Journal of Multidisciplinary Healthcare

Dovepress
Taylor & Francis Group

Open Access Full Text Article

REVIEW

Self-Determination Theory in Return to Work Interventions: A Scoping Review

Kexin Chen[1,2,*], Ling Yang[2,*], Jiajia Tu[2,*]

[1]College of Medicine and Health Sciences, China Three Gorges University, YiChang, Hubei, 443000, People's Republic of China; [2]Department of Blood Purification, Yichang Second People's Hospital, The Affiliated Yichang Hospital of China Three Gorges University, Yichang, Hubei, 443000, People's Republic of China

*These authors contributed equally to this work

Correspondence: Ling Yang, Department of Blood Purification, Yichang Second People's Hospital, The Affiliated Yichang Hospital of China Three Gorges University, Yichang, Hubei, 443000, People's Republic of China, Email 13972027722@163.com

Abstract: Self-Determination Theory (SDT) posits that satisfying the needs for autonomy, competence, and relatedness enhances motivation, which may influence return to work (RTW) outcomes. However, its specific impact on RTW remains unclear, warranting further investigation.Following PRISMA-ScR guidelines, we searched PubMed, Web of Science, Embase, Scopus, CINAHL and PsycINFO up to September 2025 for studies examining SDT constructs in RTW contexts. Eleven studies met with inclusion, covering diverse work disability populations. Evidence suggests that greater SDT need satisfaction is associated with higher quality motivation and more sustained RTW engagement, potentially reducing RTW duration and improving employment stability. SDT-informed interventions appear to promote need satisfaction and motivational internalization, with Motivational Interviewing and SDT-aligned tele-rehabilitation or organizational supports identified as common effective components. Our findings support SDT as a coherent framework for understanding RTW dynamics and imply that SDT-guided interventions may enhance vocational rehabilitation outcomes across populations. Future multidisciplinary work should develop explicit SDT-based theories, standardized measures, and integrated intervention pathways to optimize RTW trajectories and long-term employment outcomes.

Keywords: return to work, self-determination theory, occupational disability, vocational rehabilitation, motivational interviewing

Introduction

Return to work (RTW), defined as the process of reintegrating individuals into the workforce following recovery from injury or illness,[1] is widely recognized as a critical milestone in the restoration of social functioning and the improvement of quality of life among individuals with occupational disabilities.[2–4] Work-impaired individuals, defined as those experiencing functional limitations due to medical conditions such as psychiatric disorders, musculoskeletal disorders, cancer, or chronic pain,[5] face significant challenges in achieving sustainable RTW. Although successful RTW supports social role reconstruction[2,4] and psychological well-being,[3,6] epidemiological evidence indicates declining RTW probabilities, from below 50% at 3–6 months post-injury to below 20% after 12 months of work absence.[7] These barriers are further compounded by psychological distress and societal stigma, potentially exacerbating suicide risks[8–10] and increasing public health burdens.[11]

Despite the demonstrated promise of multidisciplinary interventions, particularly psychosocial support programs, in mitigating long-term occupational disabilities, the embedding of these approaches within RTW design and evaluation necessitates a more explicit theoretical framework.[12,13] Early interventions, based on the Person Environment Occupation Performance model, emphasize self-advocacy for workplace accommodations,[14] thereby promoting autonomy in shaping the RTW process.[15,16] Worker–manager collaboration and peer support networks are commonly fostered to support belonging and social connectedness, while psychoeducation and cognitive-behavioral therapy are frequently integrated to enhance cognitive functioning and job performance.[14] These components can be construed as SDT-inspired, aligning with practices that foster autonomy, relatedness, and competence. The satisfaction of these three basic psychological needs is expected to translate into

Received: 19 May 2025
Accepted: 4 November 2025
Published: 19 November 2025

higher-quality work engagement and longer-term employment stability. However, understanding why these interventions yield effects across diverse populations and contexts necessitates a unified and operationalizable theoretical framework that explains the relationships among psychological motivation, social context, and behavioral outcomes.[16]

Self-Determination Theory (SDT) provides a concise lens: the fulfillment of the three basic needs—autonomy, competence, and relatedness[17] —fuels self-determined motivation and internalization,[18] supporting adaptive work behaviors and well-being in RTW settings.[19,20] Across domains (work,[21] education,[22,23] exercise,[24,25] health[26]), need satisfaction is linked to better functioning and reduced burnout;[27] in RTW, this translates into greater workplace engagement and performance when needs are met. Thus, SDT-guided interventions may foster intrinsic motivation and proactive work behavior.[28]

By synthesizing existing evidence through an SDT framework, this review aims to (1) elucidate the mechanisms by which psychological needs and motivation types influence RTW outcomes; (2) evaluate the efficacy of SDT-informed interventions across populations; and (3) propose evidence-based strategies to optimize vocational rehabilitation programs, ultimately fostering successful social reintegration for individuals with occupational disabilities.

Methods

Study Design

A scoping review was conducted, adhering to the PRISMA-ScR guidelines, to systematically search, screen, extract, and synthesize existing literature, thereby comprehensively mapping SDT within the RTW domain. A structured workflow, as proposed by PRISMA-ScR,[29] was followed to ensure transparency and reproducibility in literature searching, screening, data extraction, and result reporting. The aim was to elucidate how SDT has been applied in published RTW studies.

Eligibility Criteria

Explicit inclusion and exclusion criteria were established a priori to ensure relevance and methodological rigor. Inclusion criteria encompassed studies involving all types of occupational disability populations pertinent to RTW (including, but not limited to, chronic illness, traumatic injury, and neurological/musculoskeletal conditions); qualitative, quantitative, or mixed methods designs; formally published journal or conference papers; and publication in English. Exclusion criteria comprised literature not directly related to the research question (eg, unrelated reviews, commentaries, case reports); gray literature, conference abstracts, or unpublished manuscripts not subjected to peer review; and non-English language articles, including those with non-English abstracts or full texts.

