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Addressing Mental Health and Poverty in Adolescence: Uncovering Systemic Barriers to Integrated Care Using the Action Scales Model

RESEARCH AND THEORY

NAOMI DE POOTER
ISABEL KOOPMANSCHAP
MARGOT PEETERS
MARY NICOLAOU
GONNEKE W. J. M STEVENS
CARLIJN B. M. KAMPHUIS

*Author affiliations can be found in the back matter of this article

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ABSTRACT

Introduction: Adolescents growing up in poverty often require support across multiple life domains, but insufficient collaboration can lead to fragmented care. This study applied the Action Scales Model (ASM) to explore how youth professionals and policymakers perceive the integration of care and support for adolescents aged 12–25 living in poverty, and to identify areas for improvement.

Methods: Between May 2023 and February 2024, semi-structured interviews were held with 32 professionals and policymakers in the Netherlands. A deductive thematic content analysis was carried out, guided by the four levels of the ASM: events, structures, goals, and beliefs.

Results: Participants experienced effective day-to-day collaboration at the event-level. However, integration was perceived less successful at the structures, goals, and beliefs levels due to limited interdepartmental coordination, conflicting municipal priorities, and divergent perspectives on mental health, poverty and integrated care.

Discussion: Findings suggest that fragmentation at deeper system levels cascades down to professionals' perception of responsibility, which may further reinforce fragmented support. Sustainable integration requires alignment across all system levels.

Conclusion: Improving integrated youth care and support requires moving beyond collaboration between individual professionals and aim towards system-wide integration of structures, goals and beliefs.

CORRESPONDING AUTHOR:
Naomi de Pooter
Department of Interdisciplinary Social Science, Faculty of Social and Behavioural Sciences, Utrecht University, Padualaan 14, 3584 CH Utrecht, the Netherlands
n.depooter@uu.nl

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BACKGROUND

Adolescents growing up in poverty report considerably lower levels of mental health than those living in more advantaged conditions [1, 2]. This can have far-reaching consequences for their development, such as an increased risk for school drop-out and mental health problems in adulthood [3, 4]. When mental health problems arise in the lives of adolescents growing up in poverty, professionals working in Youth Care Services are often involved [5]. Youth Care Services include all psychosocial support for children (aged 0–25) and their families, comprising preventive support, general social work, specialized mental health care and high intensive psychiatric support [6]. In the Netherlands, municipalities are responsible for organizing all Youth Care Services on a local level, including coordinating financing, collaboration and policy development [7]. In addition to psychosocial support, adolescents growing up in poverty are likely to get support related to other life domains, such as financial, legal or educational support [5]. However, this care and support is often fragmented due to limited coordination and collaboration among professionals [8–10]. Fragmented support refers to a situation in which professionals involved in a family's care primarily focus on their own tasks and responsibilities, with limited coordination across services [11]. As a result, some families may receive abundant care, while others experience gaps in service provision [12]. Fragmentation can also lead to reduced satisfaction of adolescents and their parents with the care they receive, and in some cases, may result in key underlying factors of the family's problems being overlooked, such as financial worries, chronic illness or housing problems [13–15]. Relatedly, fragmented support may negatively affect clinical outcomes and lead to more healthcare costs [16, 17].

Integrated care has been proposed by adolescents, parents, professionals, policy makers and researchers as a possible solution to optimize and improve the quality and effectiveness of care and the families' satisfaction with care [10, 18, 19]. Integrated care can be defined as coherent, continuous, and coordinated care across several life domains, addressing multiple issues in a seamless way [5, 10]. Previous research has indicated that integrated care may improve mental health outcomes and satisfaction with care, but remains complex to implement [20–22]. Also, many research questions on the topic of integrated care remain to be answered, especially with regard to integrating care and support across social care and healthcare. The involvement of professionals working in different types of support necessary for adolescents growing up in poverty (e.g. support in terms of financial issues, living situation and legal affairs) is likely to increase the complexity of integrated care and support [23–25]. In this paper, we use the term 'integrated youth care and support' to describe the integration of all of the support necessary for adolescents with mental health problems who grow up in poverty.

To capture the complexity of integrated care and identify key points to improve integrated care and support, we propose applying the Action Scales Model (ASM) [21, 26–28]. The ASM is based on complex adaptive systems theory and specifies four levels (beliefs, goals, structures and events) to intervene within a system, in this case the integration of care and support for adolescents. *Beliefs* refer to the missions, values and cultures involved in integrated care that should be shared across all professionals/organizations (normative integration). *Goals* refer to the rules, policies and incentives that should be coherent across all professionals/organizations (systemic integration). *Structures* entail the collaborative organization of services and support systems such as information management (functional, organizational and service integration). *Events* describe the day-to-day collaborations between the different professionals involved (professional integration) [26, 29]. Each of these levels can impact the outcome of the system uniquely, in this case the delivery of integrated care and support to adolescents. The level of events can have a quick and direct impact on system outcomes, whereas the level of beliefs theoretically has the strongest influence, guiding the system's fundamental direction and purpose [26, 30]. The levels of structures and goals also have a more indirect impact, by shaping processes and setting strategic direction [26]. The ASM shows that in addition to the unique effect of each of these levels, the complex interplay between the levels also impact the outcome. For example, processes on the goal-level (e.g., public policy) can shape or conflict with the behaviours and interactions at the event level (e.g., behaviour of professionals). Similarly, changes at the event level can accumulate (e.g., many professionals implement a new way of working), creating shifts that influence the goal level (e.g., policy changes).

Because of these unique and combined effects, the ASM suggests that integrated care should be pursued at all levels to deliver coherent, continuous and coordinated care to adolescents [26, 29]. Still, research and practice efforts into implementing integrated care mainly focused on integration at the levels of events and structures. Recent reviews into facilitators and barriers in integrating health and/or social care for adolescents and multi-problem families identified mostly factors at the levels of events and structures, such as fragmentation of services across different sectors, roles and task structures and professional autonomy [23–25, 31]. Because of the importance of integration on all levels, there is a need for research into all levels and into interactions between the levels [29, 32, 33]. Therefore, in this study, we focus on integrated youth care and support on all levels of the ASM and reflect on the interconnectivity between levels. In

addition to psychosocial support, we also reflect on other types of youth care and support and we will look into integrated youth care and support in a real-life setting by collecting and evaluating the views and experiences of professionals and policymakers from diverse disciplines. The ASM is used as an analytical lens to identify to what extent integrated youth care and support for adolescent mental health and poverty is or is not taking place, the factors that facilitate or hinder integration at these levels and at which levels integrated youth care and support can be improved.

