RESIDENTIAL CARE IN ISRAEL: PRINCIPLES FOR CONSTRUCTING A COMPUTERIZED SYSTEM FOR GATHERING DATA, PLANNING INTERVENTIONS, AND EVALUATING OUTCOMES

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Abstract: The project described here aimed to assist the Residential Placement Unit of the Ministry of Welfare and Social Affairs in developing tools for planning interventions for children in their care, monitoring activities and practices, and assessing outcomes. A major requirement was to ensure that the data produced would be relevant to field workers and support their daily therapeutic work with the children. The tools also facilitate ongoing follow-up on the children's characteristics, needs, strengths, and prior interventions, including evaluating their effectiveness. This information is organized and can be presented in outputs tailored to the needs of field workers, supervisors, and policymakers. Key principles that guided the project were: collaboration among a multitiered team; involvement of service recipients and care leavers ("experts by experience"); balancing the needs of policymakers, staff and field workers; use of standardized and accepted terminology; reliance on a shared measurement framework; and use of outcome-based thinking to structure the system and its components. The implementation of such a computerized system often raises apprehension or resistance among both managers and staff. To address this, a lengthy and in-depth process of building trust took place, including training sessions that communicated the rationale behind the system's development and the principles underlying its design, and the establishment of a structured feedback mechanism to assess the staff's acceptance of the system. The system was successfully assimilated and is in routine use in all the residential care facilities of the Ministry of Welfare. Several factors were identified to explain this success: the commitment of the administration of the Residential Placement Unit to this project; the availability of an existing computerized system upon which to develop the project; and the involvement of the research team in the characterization of the system, training the staff, and refining and modifying the system based on the feedback received.

Keywords: out-of-home care, residential care, outcome thinking, computerized systems, shared measurement

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For many years, the professional literature in Israel has consistently highlighted the increasing complexity of the challenges faced by children and youth entering residential care facilities (Budde et al., 2004; Dale et al., 2007; Dolev et al., 2009). A 2016 report by the State Comptroller on out-of-home placements revealed that the absence of a coherent policy regarding the operation of residential care facilities, along with the lack of systematic data on the status of care leavers in adulthood and the effectiveness of the interventions provided, negatively impacts the services provided for the children and their outcomes, and also undermines the ministry's ability to oversee these facilities (Ministry of Labor, Social Affairs and Social Services, 2017).

In response, the Ministry of Welfare and Social Affairs established a committee to evaluate residential care facilities, leading to the implementation of reforms in residential care settings. These reforms addressed various aspects of residential care, with the goal of developing policies tailored to the children's needs, improving services, and enhancing the children's overall condition. In recent years, significant changes have been introduced in residential care settings under the auspices of the ministry's Child and Youth Division. These include updated policies for operating the facilities, revised tender procedures, and changes in the structure of residential care facilities, the services provided, work methods, and therapeutic approaches. Following these changes and as part of implementing the reform, the ministry's Residential Placement Unit initiated the development of a computerized system for regular use by field workers, 1 supervisors, and policymakers. The goal of the system was to collect data on the characteristics and needs of children and youth entering residential care, assess the appropriateness and efficacy of services provided to them, and ensure that the data would support ongoing decision-making and interventions. Such a system also facilitates the development of intervention policies and of standards for implementing policies in residential care facilities, drafting tenders for operating the facilities, and comparing different residential care models.

In the public and third (e.g., NGOs) sectors, there is growing recognition of the importance of data in decision-making processes. Accordingly, substantial efforts are being invested in Israel and around the world to develop computerized systems for continuous data collection to facilitate documentation and management of welfare services (Sher & Arazi, 2017). Decision-making based on data collected by such systems can promote accountability and transparency; help identify trends and improve resource allocation and service delivery (Carrilio, 2008); simplify government or funder oversight of privatized services; increase transparency and accessibility for service providers and recipients (Oldfield et al., 2015); offer comprehensive solutions for early detection

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¹ In this article, the term "field workers" refers to the social workers and residential care facility directors, who directly work with and care for children in the facilities. These two groups were the primary users of the system at the field level. Social workers, who also serve as case managers, were responsible for entering information into the computerized system, while facility directors also had access to the system.

of at-risk cases (White et al., 2010); and contribute to professionalization by supporting better decision-making (Liedgren et al., 2016).

