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The Relationship between Coping Style and Psychological Outcomes: A Meta-Analysis

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Abstract:

Coping strategies influence mental health, yet evidence on avoidant versus approach coping remains mixed. This meta-analysis examined associations between avoidant/approach coping and depression and anxiety. PsycINFO, PubMed, and Google Scholar were searched (January 2005–June 2025) for quantitative, peer-reviewed studies reporting Pearson's r, finalising eleven studies that met inclusion criteria. Random-effects models (REML) pooled effect sizes for four coping–outcome pairings (avoidant/depression, avoidant/anxiety, approach/depression and approach/anxiety). Heterogeneity, publication bias, and robustness were assessed. Avoidant coping correlated positively with depression and anxiety, whilst approach coping showed small, non-significant negative associations with depression and anxiety. All models exhibited substantial heterogeneity, but no publication bias was detected. The substantial heterogeneity observed aligns with prior meta-analyses in this field, reflecting differences in populations, measures and study design, likely representing genuine contextual effects. Clinically, the findings highlight the importance of targeting avoidant behaviours in therapy, meanwhile recognising that approach coping may only be effective in specific circumstances.

Keywords: coping style; depression; anxiety

1. Introduction

When faced with challenges in life, individuals are often required to choose between tackling the problem or escaping from it. This introduces the concept of coping, which refers to the cognitive and behavioural efforts people use to manage internal and external demands appraised as stressful [1]. Coping strategies are commonly conceptualised within two main categories, avoidant coping and approach coping. Avoidant coping involves disengaging from the stressor or one's emotional response to it, through behaviours such as denial, distraction or withdrawal, in contrast, approach coping refers to actively engaging with a stressor, including problem-solving, seeking social support, and reframing challenges in a constructive manner [1-2]. Essentially, avoidant coping leads an individual away from the stressor in seeking of minimising immediate discomfort, whereas ap-

proach coping moves the individual toward the problem with intent to resolve it.

There is significant evidence suggesting that avoidant coping is linked to higher levels of anxiety and depression, whereas approach coping generally shows a negative association to symptom levels. A recent study of people recovering from COVID-19 has supported the relationship between coping style and psychological outcomes. The study reported that using avoidant coping increased the chances of developing clinically significant depression and anxiety, while employing approach coping decreased those odds [3]. Consistent with such findings, meta-analytic reviews have reinforced the positive association between avoidant coping and psychological distress, including depression and anxiety, meaning greater use of avoidant coping correlates with markedly worse mental health. Past meta-analytic reviews also indicated that approach coping is negatively associated with depression and anxiety.

Despite this overall pattern, there are inconsistencies and open questions between different studies, which justifies a new synthesis. The strength of the relationship between coping methods and mental health can vary widely across studies, some investigations are able to find strong links, whilst others are only observing modest effects [4]. Notably, the supposed benefits of approach coping are not always reliable, in some cases showing little to no effect on depression and anxiety levels.

This study aims to fill this gap through systematically comparing the relationship between avoidant and approach coping in their associations with psychological outcomes. A meta-analysis was conducted to determine whether avoidant coping is reliably linked to poorer mental health outcomes, specifically higher levels of depression and anxiety as compared to approach coping. Results from numerous studies that examined coping styles and psychological outcomes, published within the last two decades were quantitatively synthesised. Most studies included in this meta-analysis assessed coping via self-report questionnaires, i.e. COPE Inventory, Brief COPE inventory and self-made questionnaires. It is hypothesised that avoidant coping would show a significantly positive correlation with depression and anxiety (indicating worse outcomes), whereas approach coping would show a negative correlation with these outcomes (indicating a protective effect), likely of smaller magnitude. The objective of this meta-analysis is to clarify the overall impact of different coping methods on mental health, and to provide evidence that can assist future development of coping strategies.

2. Method

2.1 Literature Search

A systematic literature search was conducted in PsycINFO, PubMed, and Google Scholar between 25 July 2025 and 1 August 2025, covering studies published from January 2005 to June 2025. The following search strings were used in varying combinations: “avoidant coping depression anxiety”, “approach coping depression anxiety”, “avoidant coping depression”, “avoidant coping anxiety”, “approach coping depression”, and “approach coping anxiety”. Only peer-reviewed journal articles published in English were considered.