METHODS

STUDY DESIGN

We used in-depth, face-to-face interviews with professionals and policymakers from various organizations. In order to understand integrated youth care and support in a real-life setting, we focused specifically on a neighbourhood within a large municipality in the Netherlands. This neighbourhood has a relatively high prevalence of mental health problems and poverty among adolescents [34]. See Text Box 1 for more information about the organization of youth care and support in municipalities in the Netherlands.

This study is part of the larger Minding the Gap project, which brings together adolescents, parents, professionals and policymakers to explore ways to prevent and reduce mental health problems in adolescents (aged 12 to 25) who grow up in poverty. The current study focused on the first phase of the programme, which aims to map the professionals involved in the care and support of these adolescents and to examine their collaboration. Adolescents and parents with lived experience were actively involved in subsequent phases of the programme: exploring how poverty affects adolescent mental health and developing solutions to improve mental health outcomes.

Text Box 1 Organization of youth care and support in municipalities [35].

In the Netherlands, municipalities are responsible for social support and care of young people. The types of youth care and support can be divided into three tracks:

1. Track 1: the social foundation, including all services that help young people build a strong foundation in life, for instance education, sports, youth work, informal and formal networks.
2. Track 2: general support, including services for situations where individuals can no longer resolve problems on their own, for instance general social support and financial support.
3. Track 3: additional specialized care, including services for situations where basic care does not provide adequate support, for instance specialized mental health care. A referral from services in basic care is required.

PARTICIPANTS AND RECRUITMENT

To get an overview of the various relevant organizations and professionals, we participated in several network meetings, visited organizations and conducted an internet search. Professionals that matched the inclusion criteria were approached via email and/or personal contact through collaborating organizations (i.e., municipalities, youth care institutions). Additionally, we used snowball sampling to further enrich our sample, as not all participants were easily accessible: after every interview we inquired whether participants knew of any additional stakeholders that should be included in the study [36].

Inclusion criteria for professionals were: working in the selected neighbourhood, working in the domain of mental health (including prevention and mental health care) and/or support of families with poverty-related problems (including prevention and social care). We also included professionals working for organizations at the municipal level, because some organizations did not have a specific neighbourhood level team but were involved in mental health- or poverty-related issues among adolescents in the neighbourhood. We mainly included professionals with operational functions and direct contact with adolescents and their families, because they benefit or suffer from a lack of integration at the deeper system levels as they deliver the care and support to adolescents. Besides professionals, we also included policymakers to gain more insight into the integration of care on deeper levels of the ASM. Inclusion criteria for policymakers were: working for the selected municipality, working in departments related to the mental health of adolescents and/or working in departments related to poverty amongst adolescents.

DATA COLLECTION

Twenty-six interviews – with thirty-two participants – were conducted by two researchers (NdP & IK). In five interviews, two or three participants working in the same organization were interviewed at the same time. Each interview lasted approximately 90 minutes and took place in a quiet location chosen by the participant – often the workplace – with no other people present besides the interviewer(s). In the interviews we used the term 'collaboration' to gain insight into the perspectives of professionals and policymakers on integrated care. We chose this term because the concept of integrated care is ambiguous (and could therefore be interpreted by participants in many different ways), and the basic and measurable factor of integrated youth care and support is 'collaboration'. We did not use the term 'integrated care' in communication with the participants before, during or after the interviews.

The interviews were structured based on the Net-Map method, which is a participatory network mapping method [37]. This method includes in-depth questions

about collaboration and the visualization of these collaborations in a network map. At the start of the interview, participants completed a survey consisting of a list of organizations in the municipality that are involved in the care and support for adolescents with mental health and/or poverty-related problems. Participants specified the intensity of collaboration with each of these organizations, choosing out of three options: (1) no collaboration, (2) non-intensive collaboration, and (3) intensive collaboration. When participants indicated that they collaborated intensively with an organization, it was included in the network map. Lines were drawn between organizations to visualize the collaboration. We used the survey and the network map as a starting point for the interview questions to gain more insight into the collaboration. The aim of visualizing the network of collaboration of participants in this way first was to help the participants to reflect on the types of integration that are established, what is going well in terms of collaboration and what could be improved. An interview guide including eight open-ended questions was used (see attachment A). Questions related to what the collaboration with a specific organization entailed and which factors helped or hindered this collaboration. In addition, the interviewers asked questions relating to why participants did not collaborate with some of the organizations on the list. Probing questions were based on the ASM and the theory of boundary crossing [26, 38]. In this study, we report on the interview data.

DATA ANALYSIS

Interviews were audio-recorded and transcribed verbatim. Data analysis was performed by using the program NVivo 14. To connect the collected data to theory about integrated care on different system levels, a deductive thematic content analysis was performed using the ASM (Nobles et al., 2021). To start the data analysis, NdP deductively coded relevant quotes of the transcripts into the four levels of the ASM. The findings for each of the levels were summarized in a separate Word file. To ensure triangulation of researchers, two researchers (MP & CK) coded two transcripts according to the ASM independently, and the transcripts were compared and discussed to reach consensus on a preliminary categorization. Based on this, NdP created a coding tree with more specific subthemes for each ASM level and the coding tree was discussed and refined with two researchers (MP & CK). Next, NdP coded all of the transcripts with the coding tree, during which additional subthemes were added to the coding tree. This was an iterative process, eventually resulting in a coding tree including 21 codes across the four ASM levels. When participants described connections between ASM levels, it was coded with a fifth theme: 'connectivity'. The themes and subthemes identified in the data analysis can be found in attachment B.

ETHICAL CONSIDERATIONS

The study was approved by the Ethics Committee of the Faculty of Social and Behavioural Sciences at Utrecht University (FETC23-0330). Interviews were audio-recorded, for which written informed consent was obtained before the interview. Digital recordings were transcribed verbatim and names of organizations and persons both participating and not participating in the study were pseudonymized. Data analysis was done on verbatim transcripts, using NVivo 14. Upon completion of data collection, all data was electronically stored on a secure server of Utrecht University. Participants were allocated a random number, stored separately from any information provided during the study, to ensure that the answers were not traceable to the participants.

