

Analysis of personal and clinical
characteristics associated with a
favourable response to psychosocial
interventions aimed at preventing and
treating common mental disorders and
symptoms

English summary

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SUMMARY

Analysis of personal and clinical characteristics associated with a favourable response to psychosocial interventions aimed at preventing and treating common mental disorders and symptoms

CONTEXT

This report is a follow-up to the state of knowledge published in July 2022 entitled *Efficacité des interventions psychosociales pour prévenir et traiter les symptômes et troubles mentaux courants* [Efficacy of Psychosocial Interventions for the Prevention and Treatment of Common Mental Disorders and Symptoms] [INESSS, 2022]. This first report sought to identify interventions that could expand the supply of mental health services to meet the growing needs of the population. The results demonstrated the efficacy of several guided and unguided self-care and in-person interventions in decreasing symptoms of depression, anxiety and stress and/or improving functioning, quality of life or psychological well-being in people with common mental disorders or related symptoms.

However, even when the efficacy of an intervention is established, it rarely works for everyone. The purpose of this report is to document, through an analysis of moderating variables, the characteristics of individuals who are likely to respond favourably to these interventions, and through the analysis of mediating variables, the therapeutic procedures and processes that contribute to their efficacy.

METHODOLOGY

The literature review was based on a rapid review method that included 63 primary studies published between January 2019 and February 2022. Fifty of these studies focus on moderating variables and 13 on mediating variables. The studies were mainly carried out in an adult population and within the framework of classic or third-wave cognitive behavioural interventions.

It should be noted that moderating variables refer to characteristics of the individual, his or her clinical condition or the intervention (e.g., employment status, chronicity of symptoms, intervention format) that are pre-existing to the treatment and influence its response, regardless of what happens during the treatment. Mediating variables refer to events that occur during treatment and are ultimately associated with the efficacy of the intervention. A mediating variable may be, for example, an action or technique used by the practitioner or a change in the person's thoughts, emotions or behaviours. Finally, "treatment response" means a statistically significant decrease in symptoms of depression, anxiety or stress, a clinically significant improvement in these symptoms, or their remission.

It should be noted that, due to the great variability of the analyses and results, it was not possible to convert these results into a single statistic or to perform a quantitative analysis. The results were therefore summarized in a narrative form based mainly on the

direction of treatment effects and no statistical process for weighing the evidence was applied.

Consequently, considering their descriptive and exploratory nature, the results of this synthesis must be interpreted with caution.

KEY RESULTS ON MODERATING VARIABLES

Moderating variables are analyzed by assessing the degree of association between the presence of a given characteristic and the treatment response. This is a correlational link instead of a causal link.

Influence of sociodemographic characteristics on treatment response

Overall, the results indicate that sociodemographic characteristics such as age, marital status, or education level have little influence on treatment response. Indeed, employment status was the only moderator that was confirmed in at least three studies. Thus, individuals with symptoms or a current mental disorder who are employed would seem to be more likely to respond favourably to the psychosocial interventions evaluated than those who are not employed.

Clinical considerations

Some authors consider that the limited influence of sociodemographic variables on treatment response points to some potential for generalizing psychosocial interventions to different subgroups of the population with common mental disorders or related symptoms. Others suggest that the practitioner's recognition of these social disparities may mitigate their effects and positively influence treatment response.

Still, other authors point out that even if these variables do not clearly influence treatment response, they are at least likely to influence the rate of learning for people with common mental disorders or related symptoms.

Influence of clinical profile on treatment response

Most of the studies that have documented the influence of a person's clinical profile on treatment response indicate that people whose symptoms are more recent, who are not using antidepressants, are physically fit, and have had fewer negative experiences in the past are more likely to have a decrease or a clinically significant improvement in their symptoms.

Taken together, the results of studies on comorbidity and symptom severity suggest that people having more severe symptoms, or comorbid mental disorders or related symptoms, are likely to respond similarly or more favourably to the psychosocial interventions analyzed than those with less severe or complex clinical profiles.

Clinical considerations

Some authors have suggested that a transdiagnostic approach is preferable to symptom- or disorder-specific interventions when comorbid mental disorders or related symptoms are present. Still, others mention that for adults with a longer chronicity of symptoms, a single component intervention, practised more repetitively and intensively, may be more appropriate when the habits to be changed are well entrenched.

Finally, and given the discrepancy in results, some authors suggest that it would be premature for practitioners to use the evidence available to date to guide their choice of interventions. Instead, they advise practitioners to make decisions based on their expertise, the values of the people with whom they intervene, and in accordance with best clinical practices.

Influence of intervention-related characteristics on treatment response

Results indicate that expectations and preferences towards treatment have little influence on treatment response, while the results on motivation, ambivalence and resistance to change were inconclusive.

In contrast, the results show that the greater the adherence to treatment or assignments, the better the response to treatment. In fact, seven of the eight studies that looked at treatment adherence indicated that adults who complete more sessions or modules, do the exercises as planned, and apply the content in their lives are more likely to respond favourably to a guided self-care or in-person intervention.

Clinical considerations

The results suggest that it is not the presence or initial level of these elements that influences the response to treatment, but rather their evolution during treatment. In that regard, it is assumed that the acquisition and integration of, for example, motivational interviewing techniques could allow practitioners to optimize their interventions by promoting greater motivation to change and better adherence to treatment and assignments.