This project's goal was to assist the Residential Placement Unit in developing tools for planning interventions for children, monitoring activities and practices, and assessing outcomes, in a way that ensures that the data are relevant to field workers and support their daily therapeutic work. The tools also facilitate ongoing follow-up of the children's characteristics, needs, strengths, and prior interventions to evaluate the effectiveness of the interventions. The information is well organized and can be presented in reports tailored to the needs of field workers, supervisors, and policymakers.

Development of the System

The development of a system to serve field workers, supervisors, and policymakers, and its optimal implementation in 109 residential care facilities, required adherence to several principles. It was important to develop a system that primarily and effectively serves the field workers and supports their daily work with service recipients. When computerized systems are designed to prioritize field workers needs and create a convenient user experience that facilitates their work and enhances its quality, the workers will have confidence in the ability of those systems to assist them in their work (e.g., Huuskonen & Vakkari, 2010). Beyond viewing field workers as the ones who bear the burden of care of the children and who are entitled to a system that serves them optimally, it is worth emphasizing that achieving the other objectives of such systems — such as supervision, resource management, and organizational learning — depends on the reliability, currency, and accuracy of the data entered: the data must reflect actual conditions in the field.

Obtaining useful data necessitates the full cooperation of the field workers and the correct use of the system, both of which are better achieved when workers perceive the system as serving their ongoing work needs and fitting their requirements. This consideration should guide system development starting from the planning stage, continuing through development, and concluding with implementation, and should be reflected in the system's structure. Integrating additional uses of the system should take into consideration the worker's experience with intervention planning, the potential increase in their workload (especially when using systems not designed for their needs only), and their attitude toward — and sense of exposure from — being subject to more intensive professional oversight due to the detailed documentation of their work.

Work Principles

With the goal of ensuring optimal implementation, the system in this project was constructed according to six guiding principles: collaboration among a multitiered team; involvement of service recipients and care leavers in the process; balancing the needs of policymakers, staff², and

² In this article, the term "staff" refers to workers from the management of the Residential Placement Unit in the Ministry of Welfare, and supervisors.

field workers; use of standardized and accepted terminology; reliance on a shared measurement framework; and use of outcome-based thinking to structure the system and its components.

Collaboration Among a Multitiered Team

When developing a computerized system for regular use, an optimal process requires genuine collaboration among staff, field workers, and various other stakeholders. Involving field-level personnel and additional agents can help achieve a more comprehensive understanding and deeper insights. A participatory process will also foster the creation of a shared language and understanding, align expectations, and establish collaborative efforts among the various partners (Alster et al., 2010; Arazi & Namer-Furstenberg, 2020). As part of this approach, a multitiered working group representing diverse perspectives was formed. The working group included staff, field workers, counsellors, care coordinators, and experts by experience. Each contributed significantly from their extensive knowledge and practical field experience. Naturally, the process also involved disagreements and conflicts. However, addressing them proved invaluable as it resulted in the development of a shared language, a balance between the needs of the field and the management, and, at a later stage, assimilation of the computerized system among field workers.

The working group provided guidance throughout all phases of the process: from developing the logic model for out-of-home residential care settings and developing data entry tools for social workers, children, and their parents, to assisting in interpreting findings from the measurement. The process was conducted through virtual team meetings, sharing feedback between sessions, and gathering individual feedback.

Involvement of Service Recipients and Care Leavers ("Experts by Experience")

Partnership with service recipients is a key principle in designing intervention policies for target populations, with the goal of ensuring that their voices — their perceptions, values, and preferences — are heard. An "expert by experience" is someone who has received services or has undergone a significant related life experience; their experience serves as the foundation of their expertise. Such knowledge includes the individual's interpretation of the experience itself and its impact on their life (Beresford, 2007; Borkman, 1976).

In recent years, there has been growing recognition of the value and importance of experiential knowledge. It can make a unique and significant contribution, especially when integrated with other forms of knowledge (academic and professional), since it often reveals what remains invisible or unexplained within formal knowledge frameworks (Beresford, 2007; Borkman, 1976).

The role of an expert by experience is to present the perspectives of social service recipients to professionals, researchers, and policymakers. The insights gained are crucial for developing a deep understanding of needs and of required services, their quality, and their effectiveness. This input is particularly valuable in the case of processes aimed at improving and refining social services (Martin, 2008). An expert by experience can provide a unique viewpoint when working

alongside professionals, offering guidance, and contributing to planning and implementation (e.g., Horgan et al., 2020; Jones & Pietilä, 2020).