RESULTS

CHARACTERISTICS OF THE PARTICIPANTS

In total, 32 professionals participated in 26 interviews (4 dyads and 1 triad). The characteristics of the participants are presented in Table 1. We included mostly participants working in domains relating to both mental health and poverty.

THEMATIC ANALYSIS

Below we describe to what extent participants perceived integrated youth care and support at each of the four levels of the ASM (events, structures, goals and beliefs); their explanations for why integration is or is not taking

Profession (*n*)	
Professionals	28
Policy makers	4
Domain (*n*)	
Mental health	5
Poverty	8
Both	19
Gender (*n*)	
Male	10
Female	22
Mean age (years; range)	42; 21–57
Mean working experience in the current profession (years; range)	6; 0,75–15
Age group of adolescents the participants generally work with (*n*)	
Solely adolescents under 18	11
Solely adolescents above 18	7
Both age groups	14

Table 1 Characteristics of the participants (n = 32).

place; and their perceptions of the connectivity between different levels of integration.

INTEGRATION AT THE LEVEL OF EVENTS

Integrated care at the level of events was most often experienced by participants. Overall, they were positive about integration at this level: they indicated that they felt able to collaborate successfully with professionals in other organizations, including professionals working in other domains. Three different explanations were mentioned for successful professional collaboration: (1) personal relationships, (2) clear perceptions and division of responsibilities, and (3) personal qualities of professionals.

Personal relationships

Participants indicated that collaborations with professionals from other organizations were mostly based on personal relationships. Different preconditions were mentioned for these personal relationships: (1) having one contact person at the other organization, (2) this professional is approachable (for example directly by phone), (3) regularly seeing the other professional in person, and (4) there is trust between the professionals. These personal relationships and direct lines of communication enabled professionals to help adolescents quickly, which seems crucial in keeping them motivated and included in care. However, participants mentioned that a downside of these personal relationships is that it makes the collaboration vulnerable, for example in the case of staff turnover:

> I do feel like some contacts are very dependent on personal connections. [...] And the larger the municipality, the more organizations, the more people, and if one person leaves again, then everything can fall apart. (Participant 6, policymaker).

Clear perception and division of responsibilities

Participants were generally clear about the boundaries of their responsibility in terms of helping adolescents, meaning that they had specific ideas about when they handled problems themselves and when they collaborated with or referred to other professionals. Most participants were willing and able to carry out tasks when it came to poverty-related problems, for instance applying for certain social allowances, even when that was not their responsibility. Conditions for this were that they felt supported by their organization and that the task included symptoms of poverty (for example debts) and not the actual causes (for example minimum wages), because they felt the latter is outside of their sphere of influence. In contrast, participants drew a very clear line at mental health related problems (except for participants working in specialized mental health care), mainly because they felt that they did not have the expertise or competence:

> Eventually, of course, everything that is mental health-related does not lie with us. And our people are not healthcare professionals, so they shouldn't do that. So then it's the case that we refer them [adolescents]. Or that we give people [adolescents] information about where to go. (Participant 21, professional, financial support).

These clearly defined responsibilities avoided overlap between tasks of different professionals and organizations. When participants felt that certain tasks or problems were beyond their responsibility, they referred adolescents to other professionals. This could facilitate or hinder integrated care. Some participants indicated that it can be helpful for adolescents to have the multiple causes of their problems addressed by different professionals, as long as there is one professional that is responsible for coordinating the collaboration between different professionals and keeping an overview (which is not always the case):

> This way [splitting up problems and referring to other professionals] does work best, because adolescents also just have a chaotic life and everything is mixing together, and for us as healthcare professionals it's the task to split it up into pieces. (Participant 22, professional, general social work).

Other participants indicated that breaking up the different causes underlying the problems could hinder the provision of care and support. One participant indicated that it is detrimental for adolescents to discuss their problems with many different professionals, and that this can cause them to drop out of the care process. For that reason, some professionals avoided referring adolescents in some instances and carried out tasks beyond their own responsibility in order to quickly help adolescents:

> We decided: 'we will do it [applying for social allowances] ourselves'. We are not going to refer anymore, because then you get a messed up system. So that's what we do now too. (Participant 7, professional, informal support).

Personal qualities of professionals

Whether a professional is successful in building intra- and interorganizational relationships is also dependent on their personal qualities, according to the participants:

> I think it [successful collaboration] also depends on the person you are. I am quite a go-getter [...] If it's a side-effect, why not just put 10 minutes of time into that [using your network to help

> adolescents beyond your responsibility] as well? I do that, another person doesn't. (Participant 7, professional, informal support).

Participants indicated that professionals should be outreaching to other professionals and they should be willing to go the extra mile for adolescents. According to the professionals, the current organization of youth care and support does not always facilitate helping adolescents in multi-problem situations (which will be discussed in the upcoming paragraphs). However, participants did agree that a lot can be achieved when professionals are willing to work around these structural and systemic barriers. When professionals share these characteristics, it enhances their collaboration.

INTEGRATION AT THE LEVEL OF STRUCTURES

Overall, many participants indicated that integration at the level of structures is less successful than integration at the level of events. Participants observed a multitude of organizations and initiatives around adolescents with multiple problems, with different ways of working and a lack of communication and coordination between them. This results into a complex situation for adolescents, who have to go to many different professionals for different problems, but also for professionals that have to find their way in all the possibilities:

> I think a lot of the collaboration is not going well. I think that they [organizations in the neighbourhood] work independently of each other, because I now come across a lot of organizations and then I think: 'yes it is almost all the same, but it's like you [organizations in the neighbourhood] don't know that about each other' [...] There is no communication about that, some don't even know about the other's existence. (Participant 12, professional, informal support).

Participants mentioned both the coordinating role of the municipality and working in networks as factors influencing integration at the level of structures.

Coordinating role of the municipality

According to a few professionals, the municipality could play a significant role in coordinating the various professionals and organizations in the neighbourhood. Municipal policymakers, however, were negative about the coordinating role of the municipality, mainly due to the observed fragmentation within the municipality. Organizations in the neighbourhood that provide care and support for adolescents are subsidized by different departments in the municipality, which results in multiple uncoordinated initiatives in the neighbourhood. Departments that deal with mental health related issues and departments that deal with poverty-related issues were described as silos, meaning that they are separate entities that do not optimally coordinate their activities for adolescents:

> If we don't have any contact with [other municipal department], you see that coordination is missing, which results into all kinds of separate, individual interventions organized by us, organized by other teams and departments, which look similar in most parts, are the same, but also a little different. And as a municipality we make our infrastructure very complicated for citizens. Too complicated. (Participant 15, policymaker).

