed conceptual framework.

6.3. Nursing Therapeutics

Nursing therapeutics provide a basis for understanding how existing and possible interventions can support the transition process [58] and may begin with an "assessment of readiness", i.e., obtaining information on the profile of young construction workers to determine how well-suited or prepared they are to undergo the transition process [11]. Such information could include the assessment of levels of mental health literacy and workers' preference of modes, mediums, and settings for delivering mental health and professional literacy [63]. Nursing therapeutics also focuses on identifying the broad range of interventions that can suitably be implemented to promote young construction workers' well-being. Primary among them include different forms of formal and informal education and training provided to young construction workers (e.g., [50–53]) to enable them to obtain mental health literacy, improve help-seeking, gradually take on new responsibilities at the workplace, acquire new skills, and utilise their acquired skills within the work environment.

Past studies have also identified "role supplementation" as part of nursing therapeutics. This approach involves the use of a role model to help a vulnerable person overcome "role insufficiency" (i.e., unusual difficulties in the performance of particular roles, actions,

or behaviours) [11]. Role supplementation has, for example, contributed to a reduction in the problem of low birth weight of children born to new mothers [64]. In the case of young construction workers, a strong link has been established between the absence of good role models and alcohol misuse as a coping mechanism by young male Irish construction workers [65]. Other forms of nursing therapeutics explored in the broader literature include peer support groups [66], and more recently, Meleis' [23] addition of debriefing activities and the clarification of roles, competencies, and meanings associated with the transition process.

The concept of nursing therapeutics has the potential to be extended to other key factors, which, although outside the mental health domain, can have a strong impact on mental health outcomes. For example, because of the strong link between mental and physical health [67], factors such as the provision of personal protective equipment (PPE) and any associated training provided to young construction workers in connection with PPE use and/or misuse [68,69] can be considered as NTs and their influence tested based on the proposed conceptual model.

Li and Strachan [58] found that although these strategies are defined as nursing therapeutics, stakeholders outside the medical profession also have a responsibility towards nursing therapeutics and are actually playing a key role in their delivery. These stakeholders include friends, family members, and social workers. Studies specific to the construction industry have also added educators, employers, community leaders, religious leaders, and health and safety officers who have been identified as responsible for managing the mental well-being of young construction workers [53,63]. In fact, Li and Strachan [58] concluded that nursing therapeutics, and for that matter transitions theory, has relevance beyond the nursing profession and should therefore be relabelled. In view of this, we modify the term "nursing therapeutics" to "care strategies". The proposed conceptual framework reflects the link between care strategies and the patterns of young construction workers' responses, i.e., process indicators, connected with the transition process.

In line with the notion that the nature of transitions, transition conditions, and care strategies influence the patterns of response associated with a transition process [11,44,58], the following propositions are advanced:

Proposition 1. *There is a relationship between psychosocial factors and young construction workers' development and utilisation of coping strategies.*

Proposition 2. *There is a relationship between personal and environmental determinants of coping and young construction workers' development and utilisation of coping strategies.*

Proposition 3. *There is a relationship between care strategies and young construction workers' development and utilisation of coping strategies.*

6.4. Patterns of Response

Transitions are subjective, and they end in well-being by causing a person to achieve a state of well-being, ultimately leading to hope and a belief that life is worth living [61]. Patterns of response should therefore focus on understanding young construction workers' progress towards (process indicators) and attainment of (outcome indicators) a "subjective sense of well-being", which is considered to be one of the universal indicators of a successful transition outcome ([11] (p. 45), [18]).

Past studies (e.g., [66]) have identified effective coping as a key progress indicator. In examining process indicators, therefore, attention has to be given to young construction workers' patterns of coping during the transition process. Several studies (e.g., [48,55,56]) have given attention to the coping strategies employed by young construction workers in different settings. All these studies point to the fact that the coping practices preferred by young construction workers (i.e., maladaptive coping) are ineffective for achieving well-being. Meleis [11] emphasised that it is common for a person to encounter and overcome negative patterns of response (i.e., situations that can potentially disrupt the

transition process). This indicates that maladaptive coping is reflective of negative patterns of response and can be conceptualised as coping difficulty. The proposed conceptual framework therefore necessarily reflects the link that both effective coping and coping difficulty as process indicators.