2.2 Inclusion and Exclusion Criteria

Studies were included if they: employed a quantitative design; examined either avoidant coping or approach/problem-focused coping in relation to depression and/or anxiety; reported Pearson’s r correlations or provided sufficient data for calculation; and used a validated coping measure (e.g., Brief COPE, COPE Inventory). Studies were excluded if they were qualitative, non-peer-reviewed, not in English, lacked relevant psychological outcomes, or were conference papers, theses/dissertations, or intervention studies without extractable baseline associations. No age restrictions were applied. However, most samples were adult populations.

2.3 Study Selection

Search results were imported into a reference manager, and duplicates were removed. Titles and abstracts were screened by the first author, followed by full-text screening. The final list of included studies was independently checked by a second reviewer. The PRISMA flow diagram summarising the selection process is shown in Fig. 1. The search yielded 1,205 records, 1,005 after duplicates were removed, 25 full-text articles assessed for eligibility, and 11 studies included in the meta-analysis.

2.4 Data Extraction

From each study, the following data were extracted: author(s), year, country, sample size, population type (clinical vs. general), coping measure, effect size (r), and corresponding sample size for each association. Where not provided, standard errors were calculated from r and N.

2.5 Statistical Analysis

All analyses were conducted in JASP (Version 0.18.3). Pearson’s r values were transformed to Fisher’s Z for analysis and back-transformed for reporting. Random-effects

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models using the restricted maximum likelihood (REML) estimator were fitted separately for each coping–outcome pairing: avoidant coping–depression, avoidant coping–anxiety, approach coping–depression, approach coping–anxiety.

For each model, overall effect sizes were estimated with 95% confidence intervals. Heterogeneity was assessed using the Q-test. Publication bias was evaluated using Egger's regression test, Begg's rank correlation test, visual inspection of funnel plots, and the trim-and-fill procedure. Forest plots were generated for all models.