In contrast to municipal policy makers, some professionals felt that the municipality has provided a clear structure through municipal policies, which enabled professionals to divide tasks and responsibilities. Those professionals that were positive about the municipality's role also reported having a clear perception of their own responsibility:

> Everyone knows their responsibility, the [municipal approach] has really given us clarity, at least me, about who could mean what for a family and when it would be good to involve others. (Participant 13, professional, specialized mental health care).

Professionals also explained that the municipality had steered towards a neighbourhood-approach, as opposed to a city-wide approach, which shortened the lines of communication and improved personal relationships between professionals.

Working in networks

Several participants mentioned that they work in networks of multiple organizations, which they found helpful in coordinating services across organizations. Some of these inter-organizational networks are organized by the municipality, illustrating a link with the coordinating role of the municipality. The networks organize meetings that strengthen communication and relationships between professionals and prevent overlap and confusion by keeping them informed about the initiatives in the neighbourhood. However, participants mentioned that there are many networks, which consumes a lot of time. In addition, the networks are mostly divided into different themes (health, poverty, etc.) and/or target groups (children, youth, elderly), and are therefore either centred around poverty or around mental health problems in adolescents, without much overlap, meaning that these networks do not necessarily enhance integration between the two problems.

INTEGRATION AT THE LEVEL OF GOALS

Participants highlighted a lack of alignment in goals, both among neighbourhood organizations and between these organizations and the municipality. Reasons for this disconnect were the need of neighbourhood organizations to maintain municipal financing, no internal goals for collaboration within the municipality and conflicting national policies related to poverty and adolescent mental health.

Organizational goals

Professionals indicated that collaboration is hindered by differences in goals between organizations. Even if both organizations are supporting adolescents, they may have different, sometimes conflicting objectives: one organization might aim to help adolescents decrease their debts in the short term, while another organization aims to achieve long-term behavioural change to improve adolescent's overall quality of life. These different goals could mean that professionals working for different organizations have conflicting ideas about how to help adolescents, therefore hindering their collaboration. Professionals mentioned that competing organizational goals can be largely influenced by the need for external financing.

Goals of the municipality

According to professionals, some municipal goals facilitate integrated care while other municipal goals hinder it. Some professionals mentioned that the municipality has formulated the goal of collaboration between organizations in the neighbourhood, which results in the municipality providing organizations with more money and time to collaborate with each other. Policymakers indicated that the municipality did not formulate a clear goal for internal collaboration (between the different municipal departments), which results into a lack of communication and coordination between the departments responsible for adolescent mental health and departments responsible for poverty-related problems. Policymakers indicated that this results in different departments trying to decrease youth's problems from their own perspectives and ambitions, even though problems on different life-domains are highly interrelated. For example, a policymaker explained that one department could be aiming to improve adolescent mental health by supporting them through the changes in youth care as they transition into adulthood. However, since this transition also involves financial challenges, collaborating with the department responsible for poverty-related problems is important to provide the best support for the adolescent.

National policies

Policymakers indicated that the structure and goals of the municipality, and connected to that the structure and goals of organizations in the neighbourhood, are influenced by policies and legislation at the national level. According to policymakers, there is a lack of coherence between the different policies and the ministries involved. For example, policies related to poverty have been very strict for a long time, leaving little room for professionals to make exceptions, in contrast to policies relating to adolescent mental health, where there is much more room for interpretation by the professional.

INTEGRATION AT THE LEVEL OF BELIEFS

We identified two types of beliefs that were discussed that could impact integrated care: (1) views about the link between mental health and poverty, and (2) views about what integrated care entails.

Views about the link between mental health and poverty

Many participants were hesitant to directly link poverty and mental health problems in adolescents, because of the many interacting factors and mechanisms contributing to the mental health of adolescents, difficulties recognizing poverty in practice and perceptions that finding the causes of mental health problems fell outside the scope of their work. Because of these reasons, participants struggled with defining their own role in addressing this link, and often described it as falling outside of their scope of work or beyond their control. Some participants did observe a link between poverty and mental health problems, but often narrowed it down to a single issue, such as the effect of debts on stress. In addition, they often decomposed the interacting factors and mechanisms, for example in life domains, and referred adolescents to other organizations when they did not feel responsible for a certain life domain. This referral to other organizations can promote integration but at the same time can reinforce fragmented care, especially when the different types of support are not well coordinated.

Views about integrated care

Participants indicated that collaboration can be hindered when professionals have conflicting views about what integrated care encompasses. Policymakers indicated that views within the municipality about what integrated care entails range from integration at the level of events to integration at the level of goals: some policymakers perceived integrated care as a physical location where adolescents meet multiple professionals, while other policymakers were talking about integrating the different policies that the different departments are working with:

> We [municipal departments] have conversations about integrated care and then it turns out that they have a very [different view]. You find out after a whole trajectory that for them it's some sort of office where adolescents can go. (Participant 17, policymaker).

CONNECTIVITY BETWEEN THE LEVELS OF THE ACTION SCALES MODEL

Our analysis indicated that elements of integrated care at different levels of the ASM are highly related to each other (see Figure 1). Policymakers' differing views about what integrated care entails (views around integrated care; *beliefs*) and link between poverty and mental health (views around poverty and mental health; *beliefs*) may influence the lack of a clear goal for collaboration within the municipality itself (municipal goals; *goals*) and in turn lead to fragmentation within the municipality (coordination of municipality; *structures*). In addition, as mentioned previously, policymakers indicated that policies and legislation at the national level (national policies; *goals*) may lead to conflicting goals within the municipality (municipal goals; *goals*) and fragmentation within the municipality (coordination of municipality; *structures*). This suggests that misalignments at the national level cascade down to affect local provision of care and support to youth. Additionally, the coordinating role of the municipality can influence the goals of organizations working with adolescents (*organizational goals; goals*). Many organizations are dependent on financing provided by the municipality and the need to maintaining financing and the administrative time that takes could interfere with the goal to help adolescents in the best way possible and the time spent on collaborating with other organizations:

> These people [professionals working in organizations in the neighbourhood] are only busy with money, how much money. I notice it daily in my work [...] We are so busy in our head with what we have to do, what we have to do, what we have to do. Yes, I'm sorry but that is where we lose the essence of our work. (Participant 30, professional, informal support).

