

The importance of intervention fit and appropriate targeting for intervention development and evaluation

Karlsson, Matilda

PhD Student, University of Gothenburg, Department of Social Work

Paper for NaPSa conference in Östersund - March 2024

This paper includes the idea for the third scientific article for my doctoral thesis. It is a draft of an introduction and methods section and is supposed to be read as a looser plan for what I would like to do. The data described in the text is already collected but I have not yet begun the analysis, so this is to be seen as a plan for how I would like to go forward. I am curious as to how the idea of this article is received, if I manage to make a convincing argument as to the importance of this study. I would gladly accept suggestions of literature I have overlooked or suitable analysis methods that I am not aware of. Looking forward to your thoughts and input!

Introduction

Social workers today deal with some of the most difficult problems of the welfare state: providing social interventions to support the most marginalized and vulnerable populations in society within a range of different areas (Svärd & Edebalk, 2021). Developing and providing social interventions has been described as the core of modern social work practice (Fraser et al., 2009; IFSW, 2023). In this article, I will argue for the need to pay attention to intervention fit and the importance of ensuring that the intervention is appropriate for the intended target group in the process of developing and evaluating new interventions. Issues related to intervention fit, in addition to e.g. implementation outcomes (Damschroder et al., 2009; Powell et al., 2015; Weiner et al., 2017) are essential if we want to avoid the black-box problem of intervention evaluation (c.f. Fraser et al., 2009; Proctor et al., 2011). I.e. the loss of the ability to understand *why* an intervention works or not when the focus of evaluation is put solely on the assessment of ultimate intervention outcomes.

The simplest way to define an intervention is as a strategy used intentionally to achieve change (Fraser et al., 2009). Interventions can take many different forms, and they can operate at individual, group, organizational, regional, or national levels depending on the problem it is intended to solve. Social interventions are oftentimes complex in their nature (Fraser et al., 2009), meaning that they have several interacting components or that they target more than one level within the same intervention (Skivington et al., 2021). Within social work, many interventions operate at the individual level, aiming to support or accomplish a change for individuals who are vulnerable or marginalized in society (Svärd & Edebalk, 2021). Interventions targeting individuals can include elements of promotion, focusing on enhancing protective factors that contribute to wellbeing; at prevention, reducing risk factors for the development of a certain undesired risk factor; or on treatment (O'Connell, Boat, & Warner, 2009). Another way of describing an intervention is by its target group, whether it has a universal, selected or indicated target (Mrazek & Haggerty, 1994). Universal interventions target everyone within a certain population, irrespectively of risk, while selected interventions focus on a certain group who are at a higher risk of developing a certain undesired outcome. Indicated interventions are used when the so called problem has already developed or where early signs of the problem have been noted (O'Connell, Boat, & Warner, 2009).

New interventions tend to be developed in response to the identification of a problem; we notice something that we want to change. After specifying *what* needs to change we need to determine

how we want it to change and what could be done in order for it to change. There exists several theoretical frameworks and recommendations detailing the development process of complex interventions (e.g., Fraser & Galinsky, 2010; Michie, Atkins, & West, 2014; O'Cathain, Croot, Duncan, et al., 2019; O'Cathain, Croot, Sworn, et al., 2019). When deciding on intervention activities intervention developers generally have an idea of how the intervention activities are supposed to lead to the change they want to accomplish. The theoretical model of how this change is expected to occur is referred to as a program theory. A program theory is a conceptual framework detailing how interventions activities are theoretically expected to lead to the intended intervention outcomes and the underlying mechanisms through which these changes come about (Fraser et al., 2009; Olsson et al., 2023). In this paper, the term program theory is used to refer to the theoretical underpinning of an intervention, meaning the summarized theory of how intervention activities are supposed to lead to the desired outcomes. The program theory is generally developed based on the intervention developers' understanding of the problem which the intervention is intended to solve and can be represented in a logic model (cf. Olsson et al., 2023; Rogers, 2008).