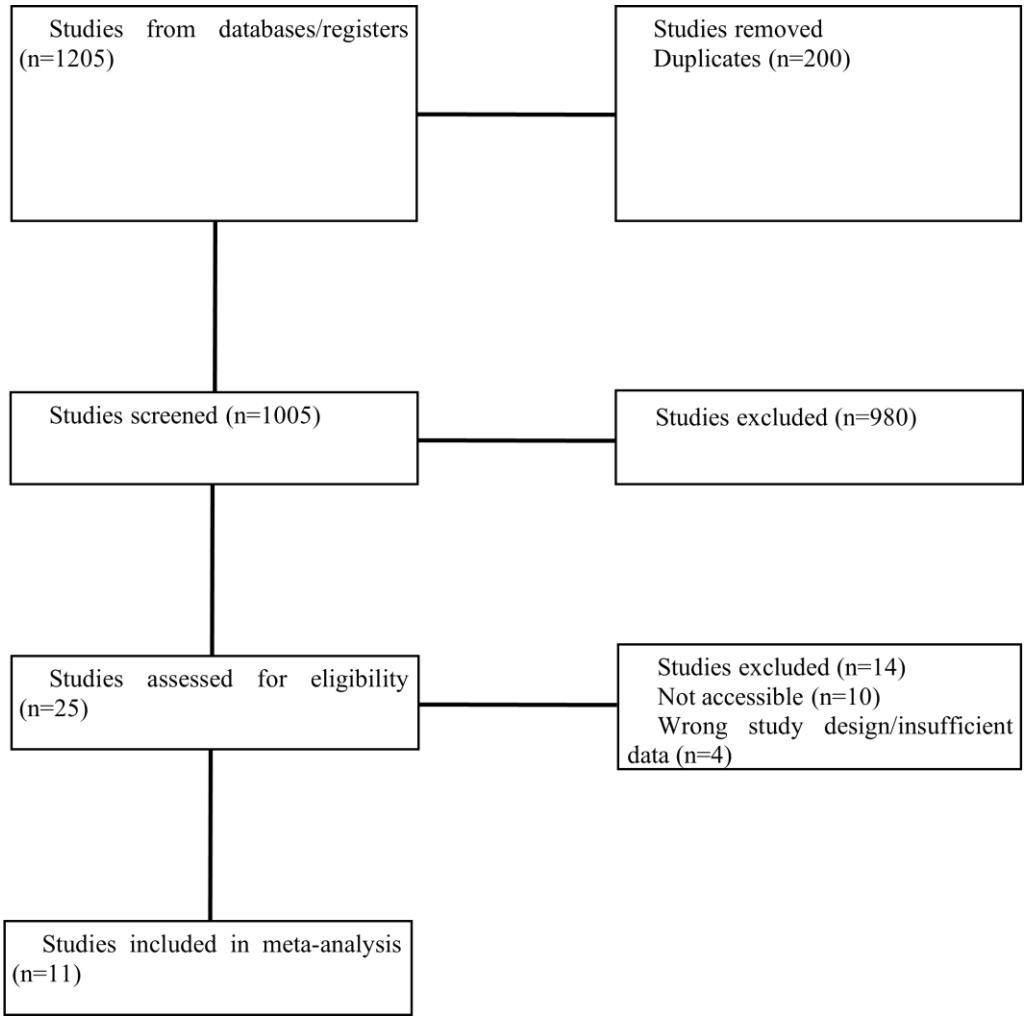

Fig. 1 PRISMA Diagram

3. Results

3.1 Avoidant Coping

3.1.1 Depression

Across 11 studies, avoidant coping was positively associated with depression, with a random-effects pooled Pearson's correlation of r = 0.43, 95% confidence interval (0.31, 0.55), p < .001 [2, 3, 5-12]. The result suggests a decent positive relationship between avoidant coping and depression, which indicates that individuals who rely on avoidant coping are more vulnerable to depression and tend to report higher levels of depressive symptoms than those who do not rely on avoidant coping. However, there was considerable between-study heterogeneity (Q(10) = 933.79, p < .001; I^2 = 97.4%), suggesting that the strength of this association varied widely across studies. There was no evidence of publication bias found, as the funnel plot appeared to be symmetric, with Egger's regression test being non-significant (p=0.18). A trim-and-fill analysis did not impute any missing studies.

3.1.2 Anxiety

A significant positive correlation was also found between avoidant coping and anxiety across 7 studies (pooled r = 0.38, 95% CI [0.30, 0.47], p < .001), implying that the greater use of avoidant coping is correlated to higher levels of anxiety. The magnitude of this effect was moderate, although heterogeneity among studies was high (Q(6) = 33.58, p < .001; I^2 = 81.1%), reflecting substantial variability in results across samples. Publication bias was not evident, and the funnel plot was not visually asymmetric, with Egger's test being non-significant (p=0.81), and the trim-and-fill analysis suggested no missing studies were needed to achieve symmetry.

The heterogeneity remained high after removing potential outliers, suggesting that it was not driven by a few extreme studies. Instead, the variability likely reflects differences in populations, coping and outcome measures, and study designs across the included samples. A more detailed consideration of possible sources of this heterogeneity is presented in the Discussion section.

3.2 Approach Coping

3.1.1 Depression

In contrast to avoidant coping, the approach coping method had a small negative correlation to depression across 9 studies. However, this effect did not achieve statistical significance. The random-effects pooled estimate was r = –0.13 (95% CI [–0.27, 0.01]), and the 95% confidence interval included zero, indicating that the true association could be negligible. Correspondingly, the overall effect was not statistically reliable, shown in (p = .067), suggesting only a non-significant trend whereby greater use of approach coping might relate to lower depression.

3.1.2 Anxiety

There was no overall association between approach coping and anxiety. The meta-analytic correlation was essentially zero as shown (pooled r = –0.07, 95% CI [–0.22, 0.09]), and this null effect was not statistically significant (p = .42). This indicates that the approach-oriented coping method was not reliably linked to anxiety levels and symptoms across the 7 studies analysed.

