



# Agency, participation in decision making and wellbeing among care leavers in care system: A quantitative mediation study

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## ABSTRACT

Care leavers are young people who have grown up in the care system, either in foster care or in residential care homes in transition from care to adulthood. They are a vulnerable group, with a high risk of negative outcomes such as poor mental health. The development of agency and the promotion of well-being are two of the most important aspects of the psychological and educational intervention with care leavers.

The purpose of this quantitative study is to investigate the relationship between agency and well-being in a group of care leavers (N = 48) recruited from the alternative care services offered by the cities of Florence and Prato and involved in the Caring project. The study employed the World Health Organization's Well-Being Index (WHO-5), Participation in Decision Making Scale and Schneider's Agency Scale as quantitative sources of data. The data were analyzed using structural equation modelling controlled for demographic data. The findings show that participation in decision making fully mediated the positive association between dispositional agency and well-being. The conclusions are discussed in terms of integrated practical recommendations for professionals concerned with care leaver protection and the development of psychological and educational interventions.

## 1. Introduction

Care leavers are young people who have grown up in the care system, either in foster care or in residential care homes in transition from care to adulthood (Häggman-Laitila et al., 2018). They are a vulnerable population, with a high risk of experiencing negative outcomes such as homelessness, unemployment, and poor mental health (Atwool, 2016; Brown, et al., 2011; Mendes & Snow, 2016; Van Breda, 2018). As such, care leavers must receive adequate protection and support to help them transition to independence and achieve positive outcomes in adulthood (Harder et al., 2020).

Providing young people with a stable and supportive living environment when they leave care is one aspect of care leaver protection. For instance, Legault, Anawati, and Flynn (2006) discovered that close friendships predicted lower levels of anxiety, lower risk of aggression, and less frequent use of avoidant coping among foster youth. Another important aspect of care leaver protection included providing access to housing and other types of accommodations, such as supported housing or shared housing (Simon, 2008). It may also include financial assistance to help care leavers cover living expenses such as rent, utilities, and other essentials (Glynn, 2021).

Ensuring care leaver protection encompasses the significant aspect of granting opportunities for education, training, and employment. Some studies (see Courtney et al., 2011; Harvey et al., 2015; Wilson et al., 2019) highlighted that care leavers often face barriers to education and employment and may need additional support to help them succeed in these areas. Another important aspect of protecting care leavers is ensuring that young people have access to mental health and other support services (Butterworth et al., 2017). Many care leavers have experienced trauma and other challenges during their time in care (Sims-Schouten, & Hayden, 2017), and they may require assistance in coping with these events and developing resilience. This can include offering counselling, therapy, and other mental health support services, as well as providing access to peer support and other social networks (Pound, & Sims-Schouten, 2022).

Aside from the foregoing, care leavers must have access to information and advice about their rights and entitlements as they transition to independence (Murray, 2014). This can include advice on housing, benefits, and other legal issues (Murray, 2017). It may also entail assisting care leavers in navigating the complex systems and processes that they may encounter as they transition to adulthood (Atkinson, & Hyde, 2019; Lynch et al., 2021; Sulimani-Aidan, & Melkman, 2018)

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The lack of consistent and coordinated support across different agencies and services is one of the most significant challenges in providing care leaver protection. As they transition to independence, care leavers may have to deal with multiple organizations and agencies, which can be confusing and overwhelming. Pinkerton (2011) emphasizes the importance of an integrated approach called whole person/whole system for all those working with care leavers. This approach helps to think of young people's transition to adulthood in general, and particularly for care leavers, as an ongoing developmental process that allows them to cope with physical, psychological, and social changes even in the case of a fragmented transition. A coordinated and integrated approach to care leaver protection must be implemented, with clear pathways and support systems in place to assist young people in navigating the transition to independence (O'Donnell et al., 2021).

Another challenge in providing care leaver protection is the lack of resources and funding available to support young people as they leave care. Many care leavers are unable to access the support and resources they need due to financial constraints, and may be forced to rely on other forms of informal support (McNamara et al., 2019). It is important that care leavers receive adequate financial support to cover the costs of living and other expenses, and that there are sufficient resources available to provide the support and services they need (Paulsen, & Berg, 2016; Paulsen, & Thomas, 2018).