Information Sources and Search Strategy

A comprehensive search strategy was devised to identify relevant studies. Information sources included PubMed, Web of Science, Embase, Scopus, CINAHL, and PsycINFO, with searches conducted from database inception through September 2025. The search strategy combined terms related to SDT (eg, Self-Determination Theory, SDT, basic psychological needs, autonomy, relatedness, amotivation, intrinsic motivation, extrinsic motivation) with RTW-related terms (eg, "return to work", RTW, "vocational rehabilitation", "occupational rehabilitation"). Search strings were adapted to the syntax of each database.

Study Selection

The study selection followed a two-stage process. During the screening phase, titles and abstracts were assessed by two independent reviewers (KX, Q) to exclude clearly irrelevant items. During the full-text screening phase, potentially eligible articles were evaluated against the predefined inclusion criteria. To ensure quality control, the screening was independently conducted by both reviewers, with disagreements resolved through discussion or adjudication by a third reviewer (J). The PRISMA flow diagram was used to document the search and selection process. An initial pool of 2099 records was identified, 941 duplicates were removed, and following the screening of titles and abstracts, 62 articles underwent full-text review. Of these, 11 met the inclusion criteria and were included in the analysis. The study selection flow is depicted in PRISMA Diagram in Figure 1.[30]

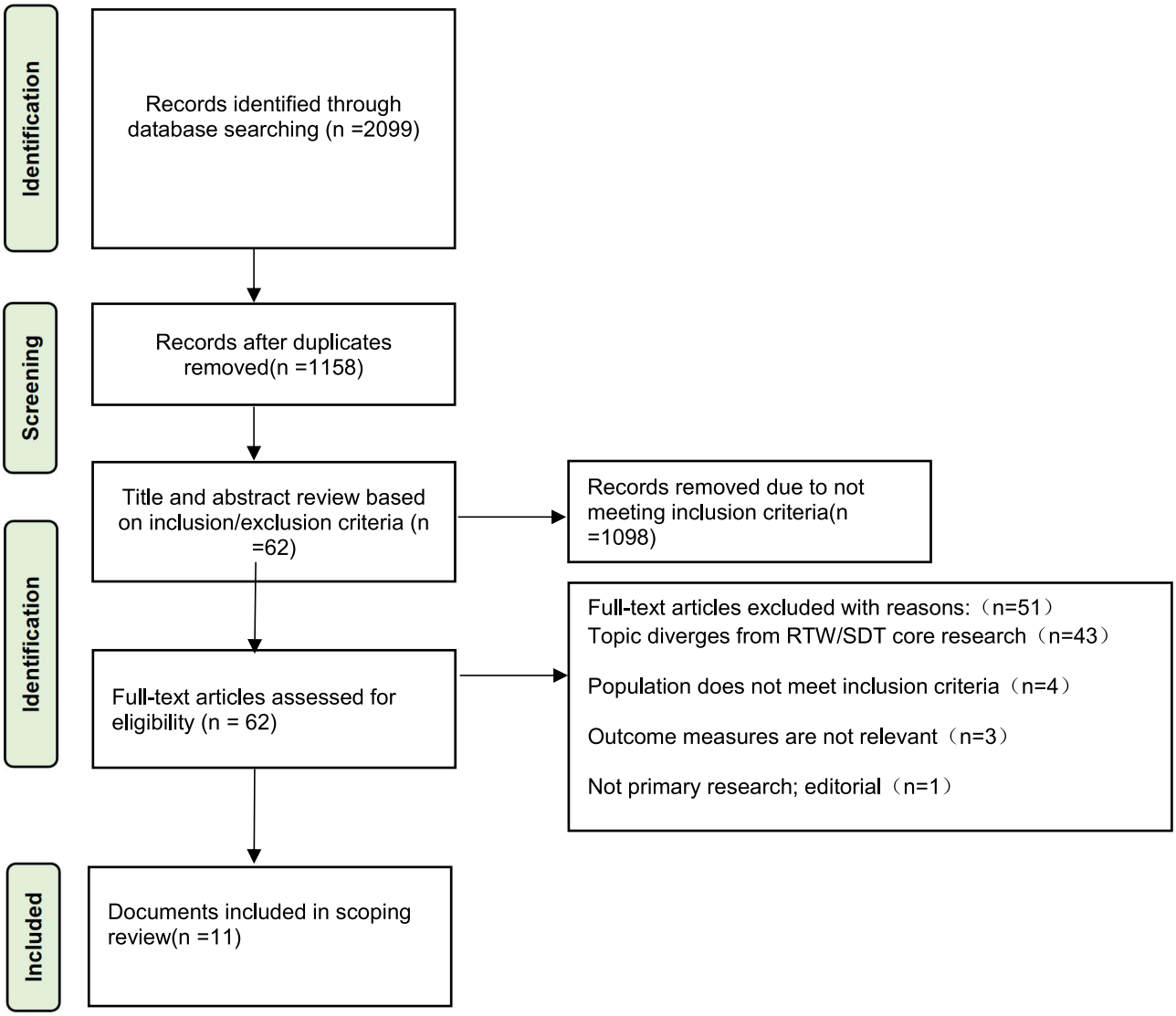

Figure 1 PRISMA Flow Diagram of the Study Selection Process. This flowchart illustrates the process of identifying, screening, assessing eligibility, and including studies in the current scoping review. The process began with 2099 records identified through database searching. After removing 941 duplicates, 1158 records underwent title and abstract screening, resulting in the exclusion of 1098 records that did not meet the inclusion criteria. Sixty-two (62) full-text articles were assessed for eligibility, of which 51 were excluded with specific reasons (eg, topic divergence, population mismatch). Ultimately, 11 studies were included in the final scoping review. From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed1000097.