However, there may be several reasons as to why an intervention, and a complex intervention in particular, fails or succeeds in producing the changes as specified by the program theory. Issues related to the appropriateness of the program theory are essential to the success of an intervention. I.e. the activities the intervention builds on must have the ability to produce the intended outcomes (O'Cathain, Croot, Sworn, et al., 2019). Moreover, it is important that the target group actually do have the characteristics that are assumed when specifying the program theory. Still, when novel (Sundell et al., 2016) preventive or promoting interventions are designed and the logic model is specified, it is often assumed that the specific risk and protective factors that the intervention activities are aimed at are present or lacking in the intended target population. This assumption may be based on findings from basic research on similar populations. However, making sure whether intervention participants actually possess these characteristics, and more so than the general population (otherwise, why would we not just give the intervention to anyone) is not specified as a central activity in the numerous theoretical frameworks on intervention development to be found in the scientific literature (O'Cathain, Croot, Sworn, et al., 2019).

Within the field of intervention adaptation, a similar process has been referred to as assessing intervention fit (e.g. Ferrer-wreder, Sundell, & Mansoor, 2012; Olsson et al., 2020; Turner et al., 2023). An intervention that has been shown to be effective in a previous context may not

demonstrate the same outcomes when moved to a new context. An important step in transferring an intervention and informing cultural adaptation is to compare the characteristics of the new population to the population in which the intervention was successful (von Thiele Schwarz, Aarons, & Hasson, 2019). The theories and methods for assessing measurement and intervention fit in the field of cultural adaptation could be useful to inspire exploration and assessment of intervention fit and appropriate targeting also for newly developed interventions. For example, intervention participants could be compared to the general population on key elements of the program theory to confirm the assumptions made in designing the intervention.

In sum, if we as intervention developers or evaluation researchers are interested in investigating whether the theories underpinning an intervention are helpful in producing the intended change, we need to assess whether the theory is appropriate considering the needs of the intervention participants. This could be done by e.g. examining baseline data measuring key constructs as specified in the program theory for the intervention target population in comparison to e.g., the general population. What if the risk factors that are specified in the intervention are not more prominent in the target population than in the general population? How then do we justify that this specific intervention should be provided to this specific group? Failing to explore such questions, we may lose one aspect in the assessment of whether and how the theory underpinning the intervention is appropriate, and thus one possible piece of information about why the intervention fails or succeeds in producing the intended outcomes.

Aims and objectives

In this study I will demonstrate how the fit of the program theory of a newly developed intervention can be tested against the intervention target population. I will also argue for the importance of such procedures being considered an important part of the intervention development process. The intervention that serves an example in this study, My Choice – My way! (MCMW) targets youth who are transitioning from out-of-home care (OHC) to independent living as adults (for details about MCMW, see further below).

The aim of this study is to examine whether MCMW is appropriately targeted by investigating whether the program theory matches the intervention's target group. This will be accomplished by exploring whether, and how, youth in OHC differ significantly from youth in the general population on theoretically defined intervention targets.

Research questions:

1. How do characteristics of youth transitioning from OHC differ from youth in the general population on the theoretically defined risk and protective factors as specified in the program theory and targeted by My Choice – My Way! ?
2. What do these results mean for intervention design, continued development, implementation, and service delivery?

My Choice – My way! Intervention description and program theory

MCMW (Olsson, Bergström, & Skoog, 2022a, 2022b) was developed in collaboration between a group of university researchers and social work practitioners from a Swedish social services unit (Olsson et al., In review). The development was initiated in response to research consistently demonstrating poor and persisting outcomes for youth who have been placed in OHC in a number of different areas of life compared to their non-placed peers (e.g. Brännström et al., 2017; Brännström, Vinnerljung, & Hjern, 2020; Gao, Brännström, & Almquist, 2016; Vinnerljung, Franzén, & Danielsson, 2007; Vinnerljung & Hjern, 2011; Vinnerljung, Hjern, & Lindblad, 2006; Vinnerljung & Ribe, 2001; von Borczyskowski, Vinnerljung, & Hjern, 2013). The process of developing MCMW was ongoing between the years of 2020 and 2021. The collaboration resulted in a selected, individual, and manual-based program. Youth meet a social worker weekly or biweekly to work on the youth's self-identified goals for the future. The intervention was pilot tested and revised (Karlsson et al., In prep.) before the launch of the effectiveness study (Skoog et al., 2024) for which the baseline data in this study was collect.