The lack of agency, or control, over one's own life, is a major issue for care leavers during their transition to adulthood (Wilson et al., 2018). Professionals might worry about exposing them to decisions and responsibilities which can act as a burden for minors who have already gone through a process of adultization (Kosher, and Ben-Arieh, 2020). Many decisions about their lives are made by social workers, foster carers, or other professionals while they are in care. This can lead to a sense of powerlessness, making it difficult for care leavers to feel in control of their lives (Bengtsson et al., 2020). This lack of agency can have several negative consequences. For example, care leavers may struggle to make decisions about their education, employment, or relationships, as they may not have had the opportunity to practice making these types of decisions while in care (Furey, & Harris-Evans, 2021).

One of the ways to support care leavers is by providing them with opportunities to participate in decision-making processes that affect their lives (Glynn, & Mayock, 2019). To this end, alternative care services have an educational mandate (Tibollo, 2015). This means they should promote experiences in which decision-making can be learnt and practised. This could include involving them in the planning of their own care plans or giving them a voice in the selection of their foster carers or residential care providers (Häggman-Laitila et al., 2020) or involving them in everyday decisions such as the choice of one's own recreational activity or where to go on holiday.

Overall, it is important to recognize that care leavers have the right to make decisions about their own lives and to help them in building their agency. By providing education and employment support, involving them in decision-making processes, and offering mental health support and a supportive network, care leavers can be supported in the transition to independence with confidence and resilience.

## 2. Agency and participation in decision making

Sen defined agency as the ability to act on behalf of what a person values and has reason to value (Sen, 1982; Sen, 1985). In Sen's interpretation of agency 1) agency is exercised in relation to goals and personal values; 2) agency includes both effective power and direct control over actions; 3) agency may promote well-being or address other objectives; 4) agency entails assessing the worth of the agent's goals (Alkire, 2005). Interestingly, how people think about their goals can influence how they deal with stressors, particularly those related to challenging situations (Snyder et al., 1997). In fact, people can also imagine various ways to achieve their desired outcomes (pathways

thinking), and they can initiate and sustain efforts to apply themselves to these means (agentic thinking). From this point of view, Snyder (2005) proposed a theoretical deepening by expanding the concept of agency and placing side by side the construct of hope, especially in children and adolescents. Children's hope is defined as a cognitive set that includes beliefs in one's ability to create workable pathways to goals (the pathways component), as well as self-related beliefs about initiating and maintaining movement toward those goals (the agency component). In the context of the current theory, impediments to goal pursuits elicit negative emotions; conversely, successful goal pursuit, particularly in the face of impediments, elicits positive emotions (Snyder, 2005).

Within this framework, hope and agency are important aspects of adolescent well-being because it allows them to feel in control of their own lives and make decisions that are consistent with their values and goals (Hansen, & Jessop, 2017). This concept is linked to the capability to aspire developed by Caroline Hart (2012). Adolescents who feel a sense of agency are more likely to have higher levels of self-esteem and self-worth, as well as better mental health, according to researchers in various contexts (Jones et al., 2019; Rose et al., 2016; Ross et al., 2020; Viner et al., 2012). The relationship between agency and well-being is theoretically embedded within the evolutionary model of social change (Nolan & Lenski, 1999). An evolutionary model acknowledges that people adjust their maximization strategies in response to changing life needs and opportunities (Parsons, 1964). The following dynamics link the two constructs: (1) as life opportunities expand, people place a greater emphasis on emancipative values; (2) as an emphasis on emancipative values expands, feelings of agency gain greater weight in shaping people's life satisfaction; and (3) as agency feelings have a greater impact on life satisfaction, the level of well-being itself rises.

There are several ways that caregivers and educators can help adolescents develop agency. One way is to give them the freedom to make their own decisions and take on responsibilities, such as allowing them to choose their own extracurricular activities or how to spend their free time (Edmonds et al., 2021). Respecting their opinions and listening to their ideas is also important because it makes them feel heard and valued (Baum et al., 2023; Esteban et al., 2022); it protects them from abusive behaviors and by cultivating their critical thinking it empowers them as citizens (Biggeri & Arciprete, 2022; Biggeri et al., 2019). Overall, promoting adolescent agency is critical for their well-being and helps them develop into confident and capable adults and citizens (Hart, 2012; Hart et al., 2014; Bonvin & Galster, 2010).

Promoting agency in care leavers (or young people who have grown up in the care system) entails giving them the ability to make their own decisions, take control of their lives, and advocate for their own needs and desires (Cox et al., 2022; Simpson, & Murphy, 2022). This is an important aspect of care leaver support because it assists young people in developing the skills and confidence necessary to succeed in adulthood. Involving care leavers in decision-making about their care and support is one crucial way to promote agency in them (Økland, & Oterholm, 2022).