Data Charting and Data Extraction

Data were extracted using a standardized form designed to capture key study characteristics, including authors, year of publication, country/region, study design, sample size, SDT application within RTW, and primary outcomes. Data extraction was performed independently by two researchers, with cross-checks of extraction results. Any discrepancies were resolved through discussion or adjudication by a third author to ensure accuracy and consistency.

Data Analysis and Synthesis

Within the scoping-review framework, descriptive and qualitative synthesis were employed to systematically analyze the extracted data. Specifically, attention was directed at describing the types of SDT applications in RTW and the associated outcomes, thereby providing a comprehensive overview of the current state of research in this domain.

Results

Studies Included in the Study

A total of 1158 articles were screened at the title and abstract level, and 62 were subsequently screened at the full-text level. Eleven articles met the inclusion criteria and were, therefore, included in this scoping review (Figure 1). Studies spanned multiple countries, including Norway,[31–33] Belgium,[34–38] the Netherlands,[39,40] and the United States,[41] although the majority were conducted in Belgium (n = 5).[34–38] Study designs varied, encompassing longitudinal studies (n= 2), cross-sectional studies (n= 2), qualitative studies (n=2), intervention studies (n=1), observational longitudinal studies (n=1), and intervention mapping studies (n=2). Table 1 summarizes the publications included in this review. The studies primarily focused on RTW populations, such as vocational rehabilitation participants and employees on long-term sick leave. Sample sizes ranged from 10 to 366 participants.

Exploring the Mechanisms of SDT in RTW

Four studies explored the mechanisms of SDT in the RTW process. Autonomy support and the satisfaction of basic psychological needs were identified as the core mechanisms driving RTW;[34] autonomy support enhances autonomous motivation, while need satisfaction promotes actual behavior and sustained engagement through motivational transformation.[34,36] Autonomy and the satisfaction of basic psychological needs are core drivers of improved vocational rehabilitation participation and RTW persistence. Shifts in motivational type from controlled to autonomous motivation have the potential to shorten RTW duration and improve psychological well-being.[31] Working alliance and autonomy support jointly contribute to high-quality, long-term employment outcomes.[41] Vanovenberghe et al[34] reported that controlled motivation is associated with shorter RTW duration, whereas frustration of basic needs is associated with longer work disability.

SDT and Need Satisfaction in the Workplace

Three studies examined how need satisfaction promotes autonomous motivation, work engagement, and RTW in the workplace. When workplaces or interventions provide autonomy support, understanding, and recognition, employees' autonomous motivation and positive work attitudes tend to increase. Conversely, need frustration and a lack of autonomy support can reduce engagement and job satisfaction. Ellingsen-Dalskau et al[32,33] demonstrated that care farm environments provide high levels of autonomy support and need fulfillment, contributing to improved functioning and well-being, thereby facilitating return to work.

RTW Intervention Design and Tool Development Guided by SDT

Motivational counseling and online tools were utilized in four studies to enhance the positive supportive behaviors of practitioners and employers during RTW. SDT was employed as the theoretical foundation in two studies, and communication strategies, such as Motivational Interviewing (MI), were integrated to develop an "autonomy-motivation-promoting" intervention framework. Rymenans et al[38] developed a motivational counseling training program to enhance practitioners' ability to support employee autonomy during RTW, thereby promoting autonomous motivation and engagement and improving practitioners' knowledge, skills, and beliefs regarding motivational counseling. Beerda et al[42] developed a web-based intervention tool to strengthen SMEs' willingness and capacity to support employees returning to work after long-term sick leave.

Discussion

This scoping review systematically synthesizes the theoretical framework and practical implementation pathways of self-determination theory in facilitating RTW interventions for individuals with occupational disabilities, elucidating the core mechanisms through which psychological need satisfaction and motivation internalization drive behavioral outcomes. The findings suggest that SDT provides a valuable lens for understanding and promoting RTW, highlighting the importance of autonomy support, competence development, and relatedness cultivation.

Table 1 Characteristics of included studies

Authors	Years	Country	Study Design	Study Sample	SDT Application Within RTW	Key Findings
Vanovenberghe[34]	2021	Belgium	Observational longitudinal study	Long-term sickness/disability RTW population; 349 participants	SDT is used as a framework in this study to understand how different types of motivation (autonomous, controlled, amotivation) and basic psychological need satisfaction/frustration predict various RTW outcomes (time until RTW, partial RTW, relapse, long-term sickness) over a one-year follow-up period.	The frustration of basic psychological needs was found to be predictive of a longer work disability. Controlled motivation, unexpectedly, predicted faster RTW. SDT seems to have predictive value, but underlying mechanisms remain unclear. The study highlights the paradox that while controlled motivation leads to faster RTW, its long-term effects on individual well-being and sustainability are questionable.
Vanovenberghe[36]	2022	Belgium	Cross-sectional study	Belgian RTW population;366 participants	SDT is used as a framework to understand the different types of motivation that individuals with work disabilities experience. It explores how these different motivational profiles (combinations of autonomous and controlled motivation) relate to RTW-related outcomes such as expectancy of RTW, mental quality of life, and depressive symptoms. Amotivation, controlled motivation, and autonomous motivation were measured using The Motivation at Work Scale.	Regardless of an individual's level of autonomous motivation, controlled motivation is associated with a higher basic psychological need frustration, decreased mental quality of life, and more depressive symptoms. The assessment of motivation measured by the health care provider does not correlate with patient's self-reports of controlled motivation, while correlations are found in the expected directions with patient's self-reports of autonomous motivation and amotivation.
Farholm[31]	2016	Norway	Longitudinal study	Long-term sickness absence; Diagnosed conditions incl. musculoskeletal, mental disorders; Recruitment at vocational center; Time points 1–4; age mean around 43	SDT was used to examine patient perceptions of autonomy support from the treatment team in a vocational rehabilitation program and how it influences need satisfaction, autonomous motivation, perceived competence, well-being, physical activity, and RTW.	It was found that the vocational rehabilitation program is associated with increases in well-being, physical activity, and RTW. These associations were explained by the SDT Model of Health Behavior.
Iwanaga[41]	2021	United States	Quantitative research	Vocational Rehabilitation (VR) clients with physical or sensory disabilities; 247 practitioners	SDT is applied to RTW by treating motivation as autonomous vs controlled and linking it to VR engagement. Key uses include: predicting engagement via autonomy, competence, and relatedness; fostering autonomy-supportive counseling to boost intrinsic motivation; integrating SDT with SET to connect motivation with self-efficacy and working alliance; informing interventions like motivational interviewing to enhance engagement and employment outcomes.	SDT and SET constructs are significant predictors of VR engagement. Working alliance emerged as the strongest predictor, succeeded by job performance self-efficacy and autonomy-supportive climate. Enhancing counselor skills to promote working alliance and increasing job performance self-efficacy can strengthen motivation to engage in VR services, leading to better employment outcomes.