How integration takes shape at the level of events is also affected by factors on deeper system levels (i.e. structures, goals and beliefs). Participants mentioned that personal relationships (*events*) are facilitated by both the coordinating role of the municipality (specifically their neighbourhood-focused approach; *structures*) and inter-organizational networks (working in networks; *structures*). Perceptions of responsibility (*events*) are facilitated by the coordinating role of the municipality (*structures*), as participants indicate that the municipality has a big influence on determining roles and tasks between organizations in the neighbourhood. In addition, participants mentioned that national policies (*goals*) also directly influence the professionals' perception of responsibilities (*events*): certain issues governed by national legislation (e.g., minimum wage policies) are perceived as beyond professionals' control, leading to a lack of perceived responsibility for these aspects. Finally, views about the relationship between poverty and mental health (*beliefs*) further influence the professional's sense of responsibility (*events*): professionals often decompose the interacting factors and mechanisms and refer adolescents to other organizations when they perceive certain aspects of the problem as outside their domain of responsibility. Depending on the coordination between the different organizations, this could hinder or enhance integrated care.

DISCUSSION

This study applied the ASM framework to examine how integrated youth care and support for adolescent mental health and poverty is taking place across system levels according to professionals and policymakers, the factors that facilitate or hinder integration at these levels, how

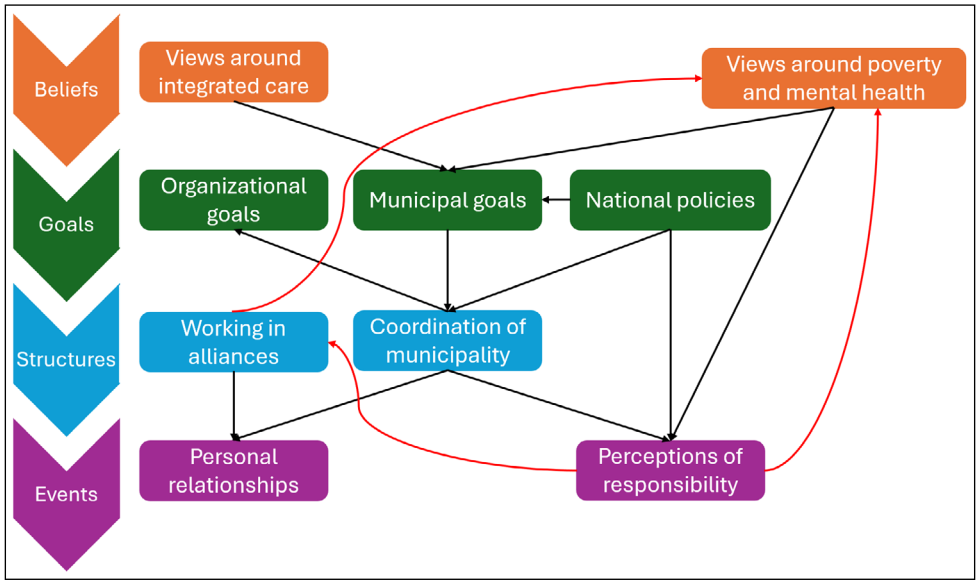


Figure 1 Connectivity between the ASM levels. Black arrows: mentioned by participants and described in Results. Red arrows: interpretation described in Discussion.

these levels are connected and what can be done to improve integrated youth care and support. Professionals indicated that they were able to provide integrated care and support at the level of events (i.e. collaborations between professionals). However, they feel hindered by systemic barriers at the levels of structures, goals and beliefs, as indicated by issues such as limited coordination between organizations and municipal departments, competing organizational and municipal goals and differing views on integrated care, poverty and mental health – pointing to key areas for improvement. Consistent with previous research, our findings show that when professionals from different domains succeed in collaborating effectively, this is often due to good personal relationships and clear perceptions of responsibility, enabling them to provide needed support despite structural and systemic barriers [23, 24, 29, 39]. However, event-level collaboration remains vulnerable to disruptions, including staff turnover, and can be constrained by formal structures that limit the time for professional to collaborate [23, 40]. These findings underscore the need for integration at deeper system levels to sustain integrated care.

At the level of structures, our findings highlight both challenges and opportunities to improve integration. Our findings show that integration at the level of structures is influenced by either top-down governance (in this case through the coordinating role of the municipality) or network-like governance (in this case through working in inter-organizational networks) [29]. Previous research on top-down governance shows that municipal leaders (i.e. decision-makers at the municipality) can strengthen integration through creating team-based structures, freeing up resources for joint working and fostering information sharing between organizations [23, 41, 42]. However, structural changes alone are insufficient when goals and beliefs remain misaligned. Divergent goals and beliefs across municipal departments may reinforce structural fragmentation and lack of interdepartmental collaboration within the municipality. This in turn results in fragmentation and competing goals and beliefs among neighbourhood organizations, and therefore fragmented care for adolescents with mental health problems who grow up in poverty. Previous research supports the importance of integration at the levels of goals and beliefs [23, 28].

At the goal-level, previous research shows that local collaborations are largely influenced by the broader political context [43]. National policies can hinder local collaboration when they lack coherence or conflict with local priorities [44]. Participants identified national policies as a key factor in shaping the misaligned departmental goals, suggesting that misalignments at the national level cascade down to affect local provision of care and support. This emphasizes the need for action from leaders at a national level, creating more coherence between national policies relating to mental health and national policies relating to poverty in youth. However, some previous studies note that enforced top-down collaboration risks undermining intrinsic motivation among professionals, creating conflicts between these professionals in the long-term [23]. This underscores the importance of improving integration at all system levels simultaneously, and not losing sight of the integration at the level of events when improving integration at deeper system levels [26, 29].

Our findings about divergent beliefs on the link between poverty and mental health and about what integrated care entails, underline the need for enhancing integration at the level of beliefs. Integration at the belief level has the highest transformative potential but is often overlooked [33]. A shift in mindset is essential, embracing the complexity of integrated care and the relationship between poverty and mental health instead of trying to reduce it [28]. Methods based in complex adaptive systems theory, such as Group Model Building, may help stakeholders in developing a shared problem definition and consensus around complex challenges [45].