Choosing between alternatives is a common way to describe decision-making (O'Hare et al., 2016). However, as Halpern (2014) outlined decision-making models are more complex than that, and are generally thought to have a number of cognitive sub-tasks that require different types of critical thinking. Some of them includes: (1) determining when a decision must be made; (2) selecting and interpreting pertinent information; (3) generating alternative courses of action and predicting the consequences of each; (4) evaluating and weighing the consequences (pros and cons); and (5) identifying and carrying out the best course of action. This approach to decision-making suggested a highly 'rational' model, whereas decisions are often made in the absence of complete information, or alternatively in emotionally or stressful situations. In the case of care leavers or young people in the care system, this approach to decision-making is not always appropriate because adolescents do not always have the ability to choose their own paths of action. On the contrary, both agency and participation in decision

making are important for individuals to feel a sense of control and ownership over their lives which affect in turn the feeling to be in control. In order for individuals to effectively participate in decision making, it is important for them to have access to information and resources, as well as the opportunity to express their views and have those views taken into consideration. When individuals are able to participate in decision making, they are more likely to feel a sense of agency and ownership over the outcomes of those decisions. This can lead to increased satisfaction and a sense of empowerment.

### 3. The present study

Moving from the evolutionary model of social change (Nolan & Lenski, 1999), the current study aims to quantitatively investigate the relationship between agency and well-being in a group of care leavers while considering the role of decision making as a possible mediating variable. Indeed, the evolutionary model of social change suggests that as values of empowerment and control over one's life expand, so does life satisfaction and, as a result, individual well-being. While this is true for adolescents who are not in care systems, it is interesting to investigate how the two variables are related in a context in which adolescents, unlike their peers, see a contraction in their possibility of action. Indeed, being placed under the care system implies a reduction in the range of agentic possibilities and the ability to make independent decisions (Van Breda et al., 2020). To the best of our knowledge, limited researches have been conducted to date to attempt to understand the role of participation in decision-making processes in this specific group of boys and girls. In terms of practical implications, the current study's findings provide valuable information that can be used in the field (and within services) to improve the pathways that accompany care leavers as they transition to adulthood.

## 4. Method

### 4.1. Sample

Participants included 48 Italian care leavers who had been placed in foster care or residential care homes. The sample was not gender balanced, with 80 % males ( $n = 38$ ) and 19 % females; one participant did not specify gender. The ages of the participants ranged from 17 to 21 years ( $M = 18.04$ ,  $SD = 1.20$ ). The inclusion criteria were as follows: (1) being in the care system, (2) being between the ages of 17 and 21, and (3) agreeing to the terms of participation in the research. There were no exclusion criteria used. We gathered a convenience sample using a non-probability sampling technique in which participants are chosen from the general population solely because they agree to participate (Emerson, 2015). Despite this, the sample has a higher level of coverage of the population of boys and girls in the care system in the two cities participating in the project.

### 4.2. The project

CarInG (<https://www.caringproject.eu/>) is a research and action project co-funded by the Rights Equality Citizenship (REC) Programme of the European Union. It supports young people who have left the care system to pursue their own life goals. The project prioritizes care leavers, involving them in all stages and supporting them throughout the transition to independence. Simultaneously, it seeks to provide tailored training for social service professionals while also encouraging the community to engage in dialogue about the needs and aspirations of caregivers. For this reason, a research-based approach allows for the provision of recommendations on how to improve policies for care leavers by devoting special attention to the preparation and facilitation of children/youth during and after the adoption process. From a structural standpoint, the project employs an eco-systemic approach that brings together care leavers, social service professionals, and local

leaders to create an integrated local model based on the capability approach (Nussbaum, 2000). CarInG develops in three directions: 1) Involve care leavers in a participatory research process; 2) Involve social service professionals in a training program that allows them to assist care leavers in preparing for self-sufficiency; 3) Involve local organizations on the ground to create new opportunities for collaboration. In terms of the project's specific goals, the goal is to provide adequate support to care leavers so that they can realize their own life plans outside of the protection systems, in order to educate and sensitize all community members, and to ensure the collection of care leavers and their right to participate in the decision-making process. The project's final output is to develop an integrated model that can serve as a methodological and operational reference point at the local, national, and European levels.