Past studies have proposed outcome indicators such as the development of strategies and skills for managing changes in life, the development of a fluid identity, mastery of new skills, and the acceptance of new situations [10,11]. In this framework, positive mental health, which to a large extent captures the aforementioned outcome indicators and many more within emotional, psychological, and social dimensions, is synonymous with the structure of subjective well-being proposed by Keyes' [3,12]) Dual Continuum Model, was chosen, in line with the objectives of this study, as a more fitting outcome indicator of the transition process. In the proposed conceptual framework, therefore, we hypothesise a link between coping—both effective coping and coping difficulty—and positive mental health.

Based on this section of the discussion, the following propositions are advanced:

Proposition 4. *There is a relationship between coping strategies and positive mental health.*

Proposition 5. *There is a positive relationship between effective coping and positive mental health.*

Proposition 6. *There is a negative relationship between coping difficulty and positive mental health.*

7. Conclusions and Recommendations

The purpose of this study was to develop a conceptual framework of young construction workers' transitions to positive mental health. Based on a theoretical framework that combines transitions theory and the Dual-Continuum Model of mental health, we proposed a conceptual framework that broadly captures the structure of young construction workers' positive mental health and its related influencing factors. We have also specified five testable propositions on young construction workers' transitions to positive mental health.

Within the extant literature, different frameworks (e.g., [6,56,70–72]) have been developed that have proposed relationships between multiple variables and mental health as an outcome. Despite being useful, current frameworks focus on negative mental health (e.g., anxiety, depression, stress) as an outcome, thus resulting in the lack of focus on positive mental health within the construction management literature [5]. It is worth noting that our proposed conceptual framework is one of the earliest attempts at developing a theoretically based framework that comprehensively focuses on the relationships between different variables and the outcome of positive mental health among construction workers. This approach is novel for at least three reasons.

Firstly, the proposed framework and the derived propositions are based on well-established health promotion theories and, therefore, offer a robust basis for expanding research that focuses on mental health promotion in the construction industry. Utilising the framework and its associated propositions can help researchers to explore constructs that focus on concepts that can yield knowledge of young construction workers' mental health experiences. For instance, a focus on the nature of transitions provides insight into what the transition to positive mental health looks like for young construction workers; transition conditions provide an understanding of the factors that make the transition to positive mental health easier or more difficult; care strategies indicate specific care actions that can be implemented by others to help young construction workers achieve healthy transitions; and patterns of response indicate young construction workers' actions that define their reactions to the transition process as well as what healthy transition outcomes look like. Having a deep understanding of such knowledge has utility for describing, explaining, and predicting young construction workers' experiences in the transition to positive mental health. Most importantly, utilising the framework and its accompanying propositions can help researchers to reposition construction research from a negative to a more positive and holistic focus on mental health.

Secondly, in the current era of interdisciplinary research, the proposed framework extends theories from the disciplines of nursing and health psychology to construction management, thus making them accessible to a wider audience and helping to increase awareness of the unique contribution of other disciplines to the industry's mental health promotion efforts. Such an interdisciplinary approach to research has the potential to yield new and interesting research paths that can lead to the testing, refinement, and extension of the theories involved for use in construction research. Potentially, this can lead to the development of new theories to build up the body of knowledge on mental health promotion in the construction industry.

Thirdly, in terms of practice, the proposed framework and its associated propositions have the potential to guide research towards providing knowledge that can adequately inform the collaborative efforts of multiple stakeholders (e.g., health and safety managers, educators, employers, young construction workers, family members, etc.) for promoting the mental well-being of young construction workers. The proposed framework can also provide stakeholders such as healthcare providers and policymakers with an understanding of the interventions and policies that are most appropriate for meeting the specific mental health needs of young construction workers.

It is worth noting that there are limitations related to the structural clarity and consistency of the proposed framework. Furthermore, the Dual-Continuum Model focuses on the psychological, emotional, and social dimensions of positive mental health, despite evidence of the possibility of the dimension of spiritual health [73,74]. Despite these limitations of our framework, we believe that its two underlying theories enable a more wholistic examination of young construction workers' positive mental health than would be possible otherwise. We recognise that its users may need to demonstrate flexibility in its application to diverse populations of young construction workers and to critically evaluate its utility for different research purposes. Future research can focus on validating the proposed conceptual framework and its associated propositions by testing them in different construction settings and among different populations of young construction workers. Furthermore, theoretical and empirical studies can be conducted to understand the structure and validity of the concept of spiritual health as a potential dimension of positive mental health among young construction workers.

