Contextualizing resilience in young people: The use of Child and Youth Resilience Measure Revised and interviews in a mixed method approach

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Purpose

This paper seeks to understand the role of an innovative Employability Programme on developing the resilience of young people Not in Education Training or Employment (NEET).

Method

Through a mixed-method approach, this paper explores the individual, contextual, and social aspects that impact on individual resilience. Combining the Child and Youth Resilience Measure-Revised (CYRM-R) with qualitative interviews allows for the investigation of how context, relationships, and support shape young people's resilience offering a holistic approach.

Results

The quantitative results reveal a significant association between higher levels of resilience and factors such as school attendance and living in areas with lower crime rates. Lower resilience is observed among individuals experiencing higher levels of deprivation. Qualitative findings shed light on the multifaceted nature of resilience, highlighting its connection to community and society (sub-themes: education and employment, external pressure, support and access to services) as well as individual and psychological aspects (sub-themes: managing stressful situations and bouncing back).

Discussion

These findings emphasize that resilience is not a static or one-dimensional

process dependent on a single factor, it is a dynamic and ongoing process

influenced by multiple factors. The interactions between young people and

families, friends, education providers, and other service providers play a crucial

role in promoting resilience.

Conclusion

Overall, this research aids our understanding of how connections between all

these levels can boost or limit individual resilience. It can help practitioners and

policymakers understand how tailored activities, accounting for multiple aspects,

are able to improve individual resilience.

Keywords: Resilience, mixed methods, Child and Youth Resilience Measure

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Resilience has received considerable attention in the fields of psychology and education with governments (Department of Education, 2016), academics and professional organizations outlining the importance of resilience in developing positive outcomes for young people (The American Psychology Association, 2019). It is a dynamic concept with individuals and networks playing a fundamental role in helping individuals to develop resilience (McAllister & McKinnon, 2009; Southwick et al., 2014). Resilience plays a central role in protecting individuals from experiencing significant adversity from long-term unemployment (Moorhouse and Caltabiano, 2007). Young people who experience challenges in accessing employment are at risk of experiencing depression, anxiety and struggles with wellbeing (McKee-Ryan, Son, Wanberg, and Kinicki, 2005). This paper seeks to understand the role of an innovative Employability Programme, delivered by a not-for-profit organizations in the United Kingdom, on developing the resilience of young people who are NEET. It considers the individual, contextual, and cultural aspects that limit and/or boost individual resilience in young people are identified through semi-structured interviews and the novel Child and Youth Resilience Measure Revised (CYRM-R) scale. On the one hand, the CYRM-R investigates Overall Resilience, Caregiver Resilience (relationships with primary caregivers), and Personal Resilience (the associations with interpersonal and intrapersonal resilience) (Jefferies et al., 2019). On the other, semi-structured interviews with young people and practitioners provide context into the relationships and support that shape young people's resilience. Moreover, it explores statistical associations between demographic characteristics and the Index of Multiple Deprivation (IMD) with resilience. Following a social-ecological approach (Ungar et al., 2013), this paper contributes to research on resilience in young people, emphasizing the interaction among individual characteristics and family and societal factors. It aids our understanding of how the connections between individual characteristics and the environment can boost, or indeed limit, resilience in young people.

Resilience and Unemployment

The categorization of young people as NEET emerged from political and administrative expediency to capture a diverse group of young people who have varied and complex support

needs (Yates and Payne, 2006; Maguire and Rennison, 2005; Goldman-Mellor et al., 2016; Manhica et al., 2022; and Ralston et al., 2021). In the United Kingdom, the number of young people (16-24 years-old) categorized as NEET was 10.6% equivalent to 704,000 young people, up 0.2% on the previous quarter (ONS, November 2022). For young people aged 18-24 year old, unemployment was at a record low of 234,000 individuals whilst the number of young people categorized as economically inactive has risen (ONS, November 2022). Research has shown that NEET young people experience challenges in developing resilience (and confidence) (Moorhouse and Caltabiano, 2007), which can be a predictor of long-term unemployment (Locke, Durham and Kluger, 1998). Resilience plays a central role in protecting individuals from experiencing significant adversity from long-term unemployment (Moorhouse and Caltabiano, 2007). Research has emphasized the role of resilience in helping young people resist adversity and cope with uncertainty, however, research on the role of resilience, within Employability Programs, in helping NEET young people is sparse. This paper seeks to full this gap by examining the role of an innovative Employability Programme on developing the resilience of NEET young people who have experienced adversity.

Resilience is generally understood as "a trait, a process, an outcome or pattern of the life course, or a broad conceptual domain that encompasses all these ideas" (Masten, 2018 p.14). It is a dynamic concept whereby an individual, family or community overcome and navigate stressors to return to normative functioning (McAllister & McKinnon, 2009; Southwick et al., 2014). As resilience can mean different things to different people, establishing a catch-all definition is difficult. This research adopts a definition that encompasses different systems:

first, the capacity of individuals to navigate to resources that sustain well-being; second, the capacity of individuals' physical and social ecologies to provide these resources; and third, the capacity of individuals, their families, and communities to negotiate culturally meaningful ways for resources to be shared (Ungar et al., 2008a, p.64).