### 4.3. Procedure

Data were collected anonymously, and all participants were briefed about the research aims and procedure. Participation in the study was on a voluntary basis, meaning that participants received no monetary or financial rewards. The study was approved by the Ethics Board at XXXXXX (prot. N. XXXXXX) and was conducted in keeping with the ethical principles laid down in the Declaration of Helsinki (World Medical Association, 2000) and the American Psychological Association code of conduct (Knapp et al., 2004). Informed consent was obtained from all participants.

### 4.4. Measures

*World Health Organization Well-being Scale (WHO-5; Topp et al., 2015)*: The WHO-5 is a quantitative self-report assessment about respondents' mood, vitality, and general life interests as perceived over the previous two weeks. The questionnaire comprised five positively worded items to be rated on a Likert scale ranging from 0 (at no time) to 5 (all the time). It is widely used in care settings as a reliable indicator of psychological functioning (Primack, 2003). The raw WHO-5 scores are computed by summing the scores for the individual items, yielding global scores ranging from 0 (no well-being) to 25 (maximal well-being) which are then conventionally converted to a scale of 0 to 100. A generally accepted threshold for poor well-being and the risk of developing depressive symptoms is less than 50 (Hoffman et al., 2015). Participants in this study completed the Italian version of the WHO-5. The unidimensional measure's Cronbach's alpha reliability coefficient (Cronbach, 1951) was .756, confidence interval of 95 % [0.624-0.838].

*Children's Hope scale (Snyder et al., 1997)*: The hope scale is a six items self-reported measure that is based on a definition of hope as a cognitive set that includes beliefs in one's ability to create workable routes to goals (the pathways component), as well as self-related beliefs about initiating and maintaining movement toward those goals (the agency component). According to the authors, both components must be evaluated concurrently in order to obtain an overall sense of the participants' hope as perceptions of control that shares similarities with perceived competence. Some examples of items included into the measure were "I can think of many ways to get the things in life that are most important to me"; "When I have a problem, I can come up with lots of ways to solve it" or "I am doing just as well as other youth my age". Participants rated item on a Likert-type response scale banding from 0 (none of the time) to 5 (all the time). The two dimensions reported good Cronbach's alpha reliability coefficient (Cronbach, 1951) for both agency ( $\alpha = 0.733$ , confidence interval 95 % [0.532-0.867]) and pathway ( $\alpha = 0.821$ , confidence interval 95 % [0.691-0.902]).

*Child and Adolescent Participation in Decision-Making Questionnaire (CAP-DMQ; O'Hare et al., 20216)*: CAP-DMQ was a self-report measure developed to evaluate child and adolescent participation in decision-making. A broad metric could be used to track children's participation and ensure that it does not conflict with the goals and objectives of

specific services. Furthermore, CAP-DMQ can be used in a context where research aimed at exploring the relationship between increased participation and other positive outcomes. The CAP-DMQ is composed of 10 items related to the possibility of being informed and making decision with a certain degree of freedom. Some examples of the items were “Information to make a decision is presented to me in a way I understand”, “Others ask my opinions when making decisions” and “When I make a decision this is followed through by action that I want”. Because the measurement had not yet been translated and validated in the Italian context, the items in the current study have been subjected to the traditional back translation process (Brislin, 1970) conducted by three different researchers. Furthermore, because the sample size did not allow for a validity evaluation of the original factor structure (via confirmatory factorial analysis), the measurement was used as a unidimensional score in the current study. The Cronbach’s alpha reliability coefficient (Cronbach, 1951) was 0.855, confidence interval 95 % [0.799-0.894].

4.5. Strategy of data modelling

Mediation is a key concept in many fields, including psychology, education, and medicine, to name a few. It is relevant when the goal is to understand how changes in a causal variable are transmitted through one or more intervening variables, or mediators, resulting in changes in an outcome (Little, 2013). We used structural equation modeling (SEM) to assess our conceptual mediation model of dispositional agency and decision-making participation as protective factors for care leavers’ well-being. SEM is a confirmatory (rather than exploratory) method for determining the degree of fit between an a priori conceptual model (and its network of relationships) and a set of empirical data (Cavalera et al., 2017; Cavioni et al., 2020; Conte et al., 2018). The model to be tested in the current study (Fig. 1) included agency, participation, and well-being as latent endogenous variables. As controlled variables, age and gender were included (see conceptual model in Fig. 1).