An expert by experience participated in the discussions of the working group. Having spent her childhood in various welfare frameworks, including residential care facilities, she brought the unique perspective of a care leaver. She highlighted the practical implications of policies on the daily lives of children in residential care. For instance, she emphasized the importance of providing and mediating information for the children, ensuring the children's safety during home or host family vacations, organizing activities for those unable to leave the residential care facilities during breaks, and offering choices in such aspects of the daily routine as meals, room arrangements, and extracurricular activities. Accordingly, these topics were incorporated into subsequent questionnaires for children and their parents; moreover, her comments on the phrasing of questions in the questionnaires helped to adapt them to the target audience.

Maintaining a Balance Between the Needs of Headquarters and the Field

As noted above, it is crucial that the system first and foremost should serve the field workers effectively and support them in their daily work with the children. Its functions should include planning interventions, monitoring and evaluating their implementation, documenting and consolidating information to support routine work needs, and conveying this information to relevant professional entities when required. The design of a computerized system and its components is often the responsibility of senior-level personnel within the organization or within a broader network of service organizations. This is usually the case when addressing intervention policies for a broad population, structured programs, and organizational or interorganizational initiatives. Consequently, the information that field workers are asked to record in the system is frequently aligned with managerial needs rather than their own; furthermore, the field workers may not have access to the information they provide or be able to utilize it. This situation often results in low completion rates or unreliable data entry, with incomplete or inaccurate information (Sher & Arazi, 2017).

Therefore, it is important for such systems to be designed with field workers' needs at the forefront, providing a user-friendly experience that facilitates their daily tasks (Huuskonen & Vakkari, 2010). The system must simultaneously address the needs of managers, supervisors, and policymakers by providing reliable and up-to-date information they can use in planning organizational learning and improvement of interventions. The system should include simple options for retrieving computer outputs (accessible and summarized information) and generating specialized reports (analyzed and processed data) tailored for professionals at various levels, including field workers, direct managers, supervisors, and senior managers (Sher & Arazi, 2017).

Accordingly, in developing the system for the Ministry of Welfare facilities, emphasis was placed on balancing the needs of policymakers with those of field workers. For instance, in cases of doubt regarding the expansion or collection of data not directly relevant to the care of children,

priority was given to the needs of field workers. Following this principle is expected to help ensure comprehensive and reliable data entry, as it will encourage staff and field workers to fully cooperate with the system and display optimal engagement.

Use of Existing Agreed-Upon Terminology

In developing a computerized system, it is important to use language and terminology that already exist regarding the population or the problem area. This approach ensures the use of terms that are well-established and aligned with current professional trends, concepts, and processes at the national, local, or professional level (Arazi & Namer-Furstenberg, 2020). Terminology adopted by the Ministry of Welfare as part of the reform previously conducted in residential care facilities was used. Examples include terms such as "strength-based approach", "partnership with children", and "partnership with the family". Additionally, the collaborative work with field workers within the framework of the working group facilitated the incorporation of terms familiar to residential care facility personnel. These included "use of an authoritative approach", "support for sibling relationships", and "organizing a child's stay at the residential care facility during vacations".

Reliance on the Concept of Shared Measurement

The "shared measurement" approach represents a significant advance in planning and measurement in the social domain: organizations, and units within them, that work with defined target populations adopt a common language and shared measurement framework for case management (Almog & Habib, 2013). Work carried out using this approach is based on an infrastructure that supports planning and measurement and includes common core components. Such an infrastructure offers substantial benefits, such as the development of success indicators and the ability to create comprehensive, reliable, and valid measurement tools in a centralized, systematic, and efficient manner (Ógáin et al., 2013). It also establishes a shared language between organizations and units working within the same field and toward a common goal, thereby promoting standardization and benchmarks for service quality (Rodin & MacPherson, 2012). This strengthens the capacity of organizations and services to independently develop and operate systems for ongoing measurement (Kramer et al., 2009); improve reporting consistency and reduce duplicate reporting requirements (Centre for Regional Development & McCaughey Centre, 2007); enhance the ability to aggregate data on the target population beyond the level of specific programs (Walker et al., 2012); and improve the ability to compare programs and track the status of the population over time and as they transition between services and frameworks (Kania & Kramer, 2011).