4. Discusion

4.1 Avoidant Coping and Psychological Outcomes

The meta-analysis revealed that avoidant coping strategies are significantly associated with poorer psychological outcomes. Individuals who habitually use avoidance-focused coping showed higher levels of depression and anxiety (average correlations of r ≈ 0.43 with depression and r ≈ 0.38 with anxiety). These effect sizes are moderate, suggesting a meaningful relationship: people who cope by disengaging, denying, or otherwise avoiding stress tend to report substantially more severe depressive and anxious symptoms. This finding is consistent with a large body of literature indicating that avoidant or maladaptive coping is linked to greater psychological distress. Avoidant strategies may provide short-term relief from stress, but in the long run they often prevent effective problem-solving and emotional processing, thereby exacerbating mental health problems. The current results reinforce that pattern on a broad scale, confirming that avoidant coping is a robust risk factor or correlates for depression and anxiety, in line with prior meta-analytic evidence [4]. Notably, the observed correlations (around 0.4) are on the higher end of what is typically seen in coping research, pointing to avoidance as a particularly important factor in emotional well-being. This strong association dovetails with clinical observations that reducing avoidance (for example, through exposure therapy in anxiety or behavioural activation in depression) often leads to improvements in psychological outcomes, underscoring the clinical relevance of findings.

The high heterogeneity observed in both the depression and anxiety analyses cannot entirely be explained by a few outlying studies, as the I^2 values remained substantial even after sensitivity checks. This implies that the variability reflects genuine differences across studies rather than statistical errors, and several factors likely contributed to the high heterogeneity. The samples included varied widely in demographic and cultural characteristics, ranging from children to adults from various countries, which could shape both coping styles and mental health outcomes. The studies included employed different different tests to assess avoidant coping (e.g., Brief COPE, RSQ, CRI and self-made questionnaires), each capturing different facets of the construct, which directly impacts the heterogeneity of this meta-analysis. Similarly, the tests to measure psychological outcomes varied across studies (e.g., PHQ-9, DASS-21, etc.), producing discrepancies in effect sizes. Differences in study design and methodology, i.e. cross-sectional and longitudinal, would further inflate heterogeneity. The high heterogeneity may reflect true contextual differences in the strength of the relationship between avoidant coping and psychological distress, suggesting that the impact of avoidant coping is not uniform, but subject to population and measurement factors.

The high variability observed here is consistent with other meta-analyses in the field. A previous study found that harmful coping strategies such as avoidance, rumination and suppression are strongly related to depression [13]. However, the magnitude of association differs between currently and formerly depressed individuals. Previous studies found that avoidance and rumination were among

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the strongest predictors of depression and anxiety in youth, emphasising that developmental stage moderates these associations [13-14]. Intervention focused evidence further reinforces this interpretation. A previous study reported that reducing disengagement-based strategies (i.e., avoidance) during treatment displayed a significant improvement in depression and anxiety, suggesting that avoidant coping is malleable and context dependent [15]. Furthermore, Kraft and colleagues extended this through demonstrating that avoidance interacts with other regulatory difficulties and vulnerabilities over time, shaping diverse trajectories of psychological distress across different populations [16]. The substantial heterogeneity observed in the present meta-analysis mirrors findings of prior studies of avoidant coping and emotion regulation, taken together, evidence from four meta-analyses converge to suggest that the high heterogeneity observed here is not merely methodological noise but reflects the inherently dynamic and context sensitive role of avoidance in psychological outcomes.

4.2 Approach Coping and Psychological Outcomes

In contrast to avoidance, approach-based coping strategies (e.g., active problem-solving, positive reframing, seeking support) showed no significant association with depression or anxiety in this meta-analysis. Several explanations may account for the lack of a significant effect in the approach coping models. First, the effectiveness of approach coping likely depends on context, in which active strategies may reduce distress primarily when stressors are controllable or acute but be less useful for chronic or unchangeable problems. Second, measurement issues could play a role. Approach coping is a broad category encompassing diverse strategies (problem-solving, seeking social support, cognitive reappraisal, etc.), not all of which uniformly lead to improved mental health. Third, timing and reciprocal effects should be considered. Many studies in the meta-analysis were cross-sectional, therefore it is unclear whether using approach coping actually lowers depression/anxiety or if individuals who are less depressed/anxious simply feel more capable of using approach coping. This outcome echoes the view that no coping strategy is universally effective, and approach coping may confer resilience in some conditions but not others, which future research should explore in more detail.