Interpreting and/or measuring resilience is a complex process involving "multiple systems at multiple levels" (Ungar et al., 2013, p.354): the micro-system, meso-system, exo-system, and macro-system. This ecological (Masten, 2014) view of resilience acknowledges that resilience is more than a mere one-time process that depends on a single factor; rather it is a dynamic and ongoing process that depends on multiple factors (Masten & Narayan, 2012; McAllister & McKinnon, 2009; Olsson et al., 2003; Rutter, 2012; Luthar & Cicchetti, 2000). Microsystems are associated with the interactions that young people have with family, school

and community, with researchers (Lee, 2006; Lerner, Dowling, & Anderson, 2003) arguing that successful and positive microsystem interactions support positive outcomes for young people. The meso-system factors associated with resilience are related to microsystems interactions, such as interactions with families, school and communities (Lee, 2006; Lerner, Dowling, & Anderson, 2003). Exo-systems influence and shape the micro- and meso-system interactions, through the creation of social networks and opportunities (Cowan, Cohen., Cowan., & Pearson, 1996). Combined, these factors and interactions contribute to an individual's ability to successfully navigate the world. More specifically, young people's interactions with family, friends, education providers and other service providers have an integral role in promoting resilience (Panter-Brick and Eggerman, 2012). Interactions that help young people navigate the world can be divided into seven broad categories (Ungar et al., 2007) including material resources, relationships, strong personal identity, agency, cultural traditions, social justice, and community or social cohesion. From this perspective, facilitative environments such as education, health care and youth provisions can promote these seven categories by helping young people to develop personal talents and motivations (Panter-Brick and Eggerman, 2012). In addition, Masten (2001) outlined the role of the environment in fostering or hindering individuals' ability to thrive. The literature argues that strong relationships with and among family, peers, and the community are key elements in ensuring that young people are supported in developing resilience (Fuller et al., 1998; McAllister & McKinnon, 2009; Masten, 2018).

Resilience, from this perspective, relies on protective factors (for example, resources, competencies, talents, and skills) at the individual-, family-, peer- and societal levels (Olsson et al., 2003), and on the capacity of the individuals to collectively navigate resources and protective factors (Ungar et al., 2008a). Support from individuals, family, and community plays a vital role in helping young people develop and maintain resilience (Garmezy et al., 1984; Masten, 2018). Research on resilience (Masten et al., 1990; Masten, 2001) shows that young people who experience chronic adversity recover more successfully when factors like a healthy relationship with a capable adult, adequate education, employment, good problem-solving skills, or positive engagement with others are present. For example, McAllister & McKinnon (2009) found that resilient individuals can adapt under difficult circumstances and establish positive relationships within society. Resilience is not exclusively linked to a single factor or variable, and individual reactions to stressors vary during their lives (Rutter, 2006). It is important to acknowledge that an individual can demonstrate more resilience in some areas

than others and that as the context changes, support should change with it (McAllister & McKinnon, 2009; Southwick et al., 2014). Research suggests that resilient young people are those who resist adversity, cope with uncertainty, and recover successfully from trauma (Masten & Narayan, 2012; McAllister & McKinnon, 2009; Olsson et al., 2003; Rutter, 2012). This paper seeks to full this gap by examining the role of an innovative Employability Programme on developing the resilience of NEET young people who have experienced adversity.

Materials and Method

The authors implemented a mixed-method approach with a convergent design (Creswell, 2014), combining the insights from questionnaires and semi-structured interviews to investigate resilience from multiple perspectives (Creswell, 2014). The utilization of mixed methods enables a more comprehensive and profound comprehension of the subject being analyzed, as highlighted by Bryman (2006). Given that resilience is a dynamic and ongoing process that depends on multiple factors, the authors made a deliberate choice to employ both quantitative and qualitative data collection methods in order to facilitate a more comprehensive investigation. Leveraging their expertise in program evaluation and research, which encompasses qualitative, quantitative, and mixed methods approaches, the authors were able to select an appropriate methodology that incorporated academically validated scales and customized interviews. This approach facilitated meaningful engagement with the young individuals being interviewed, ultimately resulting in a rich and extensive data collection process. The authors assigned equal weighting to the quantitative and qualitative phases of research, with data collected and analyzed at the same time (Creswell & Plano Clark, 2018). This enabled the authors to determine if the findings were convergent or divergent prior to reporting the results (Creswell & Plano Clark, 2018). Results from the convergent design are reported separately and combined in the discussion through the use of Table 6, which presents the convergence of the quantitative and qualitative results. To investigate the trends and relationships in Overall Resilience, Personal Resilience, and Caregiver Resilience, the CYRM-R scale was used. This information is contextualized by in-depth analysis from semi-structured interviews with young people. By implementing both quantitative and qualitative data collection, this paper investigates resilience by exploring the multiple systems (Ungar et al., 2013) that shape it. Moreover, the semi-structured interviews provide context for the findings, verifying the results through triangulation (McLeod, 1994).

Measuring Resilience

Following the complexity that shapes individual resilience, there are several approaches to measuring and/or evaluating resilience. Windle et al. (2011) and Pangallo et al. (2015) among others, conducted a methodological review of resilience measurement scales and identified multiple core measures. The Child and Youth Resilience Measure Revised (CYRM-R) scale, builds on the Child and Youth Resilience Measure (CRYM – 28-item scale), offering a robust measure with improved psychometric properties (Jefferies et al., 2019). The CYRM-R, developed in accordance with the International Resilience Project at the Resilience Research Center, is a self-reported measure of resilience that accounts for socio-ecological factors. The scale, with 17-items on a five-point Likert scale, is suitable for children and young people aged 5 to 23 years old (Resilience Research Center, 2018) and can be divided into two subscales: Personal Resilience, and Caregiver Resilience (Jefferies et al., 2019). Caregiver Resilience highlights the level of the relationship with a primary caregiver, while Personal Resilience highlights the associations with interpersonal and intrapersonal resilience (Jefferies et al., 2019). The CYRM-R scale demonstrates a strong internal reliability, with a Cronbach's alpha of 0.87 for Overall Resilience, 0.82 for the Personal Resilience subscale, and 0.82 for the caregiver/relational resilience subscale (Jefferies et al., 2019). A minimum value of 0.70 of Cronbach's is required in demonstrating internal reliability (Jefferies et al., 2019). The CYRM-R score was 0.87 for the Overall Resilience.