As part of this initiative, tools were developed that align with parallel computerized information systems for children and youth at risk within the Ministry of Welfare and Social Affairs, while adhering to agreed-upon principles. First, a distinction was made between the child's characteristics, such as gender, age, family status, and immigration status, and their needs, which encompass the difficulties, concerns, and problems requiring intervention and change. Second, the framework for defining a child's needs was based on seven life domains that encompass all aspects

of the child's life: well-being and mental health; social integration; development and acquisition of learning skills; physical well-being, health and developmental opportunities; family belonging; protection from harm and exploitation; and reduction of risk behaviors. These seven domains align with the United Nations Convention on the Rights of the Child (1989), the interministerial consensus on the definition of children and youth at risk, and the findings of the Schmid Committee's Report on the State of Children and Youth at Risk and in Distress in Israel (Schmid, 2006). Third, the child's strengths, capabilities, and resources are an integral part of their assessment and are categorized according to personal strengths, such as personality traits and special talents; interpersonal strengths, such as willingness to involve professionals in one's problems and ability to form relationships; and environmental strengths, such as the existence of support systems like family, friends, neighbors, and community. This comprehensive approach ensures that the system addresses both challenges and resources in a balanced and effective manner.

Structuring the System and its Components Based on Outcome-Based Thinking

The computerized system has been designed to support outcome-based thinking, defined as a set of norms, mechanisms, and organizational processes that encourage social welfare services to define the outcomes they aim to achieve, routinely measure the extent of their success, draw conclusions, learn lessons, and plan activities accordingly (Arazi & Namer-Furstenberg, 2020; Sher & Arazi, 2016). To assist in the system's development, a logic model was employed. This tool, in the form of a visual template, presents the components of an intervention program and their interconnections and serves as the guiding principle for each phase of the process — planning, measurement, and learning — according to the principles of outcome-based thinking.

Planning phase: In the planning phase, the system facilitates logical planning of intervention programs aimed at achieving desired outcomes. This includes identifying the intended recipients of the intervention and their characteristics, strengths, and past experiences; defining the problems to be addressed and prioritizing them; setting desired outcomes, with milestones for their achievement; selecting strategies and methods for achieving the outcomes; and allocating resources for implementing the intervention.

Measurement phase: In the measurement phase, the system facilitates continuous monitoring of intervention implementation and evaluation of the achievement of desired outcomes through the development of a well-grounded and logical measurement framework. Data about service recipients — including their characteristics, challenges, strengths, available resources, services received, and the extent to which they have achieved their goals — are collected in the computerized system over a timeframe that allows for meaningful change to occur (e.g., annually). For example, decisions were made to collect data on children from social workers serving as case managers in residential care facilities in collaboration with the entire residential care facilities' personnel (therapeutic counselors, care coordinators, and housemothers), integrating information from related systems (school staff, medical staff, and welfare departments). The system also

extracts administrative data already existing in the welfare system to avoid duplicate data entry and reduce the workload on field workers.

Learning phase: The learning phase involves the optimal and sensitive use of knowledge and data through analysis and processing, understanding it, and conducting an open, collaborative, and in-depth discussion to explain the findings. This is followed by the drawing of conclusions and lessons regarding each component of the intervention program and updating them as necessary (Arazi & Namer-Furstenberg, 2020). The goal of this phase is to assess the extent and degree to which the desired outcomes were achieved as a result of the intervention and its components, both for the entire population and for distinct subgroups, in order to improve methods of achieving these outcomes (Alster et al., 2010).

In the computerized system developed for residential care facilities, reports were designed to identify trends among the children, such as their characteristics and needs, and the correlations between them; the intervention methods used in the facilities, including the alignment of responses with needs and the extent to which a strength-based approach was implemented; and the effectiveness of the interventions in achieving the desired outcomes. These reports enable an understanding of which intervention components should be retained and perhaps expanded and which can be discontinued. For social workers working directly with children in residential care facilities, individualized reports were designed to provide all the necessary information and data to plan interventions and assess the achievement of desired outcomes. For supervisors overseeing the residential care facilities, an aggregate report is currently being developed to help them evaluate the extent to which residential care facilities adhere to the established standards and benchmarks and to enable comparisons at the regional level. For senior managerial personnel, a nationwide aggregate report is also being developed to provide a broad overview of the status of children in residential care facilities and to examine trends in their characteristics and needs over time.

