A systematic review and meta-analysis of the effectiveness of social support on turnover intention in clinical nurses

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Executive Summary

This systematic review and meta-analysis examines the relationship between social support and turnover intention (TI) among clinical nurses, a workforce under increasing global pressure. The authors argue that social support — encompassing supervisor support and colleague support — serves as a significant protective factor against nurse TI, consistent with the buffering model of social support. Drawing on 38 cross-sectional studies involving 63,989 clinical nurses, sourced from seven international databases up to January 2024, the analysis found a statistically significant medium negative correlation between overall social support and TI (r = –0.278). Supervisor support (r = –0.119) and colleague support (r = –0.100) also showed significant negative correlations with TI, though with smaller effect sizes. Moderator analyses revealed that sample size and TI measurement tools significantly influenced the strength of the correlation, while nurse department, gender, data collection time, and social support measurement tools did not. The authors conclude that enhancing perceived social support among nurses may contribute to reducing turnover rates, though the exclusive reliance on cross-sectional studies precludes causal inference.

Key Insights

1. A statistically significant medium negative correlation exists between overall social support and nurse turnover intention (r = –0.278), based on 38 studies and 63,989 clinical nurses, with the relationship holding after trim-and-fill correction for publication bias (adjusted r = –0.195).

2. Both supervisor support (r = –0.119) and colleague support (r = –0.100) are significantly negatively correlated with nurse TI, though effect sizes are small, suggesting social support type and source matter in understanding retention dynamics.

3. Sample size and TI measurement tool selection significantly moderate the social support–TI correlation: studies with smaller samples (≤1,000) reported stronger correlations (r = –0.299) than larger-sample studies (r = –0.213), consistent with known publication bias patterns; TI measurement tool type produced the largest between-group variance in effect sizes.

Practical Takeaways

• Organizational practices that strengthen supervisor-subordinate relationships and foster collegial teamwork among nurses are associated with lower observed turnover intention in the included studies, as both supervisor and colleague support dimensions demonstrated significant negative correlations with TI.

• The choice of TI measurement instrument introduces meaningful variation in observed effect sizes, with the three-item 1977 questionnaire yielding the smallest correlation (r = –0.150) and other tools

yielding notably larger correlations (r = –0.329), indicating that instrument selection in nurse retention research warrants careful consideration for comparability.

Frameworks Mentioned

Conservation of Resources (COR) Theory — A theoretical framework cited to explain how social support from supervisors provides tangible and intangible resources that alleviate turnover tendencies caused by job demands.

PRISMA — Preferred Reporting Items for Systematic Reviews and Meta-Analyses — the methodological reporting guideline followed in designing and writing this study.

Critical Analysis

Strengths include a large pooled sample (63,989 nurses), a pre-registered protocol (PROSPERO CRD42023476373), multilingual database coverage spanning Chinese and English sources, and transparent use of sensitivity analysis and publication bias correction via the trim-and-fill method. The moderator analysis adds nuance by identifying sample size and TI tool as significant moderators. Limitations are substantial: all 38 included studies are cross-sectional, precluding any causal inference between social support and TI. Significant publication bias was confirmed by the Egger test ($p = 0.002$) and funnel plot asymmetry, with 12 imputed studies required for correction, which meaningfully reduced the effect size from $r = –0.278$ to $r = –0.195$. High heterogeneity across all effect size pools (I^2 ranging from 88.5% to 94.3%) is only partially explained by the moderators tested, suggesting unmeasured confounders. Several subgroups (ICU, pediatric, male nurses) contain very few studies (as few as one), limiting subgroup conclusions. The reliance on self-reported instruments for both social support and TI introduces common-method bias. The inclusion of studies from diverse national healthcare contexts without controlling for cultural or systemic differences is an additional limitation acknowledged by the authors.

Organizational Practice

The article describes clinical nursing environments where social support is operationalized through supervisor relationships, colleague assistance, and organizational support structures. Included studies document practices such as supervisor feedback and guidance, peer teamwork, and organizational provision of emotional and informational resources to nurses across departments including emergency, operating theatre, ICU, and general wards across multiple countries including China, Belgium, Italy, Norway, Japan, Iran, and the United States.

Strategic Implications

The meta-analytic finding of a consistent, if moderate, negative correlation between social support and nurse TI across global healthcare contexts — surviving publication bias correction — points toward social support as a measurable variable in nurse retention frameworks. The moderating role of TI measurement tools suggests that variation in reported outcomes across organizational surveys may partly reflect instrument choice rather than real differences in workforce sentiment. The absence of moderating effects for COVID-19 data collection period implies that the social support–TI relationship may be relatively stable across acute crisis conditions, which has implications for understanding the durability of workplace relational factors during system shocks. The high residual heterogeneity after moderator testing indicates that the social support–TI relationship is shaped by additional unmeasured contextual factors, such as

cultural norms, leadership styles, or healthcare system structure, which are not yet systematically captured in the literature.

Validation Status: passed