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References

1. Lancet Psychiatry. Embracing a positive view of mental health. *Lancet Child Adolesc Health* **2021**, *5*, 767. [CrossRef] [PubMed]
2. United Nations Children's Fund (UNICEF). *The State of the World's Children 2021: On My Mind—Promoting, Protecting and Caring for Children's Mental Health*; UNICEF: New York, NY, USA, 2021.
3. Keyes, C.L.M. Promoting and protecting positive mental health: Early and often throughout the lifespan. In *Mental Well-Being: International Contributions to the Study of Positive Mental Health*; Keyes, C.L.M., Ed.; Springer: Dordrecht, The Netherlands, 2013. [CrossRef]
4. Milner, A.; Law, P. *Summary Report: Mental Health in the Construction Industry*; MATES in Construction: Spring Hill, Australia, 2017.

5. Hutton, E.A.; Skues, J.L.; Sullivan, J.A.; Wise, L.Z. Mental health research in the global construction industry: A scoping review using a dual-continuum model of mental health. *Ment. Health Prev.* **2022**, *28*, 200249. [CrossRef]
6. Frimpong, S.; Sunindijo, R.Y.; Wang, C.C.; Boadu, E.F. Domains of Psychosocial Risk Factors Affecting Young Construction Workers: A Systematic Review. *Buildings* **2022**, *12*, 335. [CrossRef]
7. Dong, X.S.; Brooks, R.D.; Cain, T.R. *Overdose Fatalities at Worksites and Opioid Use in the Construction Industry*; Quarterly Data Report (Fourth Quarter, 2019); The Center for Construction Research and Training (CPWR): Silver Spring, MD, USA, 2019.
8. International Labour Organization [ILO]. *Improving the Safety and Health of Young Workers*; International Labour Office: Geneva, Switzerland, 2018.
9. Pidd, K.; Duraisingam, V.; Roche, A.; Trifonoff, A. Young construction workers: Substance use, mental health, and workplace psychosocial factors. *Adv. Dual Diagn.* **2017**, *10*, 155–168. [CrossRef]
10. Meleis, A.; Sawyer, L.; Im, E.-O.; Messias, D.H.; Schumacher, K. Experiencing transitions: An emerging middle-range theory. *Adv. Nurs. Sci.* **2000**, *23*, 12–28. [CrossRef]
11. Meleis, A.I. *Transitions Theory: Middle Range and Situation Specific Theories in Nursing Research and Practice*; Springer Publishing Company: New York, NY, USA, 2010.
12. Keyes, C.L.M. Mental illness and/or mental health? Investigating axioms of the complete state model of health. *J. Consult. Clin. Psychol.* **2005**, *73*, 539–548. [CrossRef]
13. Efird, D.; Stoneham, T. What is the Principle of Recombination? *Dialectica* **2008**, *62*, 483–494. [CrossRef]
14. Lewis, D. *On the Plurality of Worlds*; Basil Blackwell: Oxford, UK, 1986.
15. Torraco, R.J. Writing integrative literature reviews: Guidelines and examples. *Hum. Resour. Dev. Rev.* **2005**, *4*, 356–367. [CrossRef]
16. Im, E.-O. Theory Development Strategies for Middle-Range Theories. *Adv. Nurs. Sci.* **2018**, *41*, 275–292. [CrossRef]
17. Chick, N.; Meleis, A.I. Transitions: A nursing concern. In *Nursing Research Methodology*; Chinn, P.L., Ed.; Aspen Publication: Boulder, CO, USA, 1986; pp. 237–257.
18. Schumacher, K.; Meleis, A. Transitions: A central concept in nursing. *Image J. Nurs. Scholarsh.* **1994**, *26*, 119–127. [CrossRef]