The interconnection between system levels suggests that perceptions of responsibility may play a central role in shaping integrated youth care and support. Our findings indicate that fragmentation at the beliefs, goals and structural levels can influence how professionals define their responsibilities. However, these perceptions of responsibility may also reinforce the fragmentation at these deeper levels, creating a vicious cycle of fragmented care (see hypothesized connections (red arrows) in Figure 1). For instance, participants mentioned that alliances or networks of professionals often centre around one theme, either mental health of poverty. Therefore, professionals' perceived responsibility may influence whether or not they participate in none, one or both alliances and their ability to bridge domains. In addition, professionals and policymakers can have difficulties seeing the link between poverty and mental health because of the perceptions that addressing the causes of mental health problems are beyond their professional role [46]. When understanding and addressing underlying causes of mental health problems (e.g. financial circumstances) is not perceived as a responsibility of mental health professionals, knowledge of these circumstances remains limited – and also stay limited when professionals do not participate in alliances on poverty support – potentially reinforcing difficulties in seeing links between mental health and poverty. Breaking this cycle therefore requires strengthening integration across all system levels to achieve sustainable integrated youth care and support [47]. Key strategies could include integrating knowledge on the links between mental health and poverty into youth professional education, fostering cross-

sectoral alliances around shared themes, creating organizational incentives that value and assess integrated collaboration rather than only organization-specific outcomes, and changing perspectives of professionals about poverty and mental health through innovative approaches such as simulation-based training.

STRENGTHS AND LIMITATIONS

One key strength of this study lies in the application of complex adaptive systems theory, and specifically the ASM, in the context of integrated care. Complex adaptive systems theory has been recognized to more fully capture and address the complexity of integrated care, but is often applied theoretically [26–28, 48]. In this study, we applied complex adaptive systems theory to analyse empirical data from a local context. Another strength of this study lies in the inclusion of participants from multiple domains beyond psychosocial support, such as financial services, to offer broader insights needed to improve care and support for adolescents growing up in poverty.

A limitation is that findings are context-specific and not easily generalizable beyond the municipality studied. Another limitation is that findings are based on participants' perceptions rather than objective measures of integration. The emphasis on event-level integration may reflect actual practice, but also participants' limited familiarity with deeper ASM levels. We tried to overcome this by including professionals and policymakers working in different positions in the system, but ended up including mostly professionals working in operational functions. Nonetheless, if integration at deeper levels does exist, but does not reach frontline professionals, this also points to key areas for improvement.

CONCLUSION

Our findings show that sustainable integrated youth care requires alignment across multiple system levels. Vulnerable relationships, structural fragmentation, conflicting goals and divergent beliefs can undermine long-term integration. Strengthening integrated care therefore requires supportive governance, unified goals, shared beliefs about integrated care, mental health and poverty, and continuous attention to professionals' perceptions of responsibility. Addressing these interconnected factors is essential to break cycles of fragmentation and for establishing coherent, continuous, and coordinated care and support for adolescents facing complex challenges related to poverty and mental health issues.

DATA ACCESSIBILITY STATEMENT

The data generated and analysed during the current study are available from the corresponding author on reasonable request.

ADDITIONAL FILES

The additional files for this article can be found as follows:

- **Attachment A.** Interview Protocol. DOI: https://doi.org/10.5334/ijic.9892.s1
- **Attachment B.** Overview of the themes and subthemes identified in the data analysis. DOI: https://doi.org/10.5334/ijic.9892.s2

REVIEWERS

Dr Cara English, CEO, Cummings Graduate Institute for Behavioral Health Studies, Arizona, USA.

Dr Esther Tordjmann, School of Population Health, University of New South Wales, Sydney, Australia.

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COMPETING INTERESTS

The authors have no competing interests to declare.

AUTHOR CONTRIBUTIONS

Conceptualization: NdP, IK, MP, MN, GS, CK. Methodology: NdP, IK, MP, MN, GS, CK. Validation: NdP, IK, MP, MN, GS, CK. Formal analysis: NdP, MP, CK. Investigation: NdP, IK. Data curation: NdP, IK. Writing original draft: NdP, IK, MP, MN, GS, CK. Writing – review and editing: NdP, IK, MP, MN, GS, CK. Visualization: NdP. Supervision: MP, MN, GS, CK. Project administration: NdP, IK, GS, CK. Funding acquisition: GS, CK.

AUTHOR AFFILIATIONS

Naomi de Pooter orcid.org/0000-0002-6484-4291
Department of Interdisciplinary Social Science, Faculty of Social and Behavioural Sciences, Utrecht University, Padualaan 14, 3584 CH Utrecht, the Netherlands
Isabel Koopmanschap orcid.org/0009-0006-4403-4175
Department of Interdisciplinary Social Science, Faculty of Social and Behavioural Sciences, Utrecht University, Padualaan 14, 3584 CH Utrecht, the Netherlands
Margot Peeters orcid.org/0000-0001-8861-5744
Department of Interdisciplinary Social Science, Faculty of Social and Behavioural Sciences, Utrecht University, Padualaan 14, 3584 CH Utrecht, the Netherlands

Mary Nicolaou orcid.org/0000-0002-0419-5816
Amsterdam UMC, Public and Occupational Health, De Boelelaan 1117, Amsterdam, the Netherlands
Gonneke W. J. M Stevens orcid.org/0000-0001-9929-7972
Department of Interdisciplinary Social Science, Faculty of Social and Behavioural Sciences, Utrecht University, Padualaan 14, 3584 CH Utrecht, the Netherlands
Carlijn B. M. Kamphuis orcid.org/0000-0001-5795-2676
Department of Interdisciplinary Social Science, Faculty of Social and Behavioural Sciences, Utrecht University, Padualaan 14, 3584 CH Utrecht, the Netherlands