MCMW is underpinned by Self-Determination Theory (Deci & Ryan, 2000), Social Cognitive Theory (Bandura, 1986), and the COM-B Model for Behavior Change (Michie, Atkins, & West, 2014). These three theories form the basis of the program theory and have guided the design of the intervention, its activities, and target areas. The primary outcome areas of the intervention relate to health, education, employment, and positive help-seeking behavior. Mechanisms of change that are targeted within the program include self-determination, self-efficacy, healthy routines, and future orientation. For further details about MCMW see (Skoog et al., 2024).

Here I mean to include a figure detailing the program theory for the final article.

Method

Study design

A cross sectional survey design will be used to compare a sample of youth from the general population to a sample of youth with experience of OHC.

Participants and recruitment

Participants in this study consist of two groups of youth.

General population. Letters with information about the study and a link to an online survey was sent to a randomly selected cross-sectional sample of 1500 youth aged between 15 and 20 years in the general population based on the Swedish civil register. Complete data was collected from 291 participants. All participants were offered a gift certificate equivalent of approximately 9€ upon completing the questionnaire.

Youth with experience of OHC. Baseline survey data will be used from a group of youth currently or recently living in OHC who are partaking in a larger effectiveness study (Skoog et al., 2024). Youth above the age of 15 were asked about research participation by social service staff upon registration into an intervention or usual services. Upon agreement to participate, youth received an email with a link to an online baseline survey, or alternatively contacted by a researcher to answer the questions via telephone if this was preferred by the youth. The data from this survey includes responses from approximately 130 participants. Participants were offered a reimbursement of approximately 18€ upon completing the questionnaire.

Data collection

The digital survey that both groups of youth were asked to complete was developed to capture several constructs relating to outcomes and change mechanisms in the MCMW program theory. Experiences from using a similar survey in the pilot testing of the intervention also informed the choice of questions in the questionnaire (see Karlsson et al., In prep.). In addition to a number of background variables the survey included questions about employment or participation in education and the following scales:

General Self-Efficacy Scale (GSE) (Schwarzer et al., 1995) – 10 item scale measuring perceived self-efficacy. We used the Swedish version, translated by Koskinen-Hagman, Schwarzer and Jerusalem .

Resilience Scale (RS-14) (Wagnild & Young, 1993) – 14 item scale measuring individual resilience. Swedish translation by Lundman et al. (2007).

The Need Satisfaction and Functional Scale (NSFS-18) (Longo et al., 2016) – 18 item scale that measures external motivation. Swedish translation by (Aurell et al., 2015).

Daily Life Routines (DLR-18) – Inspired by the Sustainability of Living Inventory (SOLI) (Hou et al., 2019), but this version was developed locally in our research team to the youth context. A higher combined score from the 18 items reflects robust routines.

Social Support Questionnaire (SSQ-6) (Sarason et al., 1987) – Assesses perceived support by asking for the number of people one has to turn to for different types of support as well as their satisfaction with that support. Swedish translation by our research team.

General Health Questionnaire 12 (GHQ-12) (Goldberg et al., 1997) – 12 items assessing psychosomatic symptoms and conditions. Swedish version purchased through <https://mapitrust.org>.

General Help Seeking Questionnaire (GHSQ) (Wilson et al., 2007) – Measures help-seeking intentions. Swedish version translated by our research group.

Further details about the entire questionnaire is available in Skoog et al. (2024).

Data analysis

When it comes to data analysis I have a few different ideas that I will cover briefly here.

First, I need to acknowledge that some self-selection bias is likely for the general population. Since there was such a low response rate I have to assume that the ones that responded may have certain characteristics that are not representative for the population. One way of handling this could be to compare the proportions of a few background characteristics in the sample for this study to representative samples in prior research to examine possible deviations. If such differences in proportions are found, I could explore the possibility of utilizing some type of weights.

One place to start after this could be use a structural equation model (SEM) measurement invariance test to ensure that the measurement scales in the questionnaire actually measure the same thing in both the general population and the target population (see e.g., van de Schoot, Lugtig, & Hox, 2012).

For comparing the two groups on important target areas as specified in the program theory one option could be to run a multiple OLS regression model where belonging to one of the groups rather than the other could be added as a variable in the model in addition to other theoretically selected background variables as covariates. The different scales in the questionnaires would constitute the outcomes in this analysis since we are interested in if they, as assumed in the program theory, are more prominent in the target group compared to in the general population. Interaction effects could also be used here to further explore if the relationships between covariates and outcomes are different between the two groups.