19. Benner, P. From novice to expert. *Am. J. Nurs.* **1982**, *82*, 402–407.
20. Kislov, R.; Pope, C.; Martin, G.P.; Wilson, P.M. Harnessing the power of theorising in implementation science. *Implement. Sci.* **2019**, *14*, 103. [CrossRef]
21. Joly, E. Transition to adulthood for young people with medical complexity: An integrative literature review. *J. Pediatr. Nurs.* **2015**, *30*, e91–e103. [CrossRef]
22. Im, E.O. Theory of transitions. In *Middle Range Theory for Nursing*, 3rd ed.; Smith, M.J., Liehr, P.R., Eds.; Springer: Berlin/Heidelberg, Germany, 2014; pp. 253–276.
23. Meleis, A.I. Transitions theory. In *Nursing Theories and Nursing Practice*, 4th ed.; Smith, M., Parker, M., Eds.; F. A. Davis Company: Philadelphia, PA, USA, 2015; pp. 361–380.
24. Munck, B.; Björklund, A.; Jansson, I.; Lundberg, K.; Wagman, P. Adulthood transitions in health and welfare; a literature review. *Nurs. Open* **2018**, *5*, 254–260. [CrossRef]
25. Messias, D.K.H. Narratives of Transnational Migration, Work, and Health: The Lived Experiences of Brazilian Women in the United States. Ph.D. Thesis, University of California, San Francisco, San Francisco, CA, USA, 1997.
26. Im, E.O. Neglecting and Ignoring Menopause within a Gendered Multiple Transitional Context: Low Income Korean Immigrant Women. Ph.D. Thesis, University of California, San Francisco, San Francisco, CA, USA, 1997.
27. Sawyer, L.M. Engaged Mothering within a Racist Environment: The Transition to Motherhood for a Group of African American Women. Ph.D. Thesis, University of California, San Francisco, San Francisco, CA, USA, 1997.
28. Meleis, A.I.; Trangenstein, P.A. Facilitating transitions: Redefinition of the nursing mission. *Nurs. Outlook* **1994**, *42*, 255–259. [CrossRef]
29. Keyes, C.L. The mental health continuum: From languishing to flourishing in life. *J. Health Soc. Behav.* **2002**, *43*, 207–222. [CrossRef]
30. Keyes, C.L.M.; Martin, C.C. The Complete State Model of Mental Health. In *Wellbeing, Recovery and Mental Health*; Cambridge University Press: Cambridge, UK, 2017; pp. 86–98. [CrossRef]
31. Westerhof, G.J.; Keyes, C.L. Mental illness and mental health: The two continua model across the lifespan. *J. Adult Dev.* **2010**, *17*, 110–119. [CrossRef]
32. Seligman, M.E. *Flourish*; Free Press: New York, NY, USA, 2011.
33. Diener, E. Subjective wellbeing. *Psychol. Bull.* **1984**, *95*, 52–575. [CrossRef]
34. Ryff, C.D. Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *J. Personal. Soc. Psychol.* **1989**, *57*, 1069–1081. [CrossRef]
35. Keyes, C.L.M. Social well-being. *Soc. Psychol. Q.* **1998**, *61*, 121–140. [CrossRef]
36. Gallagher, M.W.; Lopez, S.J.; Preacher, K.J. The hierarchical structure of well-being. *J. Personal.* **2009**, *77*, 1025–1049. [CrossRef] [PubMed]
37. Ryff, C.; Keyes, C.L.M. The structure of psychological well-being revisited. *J. Personal. Soc. Psychol.* **1995**, *69*, 719–727. [CrossRef] [PubMed]
38. Flaskerud, J.H.; Winslow, B.J. Conceptualizing vulnerable populations health-related research. *Nurs. Res.* **1998**, *47*, 69–78. [CrossRef] [PubMed]