REFERENCES

1. **Devenish B, Hooley M, Mellor D.** The Pathways Between Socioeconomic Status and Adolescent Outcomes: A Systematic Review. *Am J Community Psychol.* 2017;59(1–2):219–238. DOI: https://doi.org/10.1002/ajcp.12115
2. **Weinberg D, Stevens G, Duinhof EL, Finkenauer C.** Adolescent Socioeconomic Status and Mental Health Inequalities in the Netherlands, 2001–2017. *Int J Environ Res Public Health.* 2019;16(19):3605. DOI: https://doi.org/10.3390/ijerph16193605
3. **Kessler RC, Amminger GP, Aguilar-Gaxiola S, Alonso J, Lee S, Ustun TB.** Age of onset of mental disorders: a review of recent literature. *Curr Opin Psychiatry.* 2007;20(4):359–364. DOI: https://doi.org/10.1097/YCO.0b013e32816ebc8c
4. **Smetana JG, Campione-Barr N, Metzger A.** Adolescent development in interpersonal and societal contexts. *Annu Rev Psychol.* 2006;57(1):255–284. DOI: https://doi.org/10.1146/annurev.psych.57.102904.190124
5. **Tausendfreund T, Knot-Dickscheit J, Schulze GC, Knorth EJ, Grietens H.** Families in multi-problem situations: Backgrounds, characteristics, and care services. *Child & Youth Services.* 2016;37(1):4–22. DOI: https://doi.org/10.1080/0145935x.2015.1052133
6. **Hilverdink P, Daamen W, Vink C.** Children and youth support and care in the Netherlands. Netherlands Youth Institute/NJi. https://pjp-eu.coe.int/documents/42128013/47262373/Children-youth-support-care-in-NL.pdf/cc194340-a8af-40e5-adc4-62c222d358b5?t=1484567554000 (accessed 1 September 2026).
7. **Rijksoverheid.** Jeugdhulp bij gemeenten [youth care in municipalities] n.d. https://www.rijksoverheid.nl/themas/familie-zorg-en-gezondheid/jeugdhulp/jeugdhulp-bij-gemeenten (accessed 1 September 2026).
8. **Brooks F, Bloomfield L, Offredy M, Shaughnessy P.** Evaluation of services for children with complex needs: mapping service provision in one NHS Trust. *Prim Health Care Res Dev.* 2013;14(1):52–62. DOI: https://doi.org/10.1017/S1463423612000217
9. **Henderson JL, Cheung A, Cleverley K, Chaim G, Moretti ME, de Oliveira C,** et al. Integrated collaborative care teams to enhance service delivery to youth with mental health and substance use challenges: protocol for a pragmatic randomised controlled trial. *BMJ Open.* 2017;7(2):e014080. DOI: https://doi.org/10.1136/bmjopen-2016-014080
10. **Kodner DL.** All together now: a conceptual exploration of integrated care. *Healthc Q.* 2009;13 Spec No: 6–15. DOI: https://doi.org/10.12927/hcq.2009.21091
11. **Axelsson R, Axelsson SB.** Integration and collaboration in public health–a conceptual framework. *Int J Health Plann Manage.* 2006;21(1):75–88. DOI: https://doi.org/10.1002/hpm.826
12. **Werkgroep Toekomstverkenning.** Jeugdzorg dichterbij [Youth Care nearby]. 2010. https://www.tweedekamer.nl/kamerstukken/detail?id=2010Z08381&did=2010D22929 (accessed 1 September 2026).
13. **Imber-Black E.** *Families and larger systems: A family therapist's guide through the labyrinth*. Guilford Press; 1992.
14. **Schout G, de Jong G, Zeelen J.** Beyond Care Avoidance and Care Paralysis: Theorizing Public Mental Health Care. *Sociology.* 2011;45(4):665–681. DOI: https://doi.org/10.1177/0038038511406591
15. **Plaisier I, Schyns P, Kadrouch-Outmany K, Schotel AL, de Klerk M.** Gezien, gehoord en geholpen willen worden [Wanting to be seen, heard and helped]. https://www.scp.nl/publicaties/publicaties/2023/08/25/gezien-gehoord-en-geholpen-willen-worden (accessed 1 September 2026).
16. **Kolko DJ, Perrin E.** The integration of behavioral health interventions in children's health care: services, science, and suggestions. *J Clin Child Adolesc Psychol.* 2014;43(2):216–228. DOI: https://doi.org/10.1080/15374416.2013.862804
17. **Wissow L, Anthony B, Brown J, DosReis S, Gadomski A, Ginsburg G,** et al. A common factors approach to improving the mental health capacity of pediatric primary care. *Adm Policy Ment Health.* 2008;35(4):305–318. DOI: https://doi.org/10.1007/s10488-008-0178-7
18. **Campo JV, Geist R, Kolko DJ.** Integration of Pediatric Behavioral Health Services in Primary Care: Improving Access and Outcomes with Collaborative Care. *Can J Psychiatry.* 2018;63(7):432–438. DOI: https://doi.org/10.1177/0706743717751668
19. **Patel V, Belkin GS, Chockalingam A, Cooper J, Saxena S, Unutzer J.** Grand challenges: integrating mental health services into priority health care platforms. *PLoS Med.* 2013;10(5):e1001448. DOI: https://doi.org/10.1371/journal.pmed.1001448
20. **Asarnow JR, Rozenman M, Wiblin J, Zeltzer L.** Integrated Medical-Behavioral Care Compared With Usual Primary Care for Child and Adolescent Behavioral Health: A Meta-analysis. *JAMA Pediatr.* 2015;169(10):929–937. DOI: https://doi.org/10.1001/jamapediatrics.2015.1141
21. **Goodwin N.** Understanding Integrated Care. *Int J Integr Care.* 2016;16(4):6. DOI: https://doi.org/10.5334/ijic.2530
22. **Hetrick SE, Bailey AP, Smith KE, Malla A, Mathias S, Singh SP,** et al. Integrated (one-stop shop) youth health care: best available evidence and future directions.