Another idea that I am considering is to use latent class analysis to identify subgroups patterns within the general population and the OHC respectively and compare them to each other. This analysis could potentially add more nuance to the results.

References

- Aurell, J., Wilsson, L., Bergström, A., Ohlsson, J., Martinsson, J., & Gustavsson, P. (2015). Utprovning av den svenska versionen av The Need Satisfaction and Frustration Scale (NSFS). *Göteborg: Göteborgs Universitet*.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc.
- Brännström, L., Vinnerljung, B., Forsman, H., & Almquist, Y. B. (2017). Children Placed In Out-of-Home Care as Midlife Adults: Are They Still Disadvantaged or Have They Caught Up With Their Peers? *Child Maltreat*, 22(3), 205-214.
<https://doi.org/10.1177/1077559517701855>
- Brännström, L., Vinnerljung, B., & Hjern, A. (2020). Outcomes in Adulthood After Long-Term Foster Care: A Sibling Approach. *Child maltreatment*, 25(4), 383-392.
<https://doi.org/10.1177/1077559519898755>

- Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation Science*, 4(1), 50. <https://doi.org/10.1186/1748-5908-4-50>
- Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227-268. https://doi.org/10.1207/S15327965PLI1104_01
- Ferrer-wreder, L., Sundell, K., & Mansoor, S. (2012). Tinkering with Perfection: Theory Development in the Intervention Cultural Adaptation Field. *Child & Youth Care Forum*, 41(2), 149-171. <https://doi.org/https://doi.org/10.1007/s10566-011-9162-6>
- Fraser, M. W., & Galinsky, M. J. (2010). Steps in Intervention Research: Designing and Developing Social Programs. *Research on Social Work Practice*, 20(5), 459-466. <https://doi.org/10.1177/1049731509358424>
- Fraser, M. W., Richman, J. M., Galinsky, M. J., & Day, S. H. (2009). *Intervention Research: Developing Social Programs*. Cary: Oxford University Press, Incorporated.
- Gao, M., Brännström, L., & Almquist, Y. B. (2016). Exposure to out-of-home care in childhood and adult all-cause mortality: a cohort study. *International Journal of Epidemiology*, 46(3), 1010-1017. <https://doi.org/10.1093/ije/dyw295>
- Goldberg, D. P., Gater, R., Sartorius, N., Ustun, T. B., Piccinelli, M., Gureje, O., & Rutter, C. (1997). The validity of two versions of the GHQ in the WHO study of mental illness in general health care. *Psychol Med*, 27(1), 191-197. <https://doi.org/10.1017/s0033291796004242>
- Hou, W. K., Lai, F. T. T., Hougen, C., Hall, B. J., & Hobfoll, S. E. (2019). Measuring everyday processes and mechanisms of stress resilience: Development and initial validation of the Sustainability of Living Inventory (SOLI). *Psychol Assess*, 31(6), 715-729. <https://doi.org/10.1037/pas0000692>
- IFSW, I. F. o. S. W. (2023). *Global Definition Of Social Work*. Retrieved October 30 from <https://www.ifsw.org/what-is-social-work/global-definition-of-social-work/>

Karlsson, M., Skoog, T., Bergström, M., & Olsson, T. M. (In prep.). Transition programs for youth in out-of-home care: two small-scale multi-method pilot feasibility studies leveraging youth and practitioner perspectives.

Koskinen-Hagman, M., Schwarzer, R., & Jerusalem, M. *Swedish version of the General Self-Efficacy Scale*.

Longo, Y., Gunz, A., Curtis, G. J., & Farsides, T. (2016). Measuring Need Satisfaction and Frustration in Educational and Work Contexts: The Need Satisfaction and Frustration Scale (NSFS). *Journal of Happiness Studies*, 17(1), 295-317.

<https://doi.org/10.1007/s10902-014-9595-3>

Lundman, B., Strandberg, G., Eisemann, M., Gustafson, Y., & Brulin, C. (2007). Psychometric properties of the Swedish version of the Resilience Scale. *Scand J Caring Sci*, 21(2), 229-237. <https://doi.org/10.1111/j.1471-6712.2007.00461.x>

Michie, S., Atkins, L., & West, R. (2014). *The Behaviour Change Wheel A Guide to Designing Interventions*. Silverback Publishing.