(*Continued*)

https://doi.org/10.2147/JMDH.S536760

Table 1 (Continued).

Authors	Years	Country	Study Design	Study Sample	SDT Application Within RTW	Key Findings
Rymenans[38]	2024	Belgium	Intervention Mapping approach used for developing a training program	Health insurance practitioners in Belgium;31 practitioners	SDT is integrated with MI to create a motivational counseling communication style that aims to promote autonomous motivation for sustainable RTW among claimants, particularly within the controlling context of the Belgian health insurance system. The training facilitates the adoption of need-supportive behaviors from SDT and motivation-enhancing behaviors from MI by practitioners.	The successful development of a motivational counseling training program for health insurance practitioners, utilizing Intervention Mapping, is reported. This training aims to shift practitioners' communication style towards a more positive and supportive approach by integrating SDT and MI principles to foster autonomous motivation for RTW in claimants. A solution-focused approach is emphasized throughout the development process, which is tailored to the specific context of Belgian health insurance.
Vanovenberghe[35]	2023	Belgium	Pilot randomized controlled trial	Workers with work disability undergoing RTW path;265 patients enrolled; n ≈ 132/133 per group (MI vs CAU); 12-month follow-up	SDT informs RTW by framing motivation as autonomous vs controlled and linking it to engagement in vocational rehabilitation. Applications include: predicting RTW engagement via autonomy, competence, relatedness; using autonomy-supportive counseling; integrating SDT with self-efficacy and working alliance; guiding interventions like motivational interviewing to accelerate RTW and reduce relapse.	For psychological outcomes such as work-related motivation, work-related psychological needs, quality of life, and work ability, no significant differences were found between MI and CAU. However, MI resulted in less relapse and a faster RTW. MI shows promising outcomes in terms of RTW, but not in the underlying psychological factors.
Rymenans[37]	2023	Belgium	Qualitative study	18 participants	SDT serves as a theoretical framework to understand how addressing basic psychological needs (autonomy, competence, and relatedness) through MI can promote autonomous motivation and engagement in RTW.	The importance of autonomy, relatedness, and competence support, in conjunction with a solution-focused approach, is highlighted by the study to stimulate patient engagement in RTW. The effectiveness of MI is contingent upon personal and system-like external factors. Belgium's social security system's premise, based on control, might hinder RTW instead of facilitating it.
Beerda[40]	2025	Netherlands	Intervention mapping steps 1–4 (intervention development)	-	SDT serves as the theoretical foundation for enhancing the willingness and capacity of small and medium-sized enterprise (SME) employers to support employees on long-term sick leave. The developed SME tool aims to improve these employers' readiness and ability to facilitate the return-to-work process for their long-term absent employees.	A web-based intervention tool has been developed, with SDT utilized as the theoretical framework. This tool is designed to enhance the willingness and capacity of employers in small and medium-sized enterprises to support their employees who are on long-term sick leave.

Smeets[39]	2019	Netherlands	Qualitative study	Dutch-speaking employees in the Netherlands who are RTW in a workplace setting; 14participants	SDT is employed as a theoretical lens to understand how the satisfaction of basic psychological needs influences employees' self-direction in the RTW process. The study explores how employees perceive self-direction in RTW and which factors facilitate it.	Self-direction is generally understood by employees as the act of making their own decisions regarding RTW. The exercise of self-direction in RTW appears to contribute to a personalized RTW process that takes individual needs and preferences into account. A supportive environment and effective cooperation among the employee, employer, and occupational physician are preconditions for effective self-direction.
Ellingsen-Dalskau[33]	2016	Norway	Cross-sectional	Adults undergoing prevocational training at care farms	SDT is utilized in this study to understand how the care farm context can stimulate healthy functioning, motivation, and well-being by examining the relationship between elements of the care farm context and the satisfaction of psychological needs. The study explores how need-supportive environments can lead to autonomous motivation, which is linked to psychological health, self-esteem, well-being, and meaningfulness.	Prevocational training on care farms is concluded to facilitate motivation, functioning, and well-being for clients. Making clients feel like useful colleagues and fostering a sense of group belonging strengthen the positive qualities of these programs. Support, understanding, and acknowledgment from the farmer are the most important elements for positive development of the clients.
Ellingsen-Dalskau[32]	2015	Norway	Qualitative phenomenological stud	Adults in prevocational programs on care farms; 10 participants	SDT is employed as a theoretical framework to understand how the care farm context can motivate, engage, and contribute to better human functioning for clients participating in green work. The study explores how the satisfaction of the three psychological needs is facilitated within the care farm setting and its relation to the RTW process.	Green work on care farms is concluded to provide a high degree of autonomy support and need satisfaction, which can facilitate functioning and well-being and contribute to the return-to-work process.