The estimated total effects were divided into direct and indirect effects during the analysis (Lange et al., 2012). Five indices of goodness of fit were calculated to estimate model fit. This included (a) the Root Mean Square Error of Approximation (RMSEA), (b) the Standardized Root Mean Square Residual (SRMR), (c) the Normed Fit Index (NFI), (d) the Tucker-Lewis Index (TLI, TLI > 0.95), and (e) the Comparative Fit Index (CFI). For the purposes of this study, the model was considered to fit the data if the RMSEA was less than .07 (Kenn et al., 2015), the SRMR was less than .05 (Ximénez et al., 2022), the NFI was greater than .95 (Shi, & Maydeu-Olivares, 2020), and the CFI was greater than .95 (Marsh et al., 2014). In accordance with current SEM practices (Thakkar, 2020),

we estimated confidence limits with a set of 500 random samples using both Monte Carlo simulation and bootstrapping methods. We computed the given indirect effects for each of the k samples, as well as the mean value for the chosen pool of samples. We also used Mahalanobis distance (p.001) to identify multivariate outliers and discovered that no cases needed to be removed from the dataset. Finally, we checked the data for normality score distribution. Because none of the score sets had kurtosis or skewness values that exceeded the recommended limits [-1, 1], the Maximum Likelihood method (Ripplinger, & Sullivan, 2008) was used to estimate the parameters for the SEM analysis. Amos 23.0 was the software used for all analyses (Arbuckle, 2014)

5. Results

5.1. Descriptive And Zero-Order Correlations

Table 1 summarizes the main descriptive statistics for care leavers’ demographic, agency, participation in decision making and well-being scores (e.g., mean values and standard deviations), as well as their zero-order correlations.

In terms of well-being levels, the participants showed general trends that are consistent with what has been found in other studies that use the same instrument in the same age range. Fig. 2 depicts the results of grouped points based on the guidelines recommended by the World Health Organization.

In general, the zero-order correlations revealed some statistically significant relationships between the variables under consideration. Medium sized, positive, and statistically significant correlation were

Table 1 Main statistical descriptive and zero-order correlations for well-being, participation and agency (N = 48).

	1	2	3	4	5	6
1. Age	-					
2. Gender	-0.055	-				
3. HS - Agency	0.211	0.121	-			
4. HS - Pathway	0.181	0.162	0.694**	-		
5. CAD-DM - Participation	0.309*	-0.106	0.539**	0.510**	-	
6. WHO5 - Wellbeing	0.038	0.076	0.399**	0.259†	0.383*	-
Mean	18.04	-	12.97	14.34	38.22	53.08
SD	1.20	-	3.49	3.65	9.60	21.44

Note. † p < .075, \*p < .05, \*\* p < .01; HS = Hope Scale, CAD-DM = Participation in decision making Scale, WHO5 = World Health Organization Well-being Scale

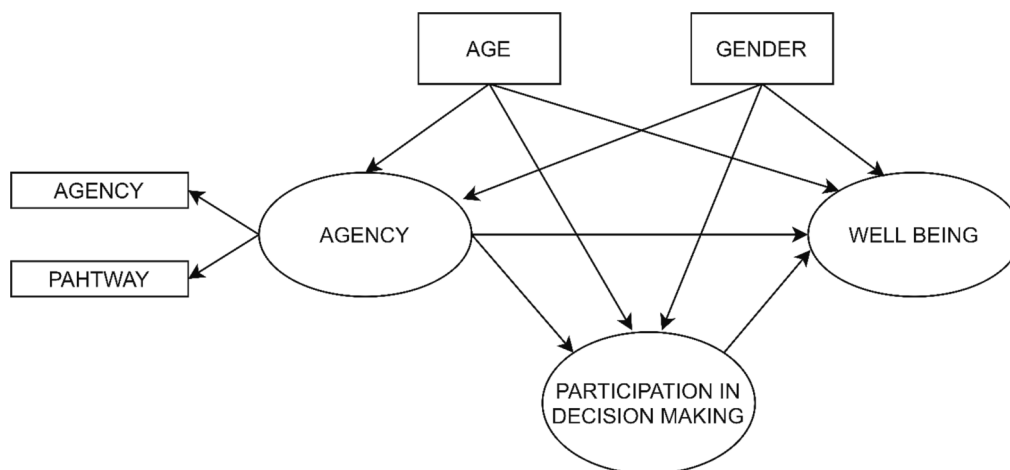


Fig. 1. Proposed conceptual mediation model. Agency was modelled as antecedent of wellbeing whereas participation in decision making was the mediator. The structural pathways of the model were controlled for age and gender of care leavers.