Mrazek, P. J., & Haggerty, R. J. (Eds.). (1994). *Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research*. National Academies Press (US)

Copyright 1994 by the National Academy of Sciences . All rights reserved.

<https://doi.org/10.17226/2139>.

O'Cathain, A., Croot, L., Duncan, E., Rousseau, N., Sworn, K., Turner, K., Yardley, L., & Hoddinott, P. (2019). Guidance on how to develop complex interventions to improve health and healthcare. *BMJ open*, 9(8), e029954. <https://doi.org/10.1136/bmjopen-2019-029954>

O'Cathain, A., Croot, L., Sworn, K., Duncan, E., Rousseau, N., Turner, K., Yardley, L., & Hoddinott, P. (2019). Taxonomy of approaches to developing interventions to improve health: A systematic methods overview. *Pilot and feasibility studies*, 5(1), 41-41. <https://doi.org/10.1186/s40814-019-0425-6>

O'Connell, M. E., Boat, T., & Warner, K. E. (2009). *Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities*. Washington, D.C: National Academies Press. <https://doi.org/10.17226/12480>

- Olsson, T. M., Bergström, M., & Skoog, T. (2022a). *Mitt val - min väg! Material för ungdomar*.
- Olsson, T. M., Bergström, M., & Skoog, T. (2022b). *Mitt val – min väg! Manual för praktiker i att stödja unga som ska lämna samhällsvård*.
- Olsson, T. M., Bergström, M., Välikoski, M., Karlsson, M., & Skoog, T. (In review). Advancing our understanding of complex intervention development in social work: a narrative description of co-producing support for youth transitioning from out-of-home care. *International Social Work*.
- Olsson, T. M., Blakeslee, J., Bergström, M., & Skoog, T. (2020). Exploring fit for the cultural adaptation of a self-determination model for youth transitioning from out-of-home care: A comparison of a sample of Swedish youth with two samples of American youth in out-of-home care. *Children and youth services review*, 119, 105484. <https://doi.org/https://doi.org/10.1016/j.childyouth.2020.105484>
- Olsson, T. M., Kapetanovic, S., Hollertz, K., Starke, M., & Skoog, T. (2023). Advancing Social Intervention Research Through Program Theory Reconstruction. *Research on Social Work Practice*, 33(6), 642-655. <https://doi.org/10.1177/10497315221149976>
- Powell, B. J., Waltz, T. J., Chinman, M. J., Damschroder, L. J., Smith, J. L., Matthieu, M. M., Proctor, E. K., & Kirchner, J. E. (2015). A refined compilation of implementation strategies: results from the Expert Recommendations for Implementing Change (ERIC) project. *Implement Sci*, 10, 21. <https://doi.org/10.1186/s13012-015-0209-1>
- Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., Griffey, R., & Hensley, M. (2011). Outcomes for implementation research: conceptual distinctions, measurement challenges, and research agenda. *Adm Policy Ment Health*, 38(2), 65-76. <https://doi.org/10.1007/s10488-010-0319-7>
- Rogers, P. J. (2008). Using Programme Theory to Evaluate Complicated and Complex Aspects of Interventions. *Evaluation*, 14(1), 29-48. <https://doi.org/10.1177/1356389007084674>
- Sarason, I. G., Sarason, B. R., Shearin, E. N., & Pierce, G. R. (1987). A Brief Measure of Social Support: Practical and Theoretical Implications. *Journal of Social and Personal Relationships*, 4(4), 497-510. <https://doi.org/10.1177/0265407587044007>