Data collection

The authors implemented the CYRM-R scale to investigate the trends and relationships for Overall Resilience, Personal Resilience, and Caregiver Resilience. The quantitative data collection was carried out between June 2019 and September 2019 using an online questionnaire, from which a total of 98 individual responses were collected. Everyone in the program was invited, including 684 program participants (Table 1). Among these, 170 specified their individual circumstances and 31.8% were looked after or in care, 17.1% on alternative provision, 17.1% supervised by YOT, 14.1% teenage parents, 5.9% pregnant, 1.2% disclosed substance misuse, and 0.6% were refugees or asylum seekers. The majority of the 684 participants were between 17 and 18 years old (50.6%), followed by those above 18 years old (32.6%), and those between 16 and 17 years old (16.8%). Most were males (51.8%), then females (42.7%), whilst a minority did not disclose gender (5.6%). The questionnaire's questions included respondents' demographic information such as age, gender, ethnicity,

special education needs, and school attendance (Table 2), and the CYRM-R. The CYRM-R scale was identified using the "Appendix A – Decision aid for measure selection" in the CYRM and ARM user manual (Resilience Research Centre, 2018, p.22). Most of the young people participating in the questionnaire were aged 15 and 20 years-old and were from Yorkshire and the Humber (51.0%) or London (23.5%). The gender distribution for young people was slightly skewed towards males (57.1%) over females (42.9%). With respect to ethnicity, 42.2% of the young people were White and 57.8% of young people were from Black Asian and Minority Ethnic Communities. School attendance was another area explored, with the majority not attending school (70.3%). Qualitative research was conducted through face-to-face semi-structured interviews, with mentors (N = 4), and young people (N = 11).

The authors conducted semi-structured interviews between September and October 2019 with a random sample of young people and mentors, recruited through email invitations to mentors and young people involved in the Employability Programme in order to contextualize findings from the questionnaire. This sampling method was used to ensure data saturation (Onwuegbuzie & Collins, 2007), with 10 - 20 participants. The young people's interviews comprised questions adapted from those suggested by the CYRM-R's authors in order to investigate resilience in the local context (Resilience Research Center, 2018), allowing to implement validated and aligned quantitative and qualitative data instruments. This includes questions on: 'What are the challenges you face living in that area?'; 'Have you encountered any difficulties in your life? If so, what has been the most challenging?' and 'How do people living here overcome the problems/difficulties they face?' The mentors' interviews focused on the challenges faced by young people in the local area, with questions on 'What are the needs of the young people you support?', 'What kinds of things are most challenging for the young people growing up here?', 'How do you support young people?' and 'What do you think makes the most difference to your young people? In what way?'. Furthermore, the authors created a codebook to effectively manage the analysis process and ensure consistent monitoring of both the quantitative and qualitative results. This codebook played a crucial role in overseeing the convergence of the data collection instruments. By employing this systematic approach, the authors were able to maintain accuracy and reliability throughout the analysis phase.

Data analysis

The paper authors collected and analyzed the research data. The authors analyzed quantitative data by disaggregating the three types of resilience (Overall, Caregiver, and

Personal) into four categories: Low Resilience, Moderate Resilience, High Resilience, and Exceptional Resilience. Since these represent four distinct categories, the data was analyzed using multinomial logistic regressions in Stata (StataCorp, 2017). In this type of regression, one of the categories of the dependent variable (Low Resilience) is selected as baseline and the Relative Risk Ratio was calculated by exponentiating the multinomial logit estimated coefficients and standard errors. The coefficients are then estimated in comparison to this baseline (i.e., Moderate Resilience compared to Low Resilience); this is the reason why Low Resilience does not present results. The Relative Risk Ratio (RRR) allows for a comparison between the comparison category (for example, male) and the reference category, whose coefficient presents a value of 1.00 in the results (for example, female). An RRR above 1 means that the risk of the outcome falling in the comparison category is more likely relative to the risk of falling into the reference category. The independent variables include demographic characteristics such as age, gender, ethnicity, Special Education Needs or disability, and school attendance (Table 2). Respondents' postcodes were linked to the Index of Multiple Deprivation (IMD) and its seven domains of deprivation, and to the Income Deprivation Affecting Children Index (IDACI, 2019) to establish and explore links between deprivation and resilience. The IMD, and its component, as well as the IDACI, have been divided into quartiles. All this information was included in three blocks of multinomial logistic regressions.

The authors organized qualitative data in NVivo 11.4.0 and analyzed using a six-phase Thematic Analysis process (Braun & Clarke, 2006) – 'data familiarization'; 'data coding'; 'theme development'; 'theme review and development'; 'theme refinement and naming'; and 'reporting' (Braun & Clarke, 2006; Clarke and Braun, 2017). This process enabled the thorough review of interview transcripts ('data familiarization) and coding of transcripts ('data coding'), with a codebook which allowed the authors to manage the analysis process, enabling discussion and reflection before the identification of patterns/themes ('theme development'). Refining and developing the themes allowed for identification of two themes: community and society (including sub-themes: education and employment, external pressure, support and access to services), and individual and psychological (including sub-themes: managing stressful situations, bouncing back). Reliability and rigor in the data collection and analysis stage was managed by acknowledging each researcher's positionality (critical realism) and arranging regular reflective sessions (Roberts, Dowell and Nie, 2019). Reflective sessions enabled the authors to discuss the interviews and codebook and, although no disparities in coding or interpretation occurred, the authors engaged in this reflective process in producing

this article.

Ethical Considerations

Ethical considerations on confidentiality and anonymity, voluntary informed consent from children and guardians, data protection and storage, and safeguarding were central to the research. Interviews are reported anonymously, with numerical codes assigned to participants. The ethics for this research were reviewed by the Universities Research Ethics Committee (REC ISII 03-01-19). Safeguarding participants was central to the research, with advanced safeguarding training and an updated Disclosure and Barring Service (DBS) obtained.

Results

The findings are arranged in two sections, with the first section presenting the quantitative findings from the multinomial logistic regression and the second presenting the qualitative findings through thematic analysis.