Implementation of the System

The routine use of a computerized system for intervention planning, monitoring of outputs, and measurement of outcomes in a complex and dynamic environment like social welfare services raises professional, ethical, practical, and methodological issues. These challenges are related to planning, measuring changes in social intervention programs, and using the collected data. For instance, to ensure maximum confidentiality, staff and field workers are granted differentiated access permissions within the system, allowing them to view and edit only the files of children and youth under their direct care. Another example relates to a practical challenge: as with any new system, workers encountered various technical difficulties. To address this, a dedicated telephone support center was established, which facilitated the resolution of these issues.

Due to the unique nature of social outcomes, measurement frameworks often require a substantial investment of time, money, and human resources to develop technological

infrastructures that support continuous measurement and evaluation, as well as significant time and effort from field workers (Almog & Habib, 2014; Alster et al., 2010; Arazi & Namer-Furstenberg, 2020).

The main challenge in implementing a computerized system for day-to-day use lies in feelings of apprehension or resistance among managers and personnel. These concerns are the result of various factors, including fear of exposing sensitive information about their work and its effectiveness, increased workload due to the need to input data into the system, anxiety over documentation and evaluation of their work and its results, reluctance to change established work habits, and in some cases, aversion to technology. Implementing and integrating the system therefore required a lengthy and in-depth process of building trust and preparing for resistance around these focal points. During this initiative, system implementation and mitigation of resistance were accomplished by various methods designed to address these challenges and foster acceptance among users.

During the implementation process of such a system, it is crucial to ensure that those in management support and encourage the field workers' use of the system in order to involve them in the project and achieve their engagement. At the same time, major effort should be invested in training sessions that will support the implementation process. These training sessions should communicate the rationale behind the system's development and the principles underlying its design. Furthermore, establishing a structured feedback mechanism to assess the staff and field workers' reception of the system, and its usage levels and patterns, is highly recommended (Sher & Arazi, 2017). As part of the implementation, it is important to address employees' concerns and apprehensions while positioning the system as a tool for supporting professional work, enhancing professionalism and accountability, and providing visibility to the work of field workers (Dearman, 2005).

During the implementation of the computerized system, a number of steps were taken to address these needs. First, the working group involved in the construction of the system was fully collaborative and multitiered. Thus, it included both field workers and residential care facilities managers. This structure promoted transparency and allowed participants to feel ownership, rather than perceiving the system as an externally imposed measure.

Second, middle-management supervisors, who are secondary users of the system for oversight purposes, were actively recruited and trained in the system's use and benefits. As agents of change, they played a key role in encouraging field workers, including residential care facilities managers and care coordinators, to adopt the system. The Residential Placement Unit also initiated regional seminars for residential care facilities managers and care coordinators to advance the implementation of the new policies, in parallel to the presentation of the system. These workshops presented the system both at the professional level, including its conceptual framework, rationale, organizational structure, and benefits, and at the technical level, which covered practical aspects such as navigating the system's interfaces, saving data, and exporting outputs.

Additionally, the importance of employee involvement in improving the system was emphasized, both through their participation in the working group and by using the system and providing feedback. Their practical experience with the system was facilitated through the pilot measurement phase, whose goal was defined as a test of the system and its compatibility with the daily work of the field workers. By using the system during this pilot phase, the field workers were able to familiarize themselves with its features and provide effective feedback for necessary adjustments.

Feedback was collected through various channels, including a dedicated telephone support center for resolving technical issues, a feedback submission feature within the system, and an email address for inquiries, where every submission was documented and received a prompt and comprehensive response. Approximately two months after the launch, regional meetings were held via the Zoom video conferencing platform during which the staff and field workers discussed issues and challenges encountered during their use of the system. These meetings also provided an opportunity for employees to voice their reservations about the system. Honest responses were given to all concerns the employees raised, while emphasizing that the system was still in the development phase. At the same time, the many benefits of regular use of the system were highlighted.

Conclusion

The initiative to characterize a computerized system for residential care facilities is one of many carried out by the Myers-JDC-Brookdale Institute in conjunction with various services for children and youth at risk in Israeli government ministries. In this initiative the system was successfully assimilated and is in routine use in all the residential care facilities of the Ministry of Welfare, but less success was achieved in implementing similar initiatives in other services such as the Youth Protection Authority, the Youth Parole Service, and the Ministry of Justice's "A Lawyer of My Own" project. Based on the experience gained, several factors can be identified that may explain the different outcomes.