39. Dyrbye, L.N.; Harper, W.; Moutier, C.; Durning, S.J.; Power, D.V.; Massie, F.S.; Eacker, A.; Thomas, M.R.; Satele, D.; Sloan, J.A.; et al. A multi-institutional study exploring the impact of positive mental health on medical students' professionalism in an era of high burnout. *Acad. Med.* **2012**, *87*, 1024–1031. [CrossRef]
40. Grant, F.; Guille, C.; Sen, S. Well-being and the risk of depression under stress. *PLoS ONE* **2013**, *8*, e67395. [CrossRef]
41. Huppert, F.A.; So, T.T. Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Soc. Indic. Res.* **2013**, *110*, 837–861. [CrossRef]
42. Keyes, C.L. Mental health as a complete state: How the salutogenic perspective completes the picture. In *Bridging Occupational, Organizational and Public Health*; Bauer, G.F., H'ammig, O., Eds.; Springer: Dordrecht, The Netherlands, 2014; pp. 179–192.
43. Keyes, C.L.; Dhingra, S.S.; Simoes, E.J. Change in level of positive mental health as a predictor of future risk of mental illness. *Am. J. Public Health* **2010**, *100*, 2366–2371. [CrossRef]
44. Weiss, M.B.; Piacentine, L.B.; Lokken, L.; Ancona, J.; Archer, J.; Gresser, S.; Holmes, S.B.; Toman, S.; Toy, A.; Vega-Stromberg, T. Perceived readiness for hospital discharge in adult medical-surgical patients. *Clin. Nurse Spec.* **2007**, *21*, 31–42. [CrossRef]
45. Chan, A.P.C.; Nwaogu, J.M.; Naslund, J.A. Mental Ill-Health Risk Factors in the Construction Industry: Systematic Review. *J. Constr. Eng. Manag.* **2020**, *146*, 04020004. [CrossRef]
46. Sun, C.; Hon, C.K.H.; Way, K.A.; Jimmieson, N.L.; Xia, B.; Wu, P.P. A Bayesian network model for the impacts of psychosocial hazards on the mental health of site-based construction practitioners. *J. Constr. Eng. Manag.* **2023**, *149*, 04022184. [CrossRef]
47. Tijani, B.; Jin, X.; Osei-kyei, R. A systematic review of mental stressors in the construction industry. *Int. J. Build. Pathol. Adapt.* **2021**, *39*, 433–460. [CrossRef]
48. Frimpong, S.; Sunindijo, R.Y.; Wang, C.C.; Boadu, E.F.; Dansoh, A.; Fagbenro, R.K. Coping with psychosocial hazards: A systematic review of young construction workers' practices and their determinants. *Buildings* **2023**, *13*, 22. [CrossRef]
49. Australian Institute for Suicide Research and Prevention [AISRAP]. *Report on the Construction Industry Apprentices' Focus Groups*; Report for Mates in Construction and Griffiths University; Griffith University: Brisbane, Australia, 2018.
50. Broadbent, R.; Papadopoulos, T. Improving mental health and wellbeing for young men in the building and construction industry. *J. Child Adolesc. Ment. Health* **2014**, *26*, 217–227. [CrossRef]
51. Doran, C.; Rebar, A.; Waters, K.; Meredith, P. *A Review of the Evidence Related to the Impacts of, and Interventions for, Workplace Bullying in the Construction Industry*; Mates in Construction: Spring Hill, Australia, 2020.
52. King, T.L.; Batterham, P.J.; Lingard, H.; Gullestrup, J.; Lockwood, C.; Harvey, S.B.; Kelly, B.; LaMontagne, A.D.; Milner, A. Are young men getting the message? Age differences in suicide prevention literacy among male construction workers. *Int. J. Environ. Res. Public Health* **2019**, *16*, 475. [CrossRef]
53. Turner, M.; Mills, T.; Kleiner, B.; Lingard, H. Suicide in the construction industry: It is time to talk. In Proceedings of the Joint CIB W099 & TG59 International Safety, Health, and People in Construction Conference, Cape Town, South Africa, 11–13 June 2017; p. 45.
54. Flannery, J.; Ajayi, S.O.; Oyegoke, A.S. Alcohol and substance misuse in the construction industry. *Int. J. Occup. Saf. Ergon.* **2019**, *27*, 472–487. [CrossRef]
55. Fordjour, G.A.; Chan, A.P.C. Exploring occupational psychological health indicators among construction employees: A study in Ghana. *J. Ment. Health Clin. Psychol.* **2019**, *3*, 6–18. [CrossRef]
56. Zhang, S.; Sunindijo, R.Y.; Frimpong, S.; Su, Z. Work stressors, coping strategies, and poor mental health in the Chinese construction industry. *Saf. Sci.* **2023**, *159*, 106039. [CrossRef]
57. Chinn, P.L.; Kramer, M.K. Description and critical reflection of empiric theory. In *Knowledge Development in Nursing: Theory and Process*, 9th ed.; Chinn, P.L., Kramer, M.K., Eds.; Mosby: Maryland Heights, MO, USA, 2015; pp. 186–209.
58. Li, L.; Strachan, P.H. Transitioning to adult services for youth with medical complexity: A practice issue viewed through the lens of transitions theory. *Nurs. Sci. Q.* **2021**, *34*, 301–308. [CrossRef]
59. Lamers, S.M.; Westerhof, G.J.; Bohlmeijer, E.T.; ten Klooster, P.M.; Keyes, C.L. Evaluating the psychometric properties of the Mental Health Continuum-Short Form (MHC-SF). *J. Clin. Psychol.* **2011**, *67*, 99–110. [CrossRef]
60. Schwartz, L.A.; Daniel, L.C.; Brumley, L.D.; Barakat, L.P.; Wesley, K.M.; Tuchman, L.K. Measures of readiness to transition to adult health care for youth with chronic physical health conditions: A systematic review and recommendations for measurement testing and development. *J. Pediatr. Psychol.* **2014**, *39*, 588–601. [CrossRef]
61. Baird, M.B. Resettlement Transition Experiences among Sudanese Refugee Women. Ph.D. Thesis, University of Arizona, Tucson, Tucson, AZ, USA, 2009.
62. Nwaogu, J.; Chan, A.; Hon, C.; Darko, A. Review of global mental health research in the construction industry: A science mapping approach. *Eng. Constr. Archit. Manag.* **2019**, *27*, 385–410. [CrossRef]
63. Frimpong, S.Y.; Antwi, A.B.; Boateng, E.S.; Hagan, J.A.; Mensah, P.A. *The State of Youth Health in Ghana's Construction Industry*; Participatory Development Associates (PDA) Ltd.: Accra, Ghana, 2021.
64. Gaffney, K.F. Nursing practice model for maternal role sufficiency. *Adv. Nurs. Sci.* **1992**, *15*, 76–84. [CrossRef] [PubMed]
65. Tilki, M. The social contexts of drinking among Irish men in London. *Drugs: Educ. Prev. Policy* **2006**, *13*, 247–261. [CrossRef]
66. Kane, J.J. Allowing the novice to succeed: Transitional support in critical care. *Crit. Care Nurs. Q.* **1992**, *15*, 17–22. [CrossRef] [PubMed]
67. Turner, M.; Lingard, H. Examining the interaction between bodily pain and mental health of construction workers. *Constr. Manag. Econ.* **2020**, *38*, 1009–1023. [CrossRef]