https://doi.org/10.2147/JMDH.S536760

The Impact of Basic Psychological Needs Fulfillment

The satisfaction of basic psychological needs exerts profound influences on key outcomes, including quality of life and occupational adaptation.[34,43] Empirical evidence indicates that when these needs are adequately met, individuals with work disabilities demonstrate enhanced intrinsic motivation and self-regulatory capacity,[19] facilitating psychological growth[18] and proactive engagement in goal-directed work behaviors. Farholm et al[31] found that vocational rehabilitation programs aligned with SDT principles led to increases in need satisfaction, autonomous motivation, perceived competence, and well-being. Conversely, persistent frustration of these needs precipitates detrimental psychological consequences. The satisfaction of these three core psychological needs correlates with improved outcomes, including increased intrinsic motivation and enhanced occupational stability for individuals with occupational disabilities.[44] Work-disabled individuals experiencing chronic need deprivation exhibit elevated anxiety and depressive symptoms,[36] with subsequent increases in controlled motivation driven by external contingencies. This extrinsic regulation pattern correlates with diminished work efficiency and maladaptive coping strategies.[45]

Vanovenberghe et al's[34] longitudinal investigation of 349 occupationally disabled individuals revealed a significant association between basic psychological need frustration and prolonged RTW duration. The study further found that sustained need deprivation worsens psychological distress, triggering avoidance behaviors (eg, social withdrawal) and substance abuse, thereby establishing a self-perpetuating cycle of occupational dysfunction.

Impact of Motivation Typologies on Return-to-Work Outcomes

Self-determined motivation serves as a psychological catalyst propelling individuals toward occupational reintegration, with motivation quality fundamentally shaping behavioral trajectories and functional outcomes.Motivation-cultivation strategies should be multi-level and personalized, requiring systematic advancement from the individual and team levels to the organizational level.[46] The key lies in creating a supportive environment in which employees feel respected and empowered, thereby stimulating intrinsic motivation.[46]

The configuration of RTW motivation in work-disabled populations is modulated by multifaceted determinants, including demographic characteristics (eg, age, prior work history), health perceptions, affective states (anxiety/depression levels), and self-efficacy beliefs.[5] Crucially, motivation type demonstrates differential associations with RTW success metrics, particularly time-to-RTW and employment sustainability.[5]

Autonomous motivation appears as a pivotal facilitator of sustainable RTW, a conclusion substantiated across multiple study designs. Individuals exhibiting autonomous motivation demonstrate heightened work engagement, psychological well-being,[47] and enhanced capacity to derive meaning from occupational activities.[17] These findings align with Saar et al's observation[48] that internalized extrinsic motivation (a subtype of autonomous regulation) predicts favorable RTW outcomes, whereas controlled motivation and amotivation correlate with adverse occupational consequences.[17]

Notably, Vanovenberghe et al's longitudinal data[34] revealed a paradoxical association between controlled motivation and accelerated initial RTW. Work-disabled populations showed elevated controlled motivation scores relative to population norms, potentially attributable to external pressures (eg, financial obligations) driving short-term RTW decisions. However, this motivation pattern carries latent risks: controlled motivation-driven RTW correlates with poorer mental health outcomes, reduced quality of life, and 2.3-fold higher probability of occupational attrition compared to autonomously motivated counterparts.[47]

The observed motivation dynamics underscore critical intervention opportunities.[49] While autonomous motivation demonstrates superior longitudinal efficacy despite requiring longer initial cultivation periods, the plasticity of motivation systems allows strategic transformation from controlled to autonomous regulation.

SDT and Need Satisfaction in the Workplace

Structured, need-supportive work environments have been demonstrated to foster autonomous motivation, thereby facilitating RTW progress and well-being across heterogeneous contexts. These environments are systematically characterized by three core support mechanisms: (1) autonomy support, involving providing meaningful choices and transparent rationales; (2) relatedness support, encompassing social connectedness and interprofessional collaboration;

and (3) competence support, focusing on structured task progression and constructive feedback.Empirical evidence consistently indicates that employees prioritize self-direction and autonomy throughout the return-to-work process, with supportive environments playing a critical role in enabling personal agency and workplace ownership.[39] Autonomy-supportive interventions, such as care farms, have demonstrated significant potential in generating psychological need satisfaction, directly correlating with enhanced functional outcomes, intrinsic motivation, and overall well-being. Particularly, social support and meaningful engagement emerge as pivotal mechanisms in such contexts.[32,33] Moreover, autonomy support can be systematically operationalized in return-to-work dialogues through the strategic integration of Motivational Interviewing communication techniques.[38]

Existing SDT-informed interventions primarily target specific work-disabled populations, including individuals with chronic musculoskeletal injuries, traumatic brain injury survivors, and other occupationally vulnerable groups. Notably, intervention frameworks extend beyond direct patient engagement to incorporate key stakeholders such as healthcare providers and organizational supervisors, reflecting a systemic approach to vocational rehabilitation. Comparative analyses of SDT-based intervention characteristics highlight tailored strategies for distinct subgroups, emphasizing the necessity of population-specific adaptations.

Motivational Interviewing-Driven Personalization Strategies

In RTW intervention design, Motivational Interviewing (MI) is a patient-centered counseling approach that uses dialogic techniques to promote behavioral change.[50] MI is now understood to be most effective for RTW when it supports basic psychological needs, aligning with SDT by fulfilling autonomy, relatedness, and competence to foster internalized motivation.[35] A study by Rymenans et al[37] found that MI's effectiveness stems from mechanisms consistent with SDT: meeting autonomy, relatedness, and competence needs all contribute to behavior change. As an operational extension of SDT, MI has established itself as a cornerstone technique for fostering motivation internalization in RTW contexts.[37] The MI intervention accelerated RTW and reduced relapse risk, with statistically significant differences between MI and the CAU condition in Kaplan-Meier analyses (RTW:$\chi^2 = 4.09$, $p < 0.04$; relapse: $\chi^2 = 5.01$, $p < 0.025$).[35]

Qualitative investigations reveal MI's tripartite action framework: autonomy reinforcement through voluntary RTW decision-making, competence development via graduated workload adjustments, and relatedness cultivation through therapeutic empathy.[37] Population-specific adaptations prove essential, as evidenced by Park et al's cluster trial[51] showing 12.1% higher RTW rates among musculoskeletal disorder patients receiving MI-enhanced interventions, contrasted with the necessity for empathy-centered approaches in medically unexplained conditions.