First, the administration of the Residential Placement Unit of the Ministry of Welfare and Social Affairs was the initiator of the project and remained committed to it from start to finish. This commitment included taking comprehensive responsibility for the project, including appointing a liaison who was involved in all aspects of the project and in all decisions made. The liaison was tasked with presenting the initiative and communicating it to staff and field workers at all levels; characterizing the system together with the software company; and allocating time and financial resources for training and for receiving feedback from the field.

Second, in the less successful initiatives, there had been no existing computerized system in which the tools could be characterized and developed and on which a pilot study could be implemented. As a result, pilot studies were carried out based on a temporary survey system of the Myers-JDC-Brookdale Institute, which was external to the organizational units and their systems.

As a survey system, its structure was not fully adapted to the rationale and principles on which the tools were developed and therefore the pilot was perceived by the field workers as a one-time and non-binding initiative, like evaluative research conducted from time to time by external parties. In the residential care facilities initiative, a new system was set up during the tool development stage, and it was possible to characterize the tools directly and to conduct the pilot study on the ministry's residential care facilities systems, as an integral part of the "service recipient file", with all that that implies — the understanding that this is an internal and binding initiative and that the system is intended to serve the field workers in their day-to-day work. This understanding increased the motivation to experiment with the system, to provide genuine feedback for its adaptation to their needs, and to learn to work with it efficiently and extensively.

Finally, unlike other initiatives where the research team only helped to develop the research tools and validate them, in this initiative the research team's involvement also included characterizing the computerized system, training the staff and field workers in implementing the system, and refining and modifying the system based on the feedback received at the end of the pilot study. Thus, the research team, which was thoroughly and deeply familiar with the structure and components of the tools, was able to optimally mediate between the rationale and principles on which the questionnaires were based and the limitations of the computerized system.

References

- Almog, Y., & Habib, J. (2013). *Shared measurement of outcomes in the social sector* [RR-646-13; Hebrew]. Myers-JDC-Brookdale Institute. https://brookdale.jdc.org.il/en/publication/shared-measurement-outcomes-social-sector/
- Almog, Y., & Habib, J. (2014). *A handbook for implementing shared measurement* [S-142-14; Hebrew]. Myers-JDC-Brookdale Institute.
- Alster, S., Habib, J, & Sabah, K. (2010). Developing the concept and practice of ongoing outcome measurement in service systems: Lessons and guidelines from relevant literature [Research report S-129-10]. Myers-JDC-Brookdale Institute. https://brookdale-web.s3.amazonaws.com/uploads/2018/01/129-10-OutcomeMeasurement-WEB-ENG.pdf
- Arazi, T., & Namer-Furstenberg, R. (2020). *The integrative guide to outcome-based thinking* [Hebrew]. Myers-JDC-Brookdale Institute.
- Beresford, P. (2007). The role of service user research in generating knowledge-based health and social care: From conflict to contribution. *Evidence & Policy*, *3*(3), 329–341. https://doi.org/10.1332/174426407781738074
- Borkman, T. (1976). Experiential knowledge: A new concept for the analysis of self-help groups. *Social Service Review*, *50*(3), 445–456.
- Budde, S., Mayer, S., Zinn, A., Lippold, M. A., Avrushin, A., Bromberg, A., Goerge, R., & Courtney, M. E. (2004). *Residential care in Illinois: Trends and alternatives* [Final report]. Chapin Hall Center for Children at the University of Chicago.
- Carrilio, T. E. (2008). Accountability, evidence, and the use of information systems in social service programs. *Journal of Social Work 8*(2), 135–148. https://doi.org/10.1177/1468017307088495
- Centre for Regional Development and McCaughey Centre. (2007). *Community indicators Victoria: A resource guide using CIV as a tool for council planning*. Swinburne University.
- Dale, N., Baker, A. J., Anastasio, E., & Purcell, J. (2007). Characteristics of children in residential treatment in New York State. *Child Welfare*, 86(1), 5-27.
- Dearman, P. (2005). Computerized social casework recording: Autonomy and control in Australia's income support agency. *Labor Studies Journal* 30(1), 47–65. https://doi.org/10.1177/0160449X0503000104
- Dolev, T., Ben-Rabi, D., & Zemach-Marom, T. (2009). Residential care for children at risk in Israel. In M. E. Courtney & D. Iwaniec (Eds.), *Residential care of children: Comparative perspectives* (pp. 72–88). https://doi.org/10.1093/acprof:oso/9780195309188.003.0005