68. Ammad, S.; Alaloul, W.S.; Saad, S.; Qureshi, A.H. Personal protective equipment (PPE) usage in construction projects: A scientometric approach. *J. Build. Eng.* **2021**, *35*, 102086. [CrossRef]
69. Ammad, S.; Alaloul, W.S.; Saad, S.; Qureshi, A.H. Personal Protective Equipment (PPE) usage in Construction Projects: A Systematic Review and Smart PLS Approach. *Ain Shams Eng. J.* **2021**, *12*, 3495–3507. [CrossRef]
70. Bowen, P.; Govender, R.; Edwards, P. Structural equation modeling of occupational stress in the construction industry. *J. Constr. Eng. Manag.* **2014**, *140*, 04014042. [CrossRef]
71. Chen, Y.; McCabe, B.; Hyatt, D. Impact of individual resilience and safety climate on safety performance and psychological stress of construction workers: A case study of the Ontario construction industry. *J. Saf. Res.* **2017**, *61*, 167–176. [CrossRef]
72. Scott-Young, C.M.; Turner, M.; Holdsworth, S. Male and female mental health differences in built environment undergraduates. *Constr. Manag. Econ.* **2020**, *38*, 789–806. [CrossRef]
73. Fernando, S.; Moodley, R. *Global Psychologies: Mental Health and the Global South*; Palgrave Macmillan: London, UK, 2018.
74. Joshanloo, M. Mental well-being in Iran: The importance of comprehensive well-being in understanding the linkages of personality and values. In *Mental Well-Being: International Contributions to the Study of Positive Mental Health*; Keyes, C.L.M., Ed.; Springer: Dordrecht, The Netherlands, 2013. [CrossRef]

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