Emerging hybrid models integrating MI with digital health technologies offer new implementation pathways, where mobile app reminders and progress tracking systems can convert transient motivational gains into enduring behavioral change, and may be scaled in SME and health-insurance settings with fidelity monitoring and need-support measures.

However, MI cannot always serve as a standalone approach;[52,53] integrating MI with frameworks such as MOHO can provide a more comprehensive understanding of injury and RTW transitions,[54] and embedding MI principles into routine rehabilitation protocols—along with context-specific communication strategies—offers a pragmatic path toward sustainable RTW support infrastructures in resource-constrained environments. In addition, the segment on SME employers demonstrates SDT-grounded tool development (clear prompts, communication videos, and practical checklists) to enhance autonomy, competence, and relatedness in workplace RTW processes, while MI-based training for healthcare insurers and supervisors reinforces needs-supportive leadership and clinical communication.[55,56]

Study Limitations

This review has several limitations. First, its scope was restricted to English-language publications, thereby excluding studies in other languages. Second, the majority of the included studies were descriptive and exploratory. Finally, the heterogeneity of intervention types presented challenges in integrating certain data. Furthermore, future research should focus on developing explicit SDT-based theories, standardized measures, and integrated intervention pathways to optimize RTW trajectories and long-term employment outcomes.

Conclusion

This review demonstrates how SDT-driven approaches achieve theoretical and practical breakthroughs through multi-dimensional evidence integration. The proposed hierarchical need-support model clarifies differential behavioral activation thresholds, where competence development initiates functional adaptation, autonomy reinforcement sustains engagement, and relatedness cultivation provides contextual reinforcement—a dynamic particularly pronounced in collectivist rehabilitation contexts. Technology-mediated interventions successfully compensate for spatial-temporal limitations of conventional rehabilitation, with tele-supervision achieving comparable efficacy to in-person modalities while expanding service accessibility. The operational integration of positive psychology techniques within SDT frameworks yields standardized yet adaptable intervention blueprints, exemplified by mindfulness-enhanced MI protocols that address both motivational and affective rehabilitation barriers. Moving forward, cross-cultural mechanistic studies must quantify need hierarchy variations across sociocultural dimensions, while artificial intelligence applications should focus on real-time MI adaptation through natural language processing and predictive modeling of intervention dosage effects. Such innovations will catalyze the evolution from generalized rehabilitation paradigms to precision support systems, ultimately enhancing social integration trajectories for individuals with occupational disabilities.

Disclosure

The authors report no conflicts of interest in this work.

References

1. Krause N, Dasinger LK, Deegan LJ, Rudolph L, Brand RJ. Psychosocial job factors and return-to-work after compensated low back injury: a disability phase-specific analysis. *Am J Ind Med*. 2001;40(4):374–392. doi:10.1002/ajim.1112
2. Chu PC, Chin WS, Guo YL, Shiao JSC. Long-term effects of psychological symptoms after occupational injury on return to work: a 6-year follow-up. *Int J Environ Res Public Health*. 2019;16(2):235. doi:10.3390/ijerph16020235
3. Figueredo JM, García-Ael C, Gragnano A, Topa G. Well-being at work after return to work (RTW): a systematic review. *Int J Environ Res Public Health*. 2020;17(20):7490. doi:10.3390/ijerph17207490
4. Young AE, Roessler RT, Wasiak R, McPherson KM, Van Poppel MNM, Anema JR. A developmental conceptualization of return to work. *J Occup Rehabil*. 2005;15(4):557–568. doi:10.1007/s10926-005-8034-z
5. Carlsson L, Lytsy P, Anderzén I, Hallqvist J, Wallman T, Gustavsson C. Motivation for return to work and actual return to work among people on long-term sick leave due to pain syndrome or mental health conditions. *Disability Rehabil*. 2019;41(25):3061–3070. doi:10.1080/09638288.2018.1490462
6. Nie Y, Chua BL, Yeung AS, Ryan RM, Chan WY. The importance of autonomy support and the mediating role of work motivation for well-being: testing self-determination theory in a Chinese work organisation. *Int j psychol*. 2015;50(4):245–255. doi:10.1002/ijop.12110
7. Lambreghts C, Vandenbroeck S, Goorts K, Godderis L. Return-to-work interventions for sick-listed employees with burnout: a systematic review. *Occup Environ Med*. 2023;80(9):538–544. doi:10.1136/oemed-2023-108867
8. Collie A, Gray SE. The relationship between work disability and subsequent suicide or self-harm: a scoping review. *PLOS Global Public Health*. 2022;2(12):e0000922. doi:10.1371/journal.pgph.0000922
9. Heikkinen J, Honkanen RJ, Quirk SE, Williams LJ, Koivumaa-Honkanen H. Long-term life satisfaction in ageing women with work disability due to mental and musculoskeletal disorders. *Maturitas*. 2023;178:107849. doi:10.1016/j.maturitas.2023.107849
10. Henderson M, Glozier N, Elliott KH. Long term sickness absence. *BMJ*. 2005;330(7495):802–803. doi:10.1136/bmj.330.7495.802
11. De Wit M, Wind H, Hulshof CTJ, Frings-Dresen MHW. Person-related factors associated with work participation in employees with health problems: a systematic review. *Int Arch Occup Environ Health*. 2018;91(5):497–512. doi:10.1007/s00420-018-1308-5
12. Elling JM, Hetzel C, Koch AM, Sewz G, Bühne D. Psychological service utilization and its impact on return to work in vocational retraining centers: a cohort study. *J Occup Rehabil*. 2024;35(4):800–809. doi:10.1007/s10926-024-10238-3
13. Wickizer TM, Franklin GM, Fulton-Kehoe D. Innovations in occupational health care delivery can prevent entry into permanent disability: 8-year follow-up of the Washington state centers for occupational health and education. *Med Care*. 2018;56(12):1018–1023. doi:10.1097/MLR.0000000000000991
14. Fleischer A, Sayers C. Individualized return-to-work intervention within the cancer care continuum. *Am J Occup Ther*. 2025;79(3). doi:10.5014/ajot.2025.051030
15. Tanaka S, Kuge RI, Nakano M, et al. Outcomes of an interdisciplinary return to work intervention including occupational therapy for mood and adjustment disorders: a single-arm clinical trial. *Work*. 2023;74(2):515–530. doi:10.3233/WOR-211144
16. Gagné M, Deci EL. Self-determination theory and work motivation. *J Organ Behav*. 2005;26(4):331–362. doi:10.1002/job.322
17. Deci EL, Ryan RM. The "what" and "why" of goal pursuits: human needs and the self-determination of behavior. *Psychol Inq*. 2000;11(4):227–268. doi:10.1207/S15327965PLI1104_01
18. Patrick H, Williams GC. Self-determination theory: its application to health behavior and complementarity with motivational interviewing. *Int J Behav Nutr Phys Act*. 2012;9(1):18. doi:10.1186/1479-5868-9-18
19. Deci EL, Olafsen AH, Ryan RM. Self-determination theory in work organizations: the state of a science. *Annu Rev Organ Psychol Organ Behav*. 2017;4(1):19–43. doi:10.1146/annurev-orgpsych-032516-113108
20. Huyghebaert-Zouaghi T, Gillet N, Fernet C, Thomas J, Ntoumanis N. Managerial predictors and motivational outcomes of workers' psychological need states profiles: a two-wave examination. *Eur J Work Organ Psychol*. 2023;32(2):216–233. doi:10.1080/1359432X.2022.2127354