KEY RESULTS ON MEDIATING VARIABLES

Analysis of mediating variables requires the use of study designs with comparators and at least three measurement times to establish the causal relationship between the mediator and the efficacy of the intervention. Mediators are classified into four broad categories according to the type of process involved: cognitive, emotional, interpersonal or behavioural.

Cognitive mediators of response to treatment

Cognitive mediators have been studied the most extensively and have been shown to contribute to intervention efficacy. The results of the reviewed studies indicate that:

- In the course of the intervention, a decrease of negative automatic thoughts, dysfunctional attitudes, erroneous interpretations of bodily sensations and belief in the inability to control one's worries leads to a subsequent decrease in depression or anxiety symptoms and a favourable response to post-treatment intervention.
- An improvement or increase in cognitive-behavioural skills, perceived competence and reflexive function related to panic symptoms¹, during the intervention, leads to a subsequent decrease in depressive or anxiety symptoms and a favourable response to the post-treatment intervention.

The results also show that changes in cognitive processes contribute to intervention efficacy, whether or not they are directly targeted by the intervention.

Clinical considerations

Adults who show a decrease or a clinically significant improvement in their anxiety or depressive symptoms are those who are able to change their perception of themselves and their abilities and interpret their symptoms differently during treatment.

However, there is some evidence that a modification of cognitive processes can generate significant distress that may interfere with intervention efficacy. This can be more problematic in the context of unguided self-care, where the practitioner is not able to monitor the distress caused by cognitive interventions and make the necessary adjustments.

Emotional mediators of response to treatment

Of the three emotional processes assessed, hope was the only one shown to have an effect. Hope would represent a person's ability to identify strategies to achieve his or her goals as well as the motivation and sense of being able to engage in the pursuit of these goals. People with high levels of hope would tend to perceive barriers as less stressful, bounce back more quickly when facing a barrier and demonstrate resilience in difficult circumstances.

The results of the hope study indicate that an increase in hope during treatment accounts for up to 60% of improvements in anxiety symptoms.

¹ Reflexive panic function refers to a person's ability to understand and interpret the psychological and emotional meaning of his or her panic symptoms.

Clinical considerations

The contribution of hope to the efficacy of interventions is of interest given that it can be validly measured and that brief interventions specifically targeting it are available.

Monitoring the level of hope and including, if necessary, interventions to increase it could help boost the efficacy of cognitive-behavioural interventions offered to people with an anxiety disorder. However, the potential for generalization to other interventions and disorders has not yet been shown.

Behavioural mediators of response to treatment

Behavioural activation and sleep quality were the only behavioural processes assessed in a study of individuals with clinical burnout-related adjustment disorder.

Results indicate that only improved sleep quality, during treatment, is associated with a subsequent decrease in burnout symptoms and a favourable response to cognitive-behavioural therapy.

Interpersonal mediators of response to treatment

The interpersonal mediators assessed in the studies reviewed were the therapeutic alliance, interpersonal problems and a person's compliance or resistance to the practitioner's instructions.

The therapeutic alliance is the only mediator that has been evaluated in more than one study, whether for its quality, its early development during the intervention, or the sudden gains resulting from the resolution of breakdowns in the intervention. The results obtained in these studies demonstrate that various aspects of the therapeutic alliance contribute to intervention efficacy, whether the interventions are offered in person or as guided self-care.

Clinical considerations

The results obtained show that the therapeutic alliance contributes to the efficacy of the intervention. However, its effect varies from one person to another and seems to be more decisive in adults with interpersonal problems or greater relational needs.

The relationship between the alliance and treatment response is less well understood in interventions where there is less direct contact with the practitioner. However, some studies suggest that synchronous communication, eye contact and the physical presence of the practitioner are not essential to the development of a good therapeutic alliance. Other factors unique to digital interventions, such as ease and flexibility of access and anonymity, could compensate for the absence of these elements.

Please note that...

- With the exception of the therapeutic alliance, the various mediators contribution's to treatment response were each confirmed in only one study.
- Furthermore, these results are based on studies of in-person cognitive-behavioural interventions in almost all cases. It is therefore difficult to determine whether the mediators evaluated are specific or common to other interventions.

CONCLUSION

The results of this synthesis can support the clinical reflection of practitioners and professionals and guide the implementation of psychosocial interventions for which the efficacy has been demonstrated. Among other things, they indicate that it might be wise for practitioners to track variables likely to influence the treatment response and adjust their interventions accordingly. This would be particularly relevant when an intervention is not producing the anticipated results. The results also underline the importance for practitioners to assist people with common mental disorders or related symptoms in their process of change, especially on the cognitive level.

The results can also guide research and assessment of innovative practices, including self-care, to ensure optimal impact. Studies specifically targeting adolescent population, young adults or the elderly are needed. Similarly, some moderating variables, including adherence to treatment, would benefit from being considered as mediators of treatment response in study designs in order to understand how they contribute to the efficacy of the interventions.

Finally, it should be noted that the work carried out in this summary and in the earlier one [INESSS, 2022] is part of the *2022-2026 Interdepartmental Mental Health Action Plan*, which aims, among other things, to continue the implementation of the *Quebec Program for Mental Disorders* and to innovate by integrating digital interventions into mental health services. We hope that the results will support the Ministry of Health and Social Services and the entire network in responding to the needs of people with common mental disorders and related symptoms.

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