The resilience scales (quantitative findings)

Analysis shows that gender is an important factor in resilience in young people, with male participants having a lower probability than female participants (RRR=0.145) of experiencing high levels of Overall Resilience than Low Resilience (Table 3, High resilience - Model 2). Similarly, the Personal Resilience (Table 4, Exceptional Resilience – Baseline) and the Caregiver Resilience (Table 5, Exceptional Resilience – Baseline and Model 7) models show that the probability of experiencing Exceptional Resilience than Low Resilience is lower for male participants than female (respectively, RRR=0.168 and RRR=0.196). The response categories in the sample, such as male and female, are not perfectly balanced. The number of observations in the sample is sufficiently large, and the RRR (Relative Risk Ratios) are not close to 1.00, which suggests that the results are reliable. A factor that seems to be positively associated with higher resilience is ethnicity. In the Overall and Caregiver Resilience models (Table 3, Baseline; and Table 5, Baseline - Model 7), the relative probability of having Moderate Resilience (with respect to Low Resilience) is higher for BAME young people than for White young people (respectively, RRR=9.918 and RRR=12.943). Moreover, in the Personal Resilience model, the relative probability of experiencing Moderate (Table 4 -

Baseline) and High (Table 4, Baseline - Model 3) resilience (with respect to Low Resilience) is higher for BAME young people than for White young people (respectively, RRR=6.312 and RRR=17.565). However, this is not true if we look at the relative probability of having Exceptional Personal Resilience with respect to Low Resilience, which is lower for BAME young people than White young people (RRR=0.039).

The authors identified another relationship between resilience and the access of services and commuting, measured through the 'Barriers to Housing and Services Domain'. This IMD component "measures the physical and financial accessibility of housing and local services" (Ministry of Housing, Communities and Local Government, 2019, p.1). Indeed, the Overall Resilience, and in particular Model 2, show that the relative probability of experiencing High Resilience with respect to Low Resilience is lower for those belonging to the second and fourth quartile with respect to the first, but especially for those living in the second quartile of 'Barriers to Housing and Services Domain' (respectively, RRR=0.026 and RRR=0.093). Our regressions show interesting results with respect to the relationship between the levels of education and resilience. For all models, the relative probability of experiencing high resilience is higher for those attending school than those not in education, training, or employment. For example, in Overall Resilience (Table 3, Exceptional Resilience – Baseline), the relative probability of having Exceptional Resilience with respect to Low Resilience for those attending school is nearly twenty times higher than the corresponding relative probability for those not attending (RRR=19.694). The quantitative analysis shows relationships between Caregiver Resilience and crime levels. The results associated with the Caregiver scale (Table 5, High Resilience - Model 7) show that the relative probability of experiencing High Resilience with respect to Low Resilience is higher (RRR=19.006) for those in lower crime areas (identified here by the IMD Crime Domain that measures the personal and material risk). The findings suggest that living in communities with higher levels of crime impacts the quality of relationships between caregivers and young people.

Young People's Voices (Qualitative findings)

The patterns emerging from the interviews were divided into two themes: community and society (including sub-themes: education and employment, external pressure, support and access to services), and individual and psychological (including sub-themes: managing stressful situations, bouncing back).

Community and Society theme

Education and Employment. Young people's experiences with education were affected by several aspects of their life and background (for example, self-confidence, immigration background, and special education needs). The challenges experienced by young people were discussed by mentors supporting young people.

They've maybe been in the country for less than three years and, for example, sometimes they want to do an apprenticeship but due to the funding requirements of certain apprenticeship providers - you have to be in the UK/EU for at least three years [...] I think some of the special educational needs children funding has been cut and there's limited number of places, limited number of opportunities available to them. So if they are out of mainstream education it's like, what alternatives do they have? So there's limited choice, and if there is choice available they will have to travel further and further afield to get there.... (M1)

Young people experiencing special education needs and/or immigration reflected on the challenges experienced in school which impacts on confidence.

Most of the times I just didn't really 'get' it. That was about it, to actually understand it, that was about it. But apart from that I didn't mind school; it's just that I didn't really understand it. (YP4)

Like I said, when I was looking for my job, when I was looking for going to University I went into [service] and they helped me out with my CV, my Personal Statement, things like that. And I just go there for advice sometimes, someone to talk to. I had a tough time in education, at school, I didn't really feel I was good enough to go to University because I wasn't one of the smart ones (YP10)

As highlighted in the literature, young people's experiences with education have an impact on resilience (Masten et al., 1990; Masten, 2001). Therefore, access to education can help the young people positively adapt and build stable futures.

And just finding alternatives to them - because a lot of them are unable to go into mainstream colleges for various different reasons so it's just helping them or researching and then passing on the information as to what else is available. (M3)

School life as well, it's quite difficult because in the area around us there aren't many good schools, so education was quite hard. My hopes - hopefully when I finish University - I'm doing optometry at the moment. Just finish that and hopefully find a good job in optometry. Then settle down with a family, hopefully. (YP10)

The problems young people experience with education and employment may illustrate wider problems in the community, with one young person (living in a high crime area) discussing the impact of crime on employment and education.

Unemployment is actually bigger around here already; it just becomes more difficult if you are into drugs. You get into bad things like crime and when you ruin your education it just gets even harder (YP10)

External pressure. External pressure from friends and family impact on young people's experiences with resilience, with the environment playing a role limiting it. Young people discuss the challenges associated with peer pressure, relationships and resources in the local community.