21. Loverre M, Chirico A, Cinque L, et al. A systematic review of self-determination theory's application in military and police organizations. *J Police Crim Psychol*. 2024:1–23. doi:10.1007/s11896-024-09718-2
22. Jr FAG, Chan KMK, Chan SL, et al. Applying motivational framework in medical education: a self-determination theory perspectives. *Med Educ Online*. 2023. doi:10.1080/10872981.2023.2178873
23. Kim S, Jeong YJ, Kim HS, Jeong SH, Lee EJ. Effects of a nursing leadership program on self-leadership, interpersonal relationships, clinical performance, problem-solving abilities, and nursing professionalism among nursing students in South Korea: a quasi-experimental study. *J Korean Acad Nurs*. 2025;55(1):137–151. doi:10.4040/jkan.24110
24. Brooks JM, Iwanaga K, Chiu CY, et al. Relationships between self-determination theory and theory of planned behavior applied to physical activity and exercise behavior in chronic pain. *Psychol Health Med*. 2017;22(7):814–822. doi:10.1080/13548506.2017.1282161
25. Zhao K, Zhao Y, Xu W. Relationship between middle school students' academic stress and physical exercise behavior from the perspective of self-determination theory: the chained mediation of motivation and intention. *PLoS One*. 2025;20(1):e0316599. doi:10.1371/journal.pone.0316599
26. Schwatka NV, Sinclair RR, Fan W, et al. How does organizational climate motivate employee safe and healthy behavior in small business?: a self-determination theory perspective. *J Occup Environ Med*. 2020;62(5):350–358. doi:10.1097/JOM.0000000000001839
27. Walker K, Carr AS, Wash A, Moczygemba LR. Pharmacist perceptions of motivation and well-being using self-determination theory: a qualitative study. *J Am Pharm Assoc*. 2025;65(2):102321. doi:10.1016/j.japh.2024.102321
28. Olafsen AH, Marescaux BPC, Kujanpää M. Crafting for autonomy, competence, and relatedness: a self-determination theory model of need crafting at work. *Appl Psychol*. 2025;74(1):e12570. doi:10.1111/apps.12570
29. Tricco AC, Lillie E, Zarin W, et al. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Ann Intern Med*. 2018;169(7):467–473. doi:10.7326/M18-0850
30. Liberati A, Altman DG, Tetzlaff J, et al. The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. *Plos Med*. 2009;6(7):e1000100. doi:10.1371/journal.pmed.1000100
31. Farholm A, Halvari H, Niemiec CP, Williams GC, Deci EL. Changes in return to work among patients in vocational rehabilitation: a self-determination theory perspective. *Disability Rehabil*. 2017;39(20):2039–2046. doi:10.1080/09638288.2016.1215559
32. Ellingsen-Dalskau LH, Morken M, Berget B, Pedersen I. Autonomy support and need satisfaction in prevocational programs on care farms: the self-determination theory perspective. *WOR*. 2015;53(1):73–85. doi:10.3233/WOR-152217
33. Ellingsen-Dalskau LH, Berget B, Pedersen I, Tellnes G, Ihlebæk C. Understanding how prevocational training on care farms can lead to functioning, motivation and well-being. *Disability Rehabil*. 2016;38(25):2504–2513. doi:10.3109/09638288.2015.1130177
34. Vanovenberghe C, Du Bois M, Lauwerier E, Van Den Broeck A. Does motivation predict return to work? A longitudinal analysis. *J Occup Health*. 2021;63(1):e12284. doi:10.1002/1348-9585.12284
35. Vanovenberghe C, Van Den Broeck A, Bois MD, Schryver MD, Lauwerier E. A pilot randomized controlled trial on motivational interviewing in return to work after work disability. *Patient Educ Couns*. 2023;106:98–106. doi:10.1016/j.pec.2022.09.014
36. Vanovenberghe C, Van Den Broeck A, Lauwerier E, Goorts K, Du Bois M. Motivation in the return to work process: a self-determination cluster approach. *Disability Rehabil*. 2022;44(10):2053–2062. doi:10.1080/09638288.2020.1826584
37. Rymenans I, Vanovenberghe C, Du Bois M, Van Den Broeck A, Lauwerier E. Process evaluation of a motivational interviewing intervention in a social security setting: a qualitative study among work-disabled patients. *J Occup Rehabil*. 2024;34(1):141–156. doi:10.1007/s10926-023-10108-4
38. Rymenans I, Van Den Broeck A, Vanovenberghe C, Du Bois M, Lauwerier E. Developing a training in motivational counselling to promote return to work: an intervention mapping approach. *J Occup Rehabil*. 2024;34(4):884–894. doi:10.1007/s10926-024-10177-z
39. Smeets J, Hoefsmit N, Houkes I. Self-directing return-to: employees' perspective. *WOR*. 2019;64(4):797–807. doi:10.3233/WOR-193041
40. Beerda DCE, Greidanus MA, De Rijk AE, De Wind A, Tamminga SJ, Schaafsma FG. The SME tool supporting employers of small- and medium-sized enterprises during the return to work of employees on long-term sick leave: study protocol for a randomized controlled trial and for a process evaluation. *Trials*. 2024;25(1):541. doi:10.1186/s13063-024-08383-4
41. Iwanaga K, Chan F, Tansey TN, Hoyt WT, Berven NL. Evaluation of constructs based on self-determination theory and self-efficacy theory as predictors of vocational rehabilitation engagement for people with physical and sensory disabilities. *Rehabil Couns Bull*. 2021;64(3):131–144. doi:10.1177/0034355220942301
42. Beerda DCE, Schaafsma FG, Tamminga SJ, De Wind A, De Rijk AE, Greidanus MA. Assisting employers of Small and Medium-Sized Enterprises (SMEs) to support employees on long-term sick-leave: development of a web-based SME tool using intervention mapping. *J Occup Rehabil*. 2025. doi:10.1007/s10926-025-10281-8
43. Ding H, Kuvaas B. Exploring the necessary roles of basic psychological needs at work: a necessary condition analysis. *J Occup Organ Psychol*. 2025;98(1):e70012. doi:10.1111/joop.70012
44. Fernet C, Litalien D, Morin AJS, et al. On the temporal stability of self-determined work motivation profiles: a latent transition analysis. *Eur J Work Organ Psychol*. 2020;29(1):49–63. doi:10.1080/1359432X.2019.1688301
45. Grabowski D, Chudzicka-Czupała A, Stapor K. Relationships between work ethic and motivation to work from the point of view of the self-determination theory. *PLoS One*. 2021;16(7):e0253145. doi:10.1371/journal.pone.0253145
46. Alves-Pereira S, Dos Santos NR, Pais L, Pereira M. The impact of COVID-19 pandemic context on work motivation: a two-wave study. *Curr Psychol*. 2025;44(8):7568–7583. doi:10.1007/s12144-024-07263-z
47. Frostad Liaset I, Lorås H. Perceived factors in return to work after acquired brain injury: a qualitative meta-synthesis. *Scand J Occup Ther*. 2016;23(6):446–457. doi:10.3109/11038128.2016.1152294
48. Saar K, Tolvanen A, Poutiainen E, Aro T. Returning to work after stroke: associations with cognitive performance, motivation, perceived working ability and barriers. *J Rehabil Med*. 2023;55:jrm00365. doi:10.2340/jrm.v55.2576
49. Moran CM, Diefendorff JM, Kim TY, Liu ZQ. A profile approach to self-determination theory motivations at work. *J Vocational Behav*. 2012;81(3):354–363. doi:10.1016/j.jvb.2012.09.002
50. Flodgren GM, Berg RC. Motivational interviewing as a method to facilitate return to work: a systematic review. Knowledge Centre for the Health Services at The Norwegian Institute of Public Health (NIPH); 2017. Available from: http://www.ncbi.nlm.nih.gov/books/NBK482096/. Accessed January 8, 2025.
51. Park J, Esmail S, Rayani F, Norris CM, Gross DP. Motivational interviewing for workers with disabling musculoskeletal disorders: results of a cluster randomized control trial. *J Occup Rehabil*. 2018;28(2):252–264. doi:10.1007/s10926-017-9712-3