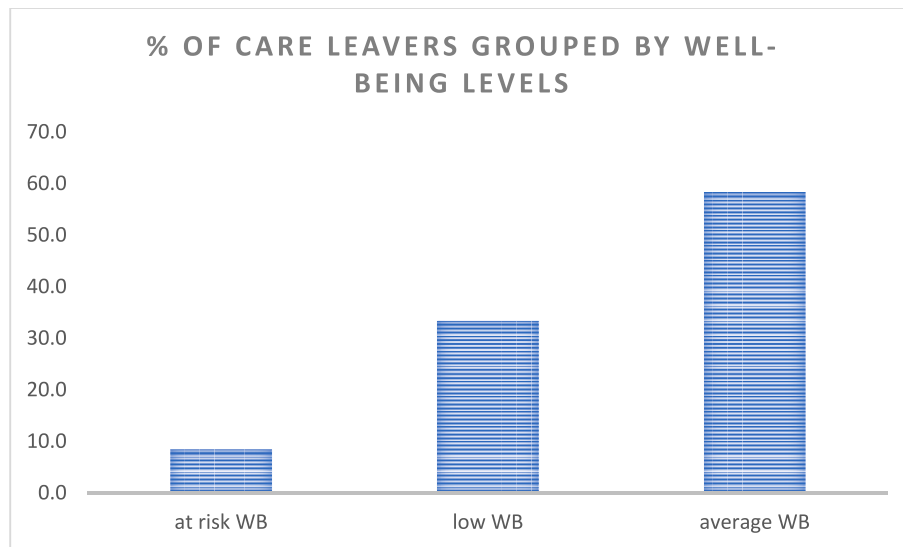


Fig. 2. Share of care leavers grouped by well-being levels. At risk group (n = 4) reported well-being scores below the cut-off point (<25).

found, in particular, between agency ( $r = 0.399$ ) and participation in decision making ( $r = .383$ ) measures with wellbeing indicators. In a similar fashion, well-being scores are also associated with pathway scores ( $r = 0.259$ ) even if the p value was a little beyond the statistical significance acceptance limit. When it comes to demographic variables, gender did not report statistically significant correlations, but there is a statistically significant correlation between the age of participants and participation in decision-making processes ( $r = 0.309$ ). Overall, the correlational analysis supported testing a structural equation model that included all of the study variables.

### 5.2. Structural equation model

The test of the conceptual model (see Fig. 3) suggested that the empirical data provided a good fit. All the fit indexes supported the full acceptance of the model: NFI = 0.973, NNFI = 0.989, CFI = 1.00, RMSEA = 0.001 [C.I. 90th = 0.152– 0.793] and SRMR = 0.023. Total, direct and indirect standardized effects are reported in Table 2. Indirect effects reflect the interaction among a set of three variables, while a direct effect represents the impact of a single determinant on a given target variable.

Moving left to right, the latent variable, agency, had statistically significant large total effects on both participation in decision-making ( $\beta = 0.625$ ) and well-being ( $\beta = 0.426$ ). Interestingly, the direct pathway between agency and well-being was non-significant ( $\beta = 0.268$ ), implying that participation in decision making mediated the relationship between these two variables (the magnitude of the indirect effect was 0.158). In this regard, the direct effect of participation on well-being

was medium-small in terms of magnitude but not statistically significant. In terms of the relationships between age and gender and other variables, older care leavers reported more agency ( $\beta = 0.246$ ) and more participation in decision making ( $\beta = 0.345$ ). In contrast, no statistically significant relationships between gender and other variables were found.

### 6. Discussion and conclusions

The current exploratory study investigated the role of participation in decision-making processes in a group of care leavers within a care system using a conceptualized mediation model with agency as the dispositional variable, well-being as the outcome variable, and decision-making as the mediator. The findings indicate that involvement in decision-making processes completely mediates the relationship between agency and well-being. This implies that, in a context such as the care system, where adolescents' agentic possibilities are limited, the role of participation in decision-making becomes critical and should thus be given special attention by professionals.

From a theoretical point of view and taking the evolutionary model of social change as a framework, the results of the present study emphasize that in a context such as protective services, the direct relationship between agency and well-being should be reconsidered in light of the difficulty of care leavers to make decisions in total autonomy. Agency is an evolutionary-shaped trait in the human motivational system, with greater feelings of agency yielding higher life satisfaction (Maryanski, & Turner, 1992). In fact, the context in which the current study was conducted is characterized by a condition in which adolescents have levels of dispositional agency, both in terms of agency and pathways, but their ability to exercise is limited by the structural features of their condition. According to the evolutionary model of social change, there is thus a lack of the third step emphasized by Welzel and Inglehart (2010), namely the ability to control one's pathways of action. Participation in decision-making processes is perfectly suited to this dynamic. Having the opportunity to be involved in decision making, to be informed about the various elements that characterize one's condition, and to discuss in agreement with service professionals one's future possibilities represents the central element that once again allows agency and well-being to be in a positive and statistically significant relationship again.