Med J Aust. 2017;207(10):S5–S18. DOI: https://doi.org/10.5694/mja17.00694

23. **Alderwick H, Hutchings A, Briggs A, Mays N.** The impacts of collaboration between local health care and non-health care organizations and factors shaping how they work: a systematic review of reviews. *BMC Public Health*. 2021;21(1):753. DOI: https://doi.org/10.1186/s12889-021-10630-1
24. **Van Eck M, Ettema R, Cloin M, Van Regenmortel T.** Facilitators and Barriers in Integrated Social Care for Families Facing Multiple and Complex Problems: A Scoping Review. *International Journal of Integrated Care*. 2024;24(3):13. DOI: https://doi.org/10.5334/ijic.7768
25. **Nooteboom LA, Mulder EA, Kuiper CHZ, Colins OF, Vermeiren R.** Towards Integrated Youth Care: A Systematic Review of Facilitators and Barriers for Professionals. *Adm Policy Ment Health*. 2021;48(1):88–105. DOI: https://doi.org/10.1007/s10488-020-01049-8
26. **Nobles JD, Radley D, Mytton OT, Whole Systems Obesity programme team.** The Action Scales Model: A conceptual tool to identify key points for action within complex adaptive systems. *Perspect Public Health*. 2022;142(6):328–337. DOI: https://doi.org/10.1177/17579139211006747
27. **Edgren L.** The meaning of integrated care: a systems approach. *Int J Integr Care*. 2008;8:e68. DOI: https://doi.org/10.5334/ijic.293
28. **Edgren L, Barnard K.** Complex adaptive systems for management of integrated care. *Leadership in Health Services*. 2012;25(1):39–51. DOI: https://doi.org/10.1108/17511871211198061
29. **Valentijn PP, Schepman SM, Opheij W, Bruijnzeels MA.** Understanding integrated care: a comprehensive conceptual framework based on the integrative functions of primary care. *Int J Integr Care*. 2013;13:e010. DOI: https://doi.org/10.5334/ijic.886
30. **Johnston LM, Matteson CL, Finegood DT.** Systems science and obesity policy: a novel framework for analyzing and rethinking population-level planning. *Am J Public Health*. 2014;104(7):1270–1278. DOI: https://doi.org/10.2105/AJPH.2014.301884
31. **Richardson LP, McCarty CA, Radovic A, Suleiman AB.** Research in the Integration of Behavioral Health for Adolescents and Young Adults in Primary Care Settings: A Systematic Review. *J Adolesc Health*. 2017;60(3):261–269. DOI: https://doi.org/10.1016/j.jadohealth.2016.11.013
32. **Delnoij D, Klazinga N, Glasgow IK.** Integrated care in an international perspective. *Int J Integr Care*. 2002;2:e04. DOI: https://doi.org/10.5334/ijic.62
33. **Singer SJ, Kerrissey M, Friedberg M, Phillips R.** A Comprehensive Theory of Integration. *Med Care Res Rev*. 2020;77(2):196–207. DOI: https://doi.org/10.1177/1077558718767000
34. **Centraal Bureau voor de Statistiek.** Sociaal-economische status; scores per wijk en buurt [socio-economic status; scores per district and neighborhood] 2022. https://opendata.cbs.nl/#/CBS/nl/dataset/85539NED/table?dl=A402B (accessed 1 September 2026).
35. **Rijksoverheid.** Hervormingsagenda Jeugd 2023–2028 [Reform Youth Agenda 2023–2028]. https://www.rijksoverheid.nl/documenten/rapporten/2023/06/20/hervormingsagenda-jeugd-2023-2028 (accessed 1 September 2026).
36. **Naderifar M, Goli H, Ghaljaie F.** Snowball Sampling: A Purposeful Method of Sampling in Qualitative Research. *Strides in Development of Medical Education*. 2017;14(3):1–6. DOI: https://doi.org/10.5812/sdme.67670
37. **Schiffer E, Hauck J.** Net-Map: collecting social network data and facilitating network learning through participatory influence network mapping. *Field methods*. 2010;22(3):231–249. DOI: https://doi.org/10.1177/1525822X1037479
38. **Akkerman SF, Bakker A.** Boundary Crossing and Boundary Objects. *Review of Educational Research*. 2011;81(2):132–169. DOI: https://doi.org/10.3102/0034654311404435
39. **Looman W, Struckmann V, Koppen J, Baltaxe E, Czypionka T, Huic M,** et al. Drivers of successful implementation of integrated care for multi-morbidity: Mechanisms identified in 17 case studies from 8 European countries. *Soc Sci Med*. 2021;277:113728. DOI: https://doi.org/10.1016/j.socscimed.2021.113728
40. **Nooteboom LA, van den Driesschen SI, Kuiper CHZ, Vermeiren R, Mulder EA.** An integrated approach to meet the needs of high-vulnerable families: a qualitative study on integrated care from a professional perspective. *Child Adolesc Psychiatry Ment Health*. 2020;14:18. DOI: https://doi.org/10.1186/s13034-020-00321-x
41. **Horvitz-Lennon M, Kilbourne AM, Pincus HA.** From silos to bridges: meeting the general health care needs of adults with severe mental illnesses. *Health Aff (Millwood)*. 2006;25(3):659–669. DOI: https://doi.org/10.1377/hlthaff.25.3.659
42. **Kerrissey M, Tietschert M, Novikov Z, Bahadurzada H, Sinaiko AD, Martin V,** et al. Social Features of Integration in Health Systems and Their Relationship to Provider Experience, Care Quality and Clinical Integration. *Med Care Res Rev*. 2022;79(3):359–370. DOI: https://doi.org/10.1177/10775587211024796
43. **Bambra C, Smith KE, Pearce J.** Scaling up: The politics of health and place. *Soc Sci Med*. 2019;232:36–42. DOI: https://doi.org/10.1016/j.socscimed.2019.04.036
44. **Mackie S, Darvill A.** Factors enabling implementation of integrated health and social care: a systematic review. *Br J Community Nurs*. 2016;21(2):82–87. DOI: https://doi.org/10.12968/bjcn.2016.21.2.82
45. **Rouwette EAJA, Vennix JAM, Mullekom Tv.** Group model building effectiveness: a review of assessment studies. *System Dynamics Review*. 2002;18(1):5–45. DOI: https://doi.org/10.1002/sdr.229
46. **Koopmanschap I, de Pooter N, Peeters M, Kamphuis CB, Nicolaou M, Stevens GW.** Understanding youth

professionals' perceptions of poverty and its link to youth mental health. *SSM-Qualitative Research in Health*. 2026:100845. DOI: https://doi.org/10.1016/j.ssmqr.2026.100845

47. **Foster-Fishman PG, Nowell B, Yang H.** Putting the system back into systems change: a framework for understanding and changing organizational and community systems. *Am J Community Psychol*. 2007;39(3–4):197–215. DOI: https://doi.org/10.1007/s10464-007-9109-0
48. **Malhi L, Karanfil O, Merth T, Acheson M, Palmer A, Finegood DT.** Places to Intervene to Make Complex Food Systems More Healthy, Green, Fair, and Affordable. *J Hunger Environ Nutr*. 2009;4(3–4):466–476. DOI: https://doi.org/10.1080/19320240903346448

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