52. Aanesen F, Grotle M, Rysstad TL, et al. Effectiveness of adding motivational interviewing or a stratified vocational advice intervention to usual case management on return to work for people with musculoskeletal disorders: the MI-NAV randomised controlled trial. *Occup Environ Med*. 2023;80(1):42–50. doi:10.1136/oemed-2022-108637
53. Aasdahl L, Standal MI, Hagen R, et al. Effectiveness of "motivational interviewing" on sick leave: a randomized controlled trial in a social insurance setting. *Scand J Work Environ Health*. 2023;49(7):477–486. doi:10.5271/sjweh.4117
54. Park J, Gross DP, Rayani F, et al. Model of human occupation as a framework for implementation of motivational interviewing in occupational rehabilitation. *Work*. 2019;62(4):629–641. doi:10.3233/WOR-192895
55. Que W, Hu X, Wu T, et al. Using peer narrative support to promote return to work for cancer survivors: a protocol study of action research. *Arch Public Health*. 2025;83(1):21. doi:10.1186/s13690-024-01498-9
56. Laguerre RA, Barnes-Farrell JL. Bringing self-determination theory to the forefront: examining how human resource practices motivate employees of all ages to succeed. *J Bus Psychol*. 2025;40(1):1–37. doi:10.1007/s10869-024-09951-w