4.3 Strengths and Limitations

This meta-analysis has several strengths worth highlighting. First, it synthesises evidence spanning two decades (2005–2025), offering a current and comprehensive view of how coping strategies relate to depression and anxiety. By examining both avoidant and approach coping across two common internalising outcomes, the analysis provides a broad yet focused picture of these relationships. Methodologically, the use of a random-effects model allowed reseachers to account for variability between studies, while formal assessments of heterogeneity and publication bias add rigour. The absence of significant publication bias, together with the inclusion of visual tools such as forest and funnel plots, supports the transparency and credibility of the findings.

At the same time, several limitations should be acknowledged. Heterogeneity was substantial in all models, indicating that the strength of associations varied considerably across studies. This suggests that unexamined moderators—such as population type, cultural background, stressor characteristics, or measurement instruments—may influence the results. Another limitation lies in the broad categorisation of coping strategies into "avoidant" and "approach." Each category encompasses diverse behaviours, some of which may have distinct or even opposing effects. This aggregation may have obscured more specific patterns of association. Additionally, most included studies were cross-sectional, which limits causal interpretation. It is also unclear whether coping style shapes mental health outcomes, or whether distress levels influence coping choices. Finally, while tests did not indicate publication bias, the modest number of studies in each model means that such tests may lack power to detect it.

4.4 Future Research Directions

Given the high heterogeneity, future studies should examine moderators of the coping–outcome relationship. Key questions include whether the link between coping and psychological distress varies by the type of stressor (e.g., acute vs. chronic stress, interpersonal vs. achievement stressors), by population characteristics (clinical samples vs. community, adults vs. adolescents, cultural background), or by the measure of coping used. There is a need for more longitudinal studies and experimental designs to clarify causality. Prospective studies following individuals over time can determine if using more avoidant coping predicts increases in depression/anxiety later (as theory suggests), or if high initial distress drives people toward avoidance. Similarly, intervention research can be illuminating. For example, trials that actively encourage use of approach coping skills or reduce avoidance (such as through therapy) could test whether those changes lead to improvements in mental health. Establishing causation would have significant theoretical and clinical implications, solidifying whether coping styles are viable targets for preventing or treating emotional disorders. Future research would benefit from a more fine-grained approach to coping strategies. Rather than dichotomising coping into just "approach" and "avoidance," researchers should investigate which specific coping strategies (or combina-

tions of strategies) are most beneficial or harmful.

5. Conclusion

This meta-analysis found that avoidant coping is reliably associated with higher levels of depression and anxiety, whilst approach coping showed little to no significant protective effect. These findings highlight avoidance as a notable risk towards mental health, meanwhile the insignificant findings on approach coping suggest that its benefits may depend more on context and population, stressing the importance of the development of more adaptive coping methods. The clear link between avoidant coping and poorer outcomes suggests that clinicians should pay particular attention to avoidance behaviours and avoidance-based thought patterns in their patients. Much evidence-based therapies for depression and anxiety already emphasise this. For example, behavioural activation for depression explicitly works to reduce avoidance by encouraging gradual re-engagement in activities, and exposure-based therapies for anxiety are designed to counter avoidance of feared situations. The findings bolster the rationale for these approaches: reducing maladaptive avoidance is likely to yield significant mental health benefits. Clinicians might assess coping styles as part of intake or case conceptualisation, identify if a client leans heavily on avoidance (e.g., excessive withdrawal, procrastination, or denial), and then focus treatment on building more active coping and problem-solving skills. Overall, these results emphasise the importance of distinguishing between coping styles in both research and clinical practice to better inform targeted and effective interventions.

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