...when your mates, they, let's say, try to intimidate you with new clothing, new shoes. Or even phones. And they make fun of you and then you have to try to conform - or you just bounce off, like, 'I don't care about your opinion', yes. So, it's that. (YP3)

Peer pressure, it can drive you to do silly things, like getting into drugs, and then that will affect you not only in your present life but in the future. You end up ruining your education. (YP10)

Interactions with family and friends help young people navigate the world, with relationships, social cohesion and strong identity three of the categories that are integral to promoting resilience (Ungar et al., 2007; Panter-Brick and Eggerman, 2012). Pressures on young people are often described associated with negative outcomes, with one young person describing negative behaviors from others in their area:

No, we've got facilities in terms of doctors and dentists and all of that. In terms of schools, obviously the kids that go there, they're not exactly on their best behavior so they are not really known for the best things. (YP9)

One young person described the challenges they have experienced living with their father, following the death of their mother:

I would say the most challenging would be living with my father, I guess. I lost my mum seven, eight years ago, so I've been living with him for three years, roughly. And so, it's like we are polar opposites. There used to be conflict, a lot of conflict, and he would take it all out on me. So, I would say that is the most difficulty, yes. (YP9)

The experiences of conflict within the family home create challenges for young people, impacting on the development of relationships and resilience.

Support and access to services. Young people's ability to respond to adverse experience are influenced by support from family (Twum-Antwi et al., 2020) and other services. One young person described the importance of good relationships with family and friends:

Well, if something happens and I'm worried about something, I've got a good relationship with my mum so I talk to my mum... My friends did comfort me, but my mum and my family are good support like that. But other people I think if they don't have that it would be harder for them so maybe offering more support and stuff like that. (YP9)

This was reiterated by another young person who was discussing support from family and friends and other services in the area:

I've got a stable background and people to talk to. And even if I didn't' have my family and some of my friends to talk to, I could go to [SERVICE]...for support. It's called [SERVICE] and it's just a place where young people can go to, to talk to people, seek advice. It's not for education or for jobs. (YP10)

Support is essential in developing resilience; however, mentors discussed challenges in terms of accessing support:

I think a lot of the younger ones - one of the main issues for the area that I cover is it's quite a rural area and I'm surprised at how many - well basically the lack of transport available, public transport, and also the amount of parents that don't drive, low income families that can't actually afford to put petrol in their cars or any luxury really, obviously including getting their children to and from activities. So that is one of the main things... Certain circumstances or barriers you just can't get around. (M3)

This impacts on one's ability to develop resilience, as outlined by Abelev (2009) "[...] without changing the opportunity structure within which the children will be employing those skills, the children's ability to achieve resilient outcomes remains highly constrained within the local context" (p.135).

Individual and psychological theme

Managing Stressful Situations. Mentors highlighted the challenges young people experience in managing stressful situations, especially young people experiencing mental health problems and/or young people with low confidence:

But the needs are - it is resilience-based, a lot of it stems from what I think is a lot of mental health issues and lack of confidence and self-esteem, really... There's a lot of pressure on them, and I think not long ago being a young person myself, you can sense that sort of pressure. Sometimes it's unnecessary pressure, so I think stuff with resilience in terms of attitudes and being able to do mindful stuff. I know 16-year-olds don't tend to think of that, funnily enough, but stuff like that goes a long way and I've seen the impact of it myself, having worked with some young people with mental health and doing resilience-based stuff with them. For me as a mentor, it's about understanding that pressure that they're feeling and prioritizing it for them in lessons of life. (M2)

The challenges facing young people are vast, and supporting their ability to feel confident helps them manage stressful situations:

...it's just given them the confidence to try something, and it means that - because I think some of them feel a bit pressured to get involved in something if maybe their parents aren't very wealthy or getting to and from and things is a struggle.... And I think if they've got that bit of added pressure at home from a parent, say, they think, 'Oh, I'm not going to be bothered trying that because I might not like it and mum will have paid for this and mum will have taken me there and then she'll be annoyed'.... then they have that as their own personal barrier as to why they can't do things. (M3)

Young people experiencing adversity, with limited resilience, face difficulties in coping and recovering successfully from stressful situations (Olsson et al., 2003; McAllister & McKinnon, 2009; Masten & Narayan, 2012; Rutter, 2012).

Bouncing back. Young people's ability to manage and overcome adversity is a core aspect of resilience. Young people suggest different approaches to solving problems and bouncing back which include looking at alternatives and/or relying on external help.

I think sometimes I kind of take a step back and see what else may come up for me. Because sometimes circumstances, all of a sudden, can change at times, and from - heal from the worst kind, it can obviously be flipped around to a good side as well, I would say. (YP2)

I like to step back and think what can I do to help myself? And if I can't do it myself then I'll go and ask someone for help or whatever (YP5)

This was reiterated by another young person who described the phases they go through in dealing with stressful situations.

I would say firstly I might go into regret phase, like, 'Why is it me? Why is this happening to me? Why not someone else?' Look at other people outside, that comparison. So, for example, I'll just use an example of shoes. Shoes are not something that make me regret, but let's say someone has shoes outside, I would be like, why are those not my shoes? So, I would say the regret phase firstly. Then I would just break down. It depends on how intense the difficulty is. If it's very intense now I would break down... And then after that phase it's like, 'Okay, that's not going to solve anything, I have to bounce back, and I have to face the problem'. So, the first phases are like regret, still trying to understand why this has happened to me and then immediately after that phase is done, 'Why are you wasting time, just get back into it, go back to face the difficulty'. (YP3)

Mentors and young people discussed how the Employability Programme helps young people to manage adverse experiences. One young person discussed the support they received in dealing with a difficult interview.

I applied to a degree apprenticeship earlier this year, got to the final stage. It was an interview situation like this but there were two people. They were staring at me, and I froze, and I was really nervous, so the interview went really badly. So, I told X about that and for a little bit we just did a bit of interview practice, confidence building. (YPI)

Receiving the right support is essential for young people, with the support offered to young persons geared towards improving confidence.