- Horgan, A., Manning, F., Donovan, M. O., Doody, R., Savage, E., Bradley, S. K., Dorrity, C., O'Sullivan, H., Goodwin, J., Greaney, S., Biering, P., Bjornsson, E., Bocking, J., Russell, S., MacGabhann, L., Griffin, M., van der Vaart, K. J., Allon, J., Granerud, A., ... & Happell, B. (2020). Expert by experience involvement in mental health nursing education: The coproduction of standards between experts by experience and academics in mental health nursing. *Journal of Psychiatric and Mental Health Nursing*, 27(5), 553–562. https://doi.org/10.1111/jpm.12605
- Huuskonen, S., & Vakkari, P. (2010). Client information system as an everyday information tool in child protection work. *IliX '10: Proceedings of the Third Symposium on Information Interaction in Context*, 3–12. https://doi.org/10.1145/1840784.1840788
- Jones, M., & Pietilä, I. (2020). Personal perspectives on patient and public involvement: Stories about becoming and being an expert by experience. *Sociology of Health & Illness*, 42(4), 809–824. https://doi.org/10.1111/1467-9566.13064
- Kania, J. & Kramer, M. (2011). Collective impact. *Stanford Social Innovation Review 9*(1), 36–41. https://ssir.org/articles/entry/collective impact
- Kramer, M., Parkhurst, M., & Vaidyanathan, L. (2009). *Breakthroughs in shared measurement and social impact*. FSG Social Impact Advisors.
- Liedgren, P., Elvhage, G., Ehrenberg, A., & Kullberg, C. (2016). The use of decision support systems in social work: A scoping study literature review. *Journal of Evidence-Informed Social Work*, 13(1), 1–20. https://doi.org/10.1080/15433714.2014.914992
- Martin, G. P. (2008). Representativeness, legitimacy and power in public involvement in health-service management. *Social Science & Medicine*, *67*(11), 1757–1765. https://doi.org/10.1016/j.socscimed.2008.09.024
- Ministry of Labor, Social Affairs and Social Services. (2017). *Annual Report 67B: Children and youth at risk in the Ministry of Welfare's boarding schools* (pp. 719–761; Hebrew).
- Ógáin, E. N., Svistak, M., & de Las Casas, L. (2013). Blueprint for shared measurement: Developing, designing and implementing shared approaches to impact measurement. Inspiring Impact & NPC.
- Oldfield, P., Hall, H., Rawson, J., & Harvey, M. (2015). *Case management systems for social service sector organisations*. New Zealand Ministry of Social Development & Infoxchange.
- Rodin, J., & MacPherson, N. (2012). Shared outcomes: How the Rockefeller Foundation is approaching evaluation with developing country partners. *Stanford Social Innovation Review Summer 2012*, 12–15.

- Schmid, H. (2006). Report of the Public Committee to Examine the Situation of Children and Teenagers at Risk and in Distress [Hebrew]. The State of Israel.
- Sher, N., & Arazi, T. (2016). "Outcome-Based Thinking" at the Organizational Level [Hebrew]. Myers-JDC-Brookdale Institute.
- Sher, N., & Arazi, T. (2017). *Information management systems in social services: Insights and guidelines for the development of systems supporting outcome oriented management & practice* [RR-745-17; Hebrew]. Myers-JDC-Brookdale Institute. https://brookdale.jdc.org.il/en/publication/information-management-systems-social-services/
- United Nations Convention on the Rights of the Child, November 20, 1989. https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child
- Walker, K. E., Farley, C., & Polin, M. (2012). *Using data in multi-agency collaborations: Guiding performance to ensure accountability and improve programs.* Public/Private Ventures. https://www.ojp.gov/ncjrs/virtual-library/abstracts/using-data-multi-agency-collaborations-guiding-performance-ensure
- White, S., Wastell, D., Broadhurst, K., & Hall, C. (2010). When policy o'erleaps itself: The 'tragic tale' of the Integrated Children's System. *Critical Social Policy*, *30*(3), 405–429. https://doi.org/10.1177/0261018310367675