- Schwarzer, R., Jerusalem, M., Weinman, J., Wright, S., & Johnston, M. (1995). Measures in health psychology: A user's portfolio. Causal and control beliefs. *Causal and control beliefs*, 1, 35-37.
- Skivington, K., Matthews, L., Simpson, S. A., Craig, P., Baird, J., Blazeby, J. M., Boyd, K. A., Craig, N., French, D. P., McIntosh, E., Petticrew, M., Rycroft-Malone, J., White, M., & Moore, L. (2021). A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance. *Bmj*, 374, n2061. <https://doi.org/10.1136/bmj.n2061>
- Skoog, T., Bergström, M., Karlsson, M., & Olsson, T. M. (2024). Study protocol for leaving care—A comparison study of implementation, change mechanisms and effectiveness of transition services for youth. *PLoS One*, 19(2):e0293952. <https://doi.org/https://doi.org/10.1371/journal.pone.0293952>
- Sundell, K., Beelmann, A., Hasson, H., & von Thiele Schwarz, U. (2016). Novel Programs, International Adoptions, or Contextual Adaptations? Meta-Analytical Results From German and Swedish Intervention Research. *Journal of Clinical Child & Adolescent Psychology*, 45(6), 784-796. <https://doi.org/10.1080/15374416.2015.1020540>
- Swärd, H., & Edebalk, P. G. (2021). *Socionomutbildningen - då, nu och i framtiden* (Upplaga 1 ed.). Lund : Studentlitteratur.
- Turner, R., Vira, E. G., Bergström, M., & Olsson, T. M. (2023). Cultural Adaptation of Interventions and the a Priori Assessment of Intervention Fit: Exploring Measurement Invariance for American and Swedish Youth Leaving Care. *Journal of Evidence-Based Social Work*, 20(3), 306-322. <https://doi.org/10.1080/26408066.2022.2159602>
- van de Schoot, R., Lugtig, P., & Hox, J. (2012). A checklist for testing measurement invariance. *European Journal of Developmental Psychology*, 9(4), 486-492. <https://doi.org/10.1080/17405629.2012.686740>
- Vinnerljung, B., Franzén, E., & Danielsson, M. (2007). Teenage parenthood among child welfare clients: A Swedish national cohort study of prevalence and odds. *Journal of Adolescence*, 30(1), 97-116. <https://doi.org/https://doi.org/10.1016/j.adolescence.2005.12.002>

- Vinnerljung, B., & Hjern, A. (2011). Cognitive, educational and self-support outcomes of long-term foster care versus adoption. A Swedish national cohort study. *Children and youth services review*, 33(10), 1902-1910.
<https://doi.org/10.1016/j.childyouth.2011.05.016>
- Vinnerljung, B., Hjern, A., & Lindblad, F. (2006). Suicide attempts and severe psychiatric morbidity among former child welfare clients - a national cohort study. *Journal of child psychology and psychiatry*, 47(7), 723-733. <https://doi.org/10.1111/j.1469-7610.2005.01530.x>
- Vinnerljung, B., & Ribe, M. (2001). Mortality after care among young adult foster children in Sweden. *International Journal of Social Welfare*, 10(3), 164-173.
<https://doi.org/https://doi.org/10.1111/1468-2397.00169>
- von Borczyskowski, A., Vinnerljung, B., & Hjern, A. (2013). Alcohol and drug abuse among young adults who grew up in substitute care — Findings from a Swedish national cohort study. *Children and youth services review*, 35(12), 1954-1961.
<https://doi.org/10.1016/j.childyouth.2013.09.024>
- von Thiele Schwarz, U., Aarons, G. A., & Hasson, H. (2019). The Value Equation: Three complementary propositions for reconciling fidelity and adaptation in evidence-based practice implementation. *BMC Health Services Research*, 19(1), 868.
<https://doi.org/10.1186/s12913-019-4668-y>
- Wagnild, G. M., & Young, H. M. (1993). Development and psychometric evaluation of the Resilience Scale. *J Nurs Meas*, 1(2), 165-178.
- Weiner, B. J., Lewis, C. C., Stanick, C., Powell, B. J., Dorsey, C. N., Clary, A. S., Boynton, M. H., & Halko, H. (2017). Psychometric assessment of three newly developed implementation outcome measures. *Implement Sci*, 12(1), 108.
<https://doi.org/10.1186/s13012-017-0635-3>
- Wilson, C. J., Deane, F. P., Ciarrochi, J., & Rickwood, D. (2007). Measuring Help-Seeking Intentions: Properties of the General Help Seeking Questionnaire. *Canadian Journal of Counselling and Psychotherapy*, 39(1). <https://cjc-rcc.ucalgary.ca/article/view/58748>