... we can look at ways of identifying the issues they would be facing; they may be more open to giving you more detail about certain issues that they're facing.... last week I went with a young person to a training provider, an apprenticeship training provider, that was in South London.... even though I spent the morning there, it was worthwhile now he's more empowered, independent, to take responsibility for his actions. So, it's little steps like that. (M1)

The adverse experiences that young people face are at the societal level (with housing, unemployment, high levels of criminality and drug use, and limited service), and the individual level (accessing education and employment, external pressures, and high levels of stress).

Discussion

Adopting a convergent-mixed method design, with a social-ecological approach (Ungar et al., 2013), this research implemented an evaluation approach to youth resilience that considers the different systems and resources that influence individual resilience. Table 6 presents the results of both quantitative and qualitative data analysis by converging the finding and displaying where these lead to the same themes. This research supports the idea that resilience is more than a mere one-time process that depends on a single factor; rather it is a dynamic and ongoing process that depends on multiple factors (Masten & Narayan, 2012; McAllister & McKinnon, 2009; Olsson et al., 2003; Rutter, 2012; Luthar & Cicchetti, 2000). Our findings suggest that resilience is linked to community and societal factors (including subthemes: education and employment, external pressure, support and access to services), and individual and psychological factors (including sub-themes: managing stressful situations, bouncing back). Factors at the societal level (education, housing, unemployment, high levels of criminality and drug use, and limited services), at the community level (family and external pressures), and the individual level (health and high levels of stress) affect individual resilience (Figure 1) (Khanlou & Wray, 2014).

Both quantitative results and interviews identified the importance of 'community and societal factors'. The findings show that accessing services is fundamental to boosting young peoples' resilience, as it increases their potential and that of the community to recover (Ungar, 2011). These results are confirmed by both young people and the Overall Resilience results in

relation to the IMD domain 'Barriers to Housing and Services Domain'. Another factor emerging from the qualitative and quantitative analysis, supported by the literature (Department of Education, 2016; Twum-Antwi, et al., 2020), is education. As highlighted by young people and mentors, education and resilience are intertwined in both positive and negative ways. The quantitative data highlights that the relative probability of having High Resilience (with respect to Low Resilience) is higher for young people attending school. The interviews offer a more in-depth understanding of the associations with education and resilience. The interviews show that the educational settings and pressure can reduce individual confidence and resilience, but they also display that a higher level of resilience allows young people to progress in school. Moreover, young people discussed family support and pressure from both family and peers as a factor influencing resilience. As previously discussed in the literature, families provide the first tools in understanding the world and it "plays a crucial role in shaping child and youth development" (Twum-Antwi et al., 2020, p.79). The societal factors identified in the study, such as family, education, and other services, reinforce the integral role these factors play in promoting resilience, as supported by previous research. Studies conducted by Fuller et al. (1998), McAllister & McKinnon (2009), Panter-Brick and Eggerman (2012), and Masten (2018) have also emphasized the significance of these factors in fostering resilience. Further substantiating the notion that family support, access to quality education, and availability of essential services contribute to the development of resilience among young individuals. These societal factors provide crucial resources, guidance, and opportunities that enable individuals to navigate adversity, build coping mechanisms, and thrive in the face of challenges.

Individual factors, including 'managing stressful situations', and 'bouncing back' are mainly identified through the interviews. As highlighted by the literature (McAllister & McKinnon, 2009; Masten & Narayan, 2012; Rutter, 2012), stressful situations can have an impact on an individual wellbeing, especially for those with lower levels of resilience. Nonetheless, our respondents discuss how they respond to adversity by bouncing back. It emerged that, after an initial moment in which young people 'step back', they then apply different approaches to overcome the situation, including looking at alternatives and relying on external help. In addition to the previously discussed findings, the quantitative results of the study reveal a significant relationship between gender and resilience. Specifically, the data indicates that male young people tend to exhibit lower levels of resilience compared to their female counterparts. This gender disparity in resilience can be attributed to the observation that

girls are generally more skilled at seeking and receiving social support when they require it (Hampel and Petermann, 2005; Sun and Stewart, 2007). This distinction highlights the potential influence of social support networks on resilience and suggests that girls may have better access to such support systems, thereby enhancing their resilience levels.

Resilience relies on protective factors (for example, resources, competencies, talents, and skills) at the individual-, societal-, and community levels (Olsson et al., 2003), thus, effective support is essential in promoting NEET young people's resilience. This illustrates the need for strong relationships with family, peers, and the community in ensuing young people in supported in terms of developing resilience (Fuller et al., 1998; McAllister & McKinnon, 2009).

Overall, this research outlines the benefits of understanding the factors that affect resilience in young people in NEET and how this can be experienced in negative or positive fashions according to the young person's situation. It can help practitioners and policy makers understand how tailored activities, accounting for multiple aspects, are able to improve individual resilience. Specifically, embedding resilience practices into health care, education and social care provisions would enable consistent and holistic provisions that promote resilience in young people. Government policy with reference to resilience is often interlinked with health and wellbeing (i.e., Health Child Programme, Child and Family Act 2014) but there is a need for policy and guidance that acknowledges the benefits of developing resilience practices. Acknowledging the benefit of residence practices in Government policies in health, education and social care will enable the development of guidance and best practice approaches to embedding reliance into practice (including the provision of training and development for front-line staff). Furthermore, our finding illustrates how the implementation of a mixed method approach to research is essential to an understanding of resilience, the factors that influence it, and how actors navigate them. The quantitative results of the novel CYRM-R scale help in understanding the link between the type of resilience and the influencing factors, whilst the interviews offer details and in-depth knowledge that clarifies the contextual condition for young people.

The research is not without limitations and caution should be used when interpreting the results as retrospective reporting on past experiences could be misleading, especially for young people suffering adverse experiences (Eaton & Paterson-Young, 2018). Interviews with young people and mentors were completed to mitigate this limitation by contextualizing the

quantitative findings. Other limitations of the research are related to data collection and the recruitment of the participants. The limited number of participants for the quantitative and qualitative phases limit the findings, despite the samples being higher than recommended (Onwuegbuzie & Leech, 2004; Creswell, 1998). Overall, the authors addressed the limitations by employing mixed methods, continuously monitoring the data collection process, and rigorously examining the obtained results. Moreover, complementary data collection engaging the main actors of the multiple systems that emerged (e.g., families and teaches) could be beneficial to an understanding of the resources available at the different levels and the ability of the multiple actors to collectively navigate them.