Consequently, the right to participate in the decisions made about them is not only one of the basic requirements of the United Nations Convention on the Rights of the Child (1989), but it becomes a central

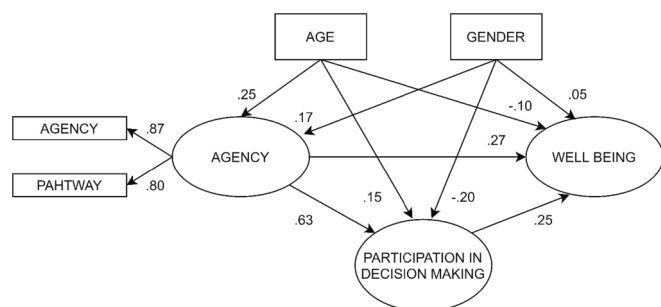


Fig. 3. Results of the structural equation model. Standardized direct effects were reported.

**Table 2**  
Results of structural equation modelling: standardized total, direct and indirect effects.

From	To	Total Effect			Total Direct			Total Indirect		
		$\beta$	p	95 % CI [LB-UB]	$\beta$	p	95 % CI [LB-UB]	$\beta$	p	95 % CI [LB-UB]
Age	Agency	0.246	0.088	[0.018 - 0.486]	0.246	0.088	[0.018 - 0.486]	–	–	–
Age	Participation	0.305	0.010	[0.076 - 0.510]	0.151	0.253	[-0.060 - 0.360]	0.154	0.088	[0.011 - 0.371]
Age	Well-being	0.042	0.865	[-0.212 - 0.265]	-0.101	0.554	[-0.357 - 0.137]	0.143	0.043	[0.024 - 0.284]
Gender	Agency	0.175	0.278	[-0.098 - 0.416]	0.175	0.278	[-0.098 - 0.416]	–	–	–
Gender	Participation	-0.089	0.541	[-0.324 - 0.102]	-0.198	0.148	[-0.406 - 0.013]	0.109	0.278	[-0.063 - 0.309]
Gender	Well-being	0.078	0.624	[-0.177 - 0.305]	0.054	0.655	[-0.202 - 0.283]	0.024	0.834	[-0.139 - 0.183]
Agency	Participation	0.625	0.010	[0.389 - 0.854]	0.625	0.010	[0.389 - 0.854]	–	–	–
Agency	Well-being	0.426	0.045	[0.124 - 0.663]	0.268	0.263	[-0.184 - 0.668]	0.158	0.233	[-0.055 - 0.382]
Participation	Well-being	0.252	0.231	[-0.080 - 0.604]	0.252	0.231	[-0.080 - 0.604]	–	–	–

Note. 95 % CI = Confidence intervals, LB = Lower Bound, UB = Upper Bound

component in the exercise of a type of agency that must necessarily pass through the intermediation of the 'ecosystem of adults' that revolves around an adolescent placed in a protective service. Thus, it is not only an ethical and political principle to involve people in their own life course, but participation in decision-making becomes the element that allows agencies to return to their function of promoting well-being within a context in which freedom of action is (by definition) constrained. These considerations lead to the practical implications of the current work's results.

As suggested by [Harder and colleagues \(2020\)](#) practitioners and professionals working in the care system should follow robust theoretical models in planning and developing their interventions. The "Ladder of Participation" (Hart, 1992) is a well-known one that refers to participation in the public context, but some of the degrees of participation are relevant to care leavers. Lower levels of the ladder, which cannot be referred to as participation, refer to situations in which care leavers attend relevant meetings but are not provided with adequate information or an opportunity to speak. While the highest and most desirable levels are those in which care leavers are informed about relevant discussions on their issues, encouraged to express their opinions, and can even participate in decision-making processes. [Shier \(2001\)](#) presents a more complex model that includes questions for practitioners to use in assessing their current position in terms of participation. These questions prompt practitioners to investigate their willingness to share power with care leavers, the opportunities for sharing power and responsibilities with children, and the existence of obligations (such as policies) that require shared power between adults and youth in care in decision making. Finally, the Lundy Model (Lundy, 2007) supports practitioners in ensuring that they uphold their obligations under Article 12 of the United Nations Convention on the Rights of the Child. According to the model, when working with children and young people, practitioners should make sure to do four things. First, children and young people must be supported to make their voices heard and express their views in a manner they deem appropriate. Second, the most appropriate audience should pay attention to the voices of children and young people. Third, practitioners should demonstrate how those decisions concerning the lives of children and young people were informed by those children and young people. When decisions are made regarding them that differ from what they expressed they wanted, it is crucial that practitioners communicate this in a clear and concise manner. The three models emphasize the need for an ongoing dialogue between adults and adolescents, especially in protective services, so that both parties look not only at the other with awareness but also look within themselves in search of the best way to build a relationship that goes in the direction of promoting well-being, autonomy, and can accompany care leavers in their transition to adulthood ([Cavioni et al., 2021](#); [Pepe et al., 2021](#); [Pepe & Farina, 2023](#); [Veronese](#)).