Conclusion

Resilience is a dynamic concept with individuals and networks playing a fundamental role in helping individuals to develop resilience (McAllister & McKinnon, 2009; Southwick et al., 2014). Our findings draw on the existing literature (Christmas & Khanlou, 2019; Theron and Malindi, 2010; Ungar, et al., 2013;), confirming the role of the structural level (for example, infrastructure and access to services), community level (for example, family), and micro-level/individual level (for example, health and wellbeing and individual development) on resilience. The integration of both quantitative and qualitative data collection and data analysis helps us to draw a more detailed picture of resilience and the factors that influence resilience in young people. Findings from this research aid our understanding of how connections between all these levels can boost or limit individual resilience, with emphasis on the importance of multi-system approaches in supporting the resilience of young people who are NEET. This research enables policy makers, organizations, and practitioners to understand the multiple factors that influence young peoples' resilience.

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References

- Abelev, M.S. (2009). Advancing out of poverty: Social class worldview and its relation to resilience. *Journal of Adolescent Research*, 24(1), 114-141.
- Borualogo, I.S. & Jefferies, P. (2019). Adapting the child and youth resilience measure-revised for Indonesian contexts. *Journal of Educational, Health and Community Psychology*, 8(4), 480-498.
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research* in *Psychology*, 3 (2), 77-101.
- Braun, V. & Clarke, V. (2020). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, DOI: 10.1080/14780887.2020.1769238.
- Bryman A. (20026). Integrating quantitative and qualitative research: how is it done? *Qual Res*, 6, 97–113.
- Christmas, C.M. & Khanlou, N. (2019). Defining youth resilience: a scoping review. International Journal of Mental Health and Addiction, 17(3), 731-742.
- Clarke, V. & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, 12(3), 297-298. DOI: 10.1080/17439760.2016.1262613.
- Connor, K. M. & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and anxiety*, 18(2), 76-82.
- Cowan, P.A., Cohen., D.A., Cowan., C.P., & Pearson, J.L. (1996). Parents' attachment histories and children's externalizing and internalizing behaviours: Exploring family systems models of linkage. Journal of Consulting and Clinical Psychology, 64, 53–63.
- Cresswell, J.W. and Plano Clark, V.L. (2018). *Designing and conducting mixed methods research*. Third Edition. Sage.
- Creswell, J.W. (2014). A concise introduction to mixed methods research. SAGE publications.

- Department of Education (DfE). (2016). DfE Strategy 2015-2020: World class education and care. Available at: https://www.gov.uk/government/publications/dfe-strategy-2015-to-2020-world-class-education-and-care.
- Eaton, J. & Paterson-Young, C. (2018). The Little Orange Book. Derby: Victim Focus.
- Friborg, O., Hjemdal, O., Rosenvinge, J. H. & Martinussen, M. (2003). A new rating scale for adult resilience: what are the central protective resources behind healthy adjustment? *International Journal of Methods in Psychiatric Research*, 12(2), 65-76.
- Fuller, A., McGraw, K. & Goodyear, M. (1998). *Young People, Well-Being and Resilience*. The Resilience Project, Victoria, Strategy Against Drug Abuse.
- Garmezy, N., Masten, A.S., & Tellegen, A. (1984). The study of stress and competence in children: A building block for developmental psychopathology. *Child Development*, 55, 97–111.
- Hampel, P. and Petermann, F., 2005. Age and gender effects on coping in children and adolescents. *Journal of youth and adolescence*, 34, pp.73-83.
- Hazenberg, R., Seddon, F. & Denny, S. (2014) Investigating the outcome performance of work-integration social enterprises (WISEs): Do WISEs offer 'added value' to NEETs? Public Management Review, 16(6): 876-899.
- IDACI. (2019). English indices of deprivation 2019. Available at: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019.
- Jefferies, P., McGarrigle, L., & Ungar, M. (2019). The CYRM-R: A Rasch-validated revision of the Child and Youth Resilience Measure. *Journal of Evidence- Based Social Work*, 16:1, 70-92, DOI: 10.1080/23761407.2018.1548403.
- Judge, T. A., Locke, E. A. and Durham, C. C. (1997). The dispositional causes of job satisfaction: a core evaluation approach. *Research in organisational behaviour*, 19: 151-188.
- Khanlou, N. & Wray, R. (2014). A whole community approach toward child and youth resilience promotion: A review of resilience literature. *International journal of mental health and addiction*, 12(1), 64-79.

- Lee, T.Y. (2006). Resilience as a positive youth development construct: Conceptual bases and implications for curriculum development. *International Journal of Adolescent Medical health*, 18, 475–482.
- Lerner, R.M., Dowling, E.M., & Anderson, P.M. (2003). Positive youth development: Thriving as the basis of personhood and civil society. *Applied Developmental Science*, 7, 172–180.
- Locke, E.A., Durham, C.C and Kluger, A.N. (1998) Dispositional Effects on Job and Life: The Role of Core Evaluations, *Journal of Applied Psychology*, 83: 17-34.
- Luthar, S. S. & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology*, 12(4), 857–885.
- Maguire, S. and Rennison, J. (2005), Two Years On: The Destinations of Young People who are Not in Education, Employment or Training at 16, *Journal of Youth Studies*, 8(2):187-201.
- Manhica, H., Yacamán-Méndez, D., Sjöqvist, H., Lundin, A., Agardh, E. and Danielsson, A.K.
 (2022) Trajectories of NEET (Not in Education, Employment, and Training) in
 Emerging Adulthood, and Later Drug Use Disorder a National Cohort Study, *Drug and Alcohol Dependence*, 233.
- Marulanda, S., & Addington, J. (2016). Resilience in individuals at clinical high risk for psychosis. *Early Intervention in Psychiatry*, 10, 212–219. doi:10.1111/eip.12174
- Masten, A. S. & Narayan, A. J. (2012). Child Development in the Context of Disaster, War, and Terrorism: Pathways of Risk and Resilience. *Annual Review of Psychology*, 63:227-257.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227-238.
- Masten, A. S., Best, K. M. & Garmezy., N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and psychopathology*, 2(4), 425-444.