## 7. Limitations

The current study, like other studies, has limitations. The first is about the research design, which is cross-sectional in nature; the associations found in the analysis are thus "probabilistically causal" rather than "deterministically causal" ([Pearl, 2009](#)). To compensate for this limitation, we chose an analysis methodology (SEM) that allows us to estimate both direct and indirect effects at the same time in the mediation model. Similarly, a measure of agency defined dispositional was related to a state variable (e.g. well-being) as a research design variable, whereas a cognitive perception of one's levels of participation in decision making was used as a mediator. However, future studies should use a longitudinal research design to better identify the stability of the associations over time. A second limitation is the sample size, which can be considered rather small. Also, during the analysis stages, a bootstrap approach with Monte Carlo simulation was chosen to reduce possible statistical bias due to the model's degrees of freedom. In terms of the generalizability of emerging evidence, the findings should be used with caution and read more in terms of transferability to similar contexts. It should also be remembered that the overall population of care leavers in Italy is not particularly large (about 3,000 each year), consequently it was also difficult to gather a "large" sample. The third limitation of the current study is the sample composition. In fact, it does not appear to be balanced between males and females, so more research is needed to confirm the model's gender invariance. A fourth limitation that arose in the present study pertained to the mediation model under examination. It is worth noting that the relationship between the mediator (i.e., participation in decision-making) and the target variable (i.e., care leaver well-being) did not demonstrate statistical significance, indicating that only partial mediation can be supported. Nonetheless, recent advancements in mediation process testing ([Hayes, 2017](#)) have proposed that the concepts of complete and partial mediation are contingent upon sample size, rendering their distinction devoid of substantive or theoretical significance (p. 121). Mediation models encompass more than asserting that X influences M and Y. For instance, M might be associated with a variable other than the one X is actually affecting, or both M and Y could be linked to another variable, denoted as C. In such cases, the mechanism referred to as *epiphenomenal association* ([Hayes, 2017](#)) posits that the association between Y and M might be an epiphenomenon resulting from the influence of X on a different variable not included in the model, which subsequently affects both Y and M. Consequently, further research is necessary to deepen our understanding of the mechanisms that connect agency, decision-making processes, and the well-being of adolescents.

## CRedit authorship contribution statement

**Alessandro Pepe:** Conceptualization, Data curation, Writing – original draft, Writing – review & editing, Investigation, Formal analysis, Methodology. **Elisabetta Biffi:** Conceptualization, Data curation,

Writing – original draft, Writing – review & editing, Investigation, Methodology, Supervision. **Chiara Carla Montà:** Conceptualization, Data curation, Writing – original draft, Writing – review & editing, Investigation, Formal analysis, Methodology. **Caterina Arciprete:** Conceptualization, Funding acquisition, Data curation, Writing – original draft, Writing – review & editing, Investigation, Methodology, Supervision, Resources, Project administration. **Mario Biggeri:** Conceptualization, Funding acquisition, Data curation, Writing – original draft, Writing – review & editing, Investigation, Methodology, Resources.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Data availability

Data will be made available on request.

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The study was approved by the Ethics Board at Milano-Bicocca University (prot. N. 0010874/22) and was conducted in keeping with the ethical principles laid down in the Declaration of Helsinki (World Medical Association, 2000) and the American Psychological Association code of conduct (Knapp et al., 2004). Informed consent was obtained from all participants. The project EMPOWERING CHILD CARE SYSTEMS AND SUPPORTING LEAVING CARE FROM INSIDE (CarING) is co-funded by the Rights, Equality and Citizenship (REC) Programme of the European Union.

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