- Masten, A.S., (2018). Resilience theory and research on children and families: Past, present, and promise. *Journal of Family Theory & Review*, 10(1), 12-31.
- McAllister, M. & McKinnon, J. (2009). The importance of teaching and learning resilience in the health disciplines: A critical review of the literature. *Nurse Education Today*, 371–379.
- McLeod, J. (1994). Doing Counselling Research, London, Sage.
- Ministry of Housing, Communities & Local Government. (2019). The English Indices of Deprivation 2019, Statistical release main findings. Available online at: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019.
- Moorhouse, A., & Caltabiano, M. L. (2007). Resilience and unemployment: Exploring risk and protective influences for the outcome variables of depression and assertive job searching. *Journal of Employment Counseling*, 44(3), 115–125.
- Noordzij, M., van Diepen, M., Caskey, F.C. & Jager, K.J. (2017). Relative risk versus absolute risk: one cannot be interpreted without the other. *Nephrology Dialysis Transplantation*, 32(2), 13-18.
- Olsson, C. A., Bond, L., Burns, J.M., Vella-Brodrick, D.A., Sawyer, S.M. (2003). Adolescent resilience: a concept analysis. *Journal of Adolescence*, 26(1), 1-11.
- ONS (November 2022) Young people not in education, employment or training (NEET), UK:

 May 2022, Office for National Statistics 24th November 2022, available online at

 https://www.ons.gov.uk/employmentandlabourmarket/peoplenotinwork/unemploymentortrainingneet/november2022
- Onwuegbuzie, A. J. & Collins, K. M. T. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report*, 12, 281-316.
- Pangallo, A., Zibarras, L. & Lewis, R. (2015). Resilience Through the Lens of Interactionism: A Systematic Review. *Psychological Assessment*, 27(1), 1-20.
- Panter-Brick, C., Hadfield, K., Dajani, R., Eggerman, M., Ager, A., & Ungar, M. (2018). Resilience in context: A brief and culturally grounded measure for Syrian

- refugee and Jordanian host-community adolescents. *Child Development*, 89, 1803–1820. doi:10.1111/cdev.12868.
- Quinlan, A. E., Berbés-Blázquez, M., Haider, J. L. & Peterson, G. D. (2016). Measuring and assessing resilience: broadening understanding through multiple disciplinary perspectives. *Journal of Applied Ecology*, 53, 3(53), 677–687.
- Ralston, K., Everington, D., Feng, Z. and Dibben, C. (2021), 'Economic inactivity, not in employment, education or training (NEET) and scarring: The importance of NEET as a marker of long-term disadvantage', *Work, Employment And Society* https://doi.org/10.1177/0950017020973882
- Renbarger, R.L., Padgett, R.N., Cowden, R.G., Govender, K., Yilmaz, M.Z., Scott, L.M., Makhnach, A.V., Novotny, J.S., Nugent, G., Rosenbaum, L. & Křeménková, L. (2020). Culturally Relevant Resilience: A Psychometric Meta-Analysis of the Child and Youth Resilience Measure (CYRM). *Journal of Research on Adolescence*, 30(4), 896-912.
- Resilience Research Centre. (2018). *CYRM and ARM user manual*. Halifax, NS: Resilience Research Centre, Dalhousie University. Available at. http://www.resilienceresearch.org/
- Roberts, K., Dowell, A. and Nie, JB. Attempting rigour and replicability in thematic analysis of qualitative research data; a case study of codebook development. *BMC Med Res Methodolology* **19**, 66 (2019). https://doi.org/10.1186/s12874-019-0707-y
- Rutter, M. (2006). Implication of resilience concepts for scientific understanding. In B.M. Lester, A.S. Masten, & B.McEwen (Eds.), Resilience in children (1–12). Boston, MA: Blackwell.
- Rutter, M. (2012). Resilience as a dynamic concept. *Development and Psychopathology*, 24(2), 335–344.
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P. & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15(3), 194-200.

- Southwick, S.M., Bonanno, G.A., Masten, A.S., Panter-Brick, C. & Yehuda, R. (2014). Resilience definitions, theory, and challenges: interdisciplinary perspectives. *European journal of psychotraumatology*, 5(1), 25338.
- StataCorp. (2017). Stata Statistical Software: Release 15. College Station, TX: StataCorp LLC.
- Sun, J. and Stewart, D., 2007. Age and gender effects on resilience in children and adolescents. *International Journal of mental health promotion*, 9(4), pp.16-25.
- The American Psychology Association. (2019). American Psychology Association Resilience Booster: Parent Tip Tool. Available at: https://www.apa.org/topics/parenting/resilience-tip-tool
- Theron, L.C. & Malindi, M.J. (2010). Resilient street youth: A qualitative South African study. *Journal of Youth Studies*, 13(6), 717-736.
- Twum-Antwi, A., Jefferies, P. & Ungar, M. (2020). Promoting child and youth resilience by strengthening home and school environments: A literature review. *International Journal of School & Educational Psychology*, 8(2), 78-89.
- Ungar, M. (2008). Resilience across cultures. *The British Journal of Social Work*, 38(2), 218-235.
- Ungar, M. (2011). Community resilience for youth and families: Facilitative physical and social capital in contexts of adversity. *Children and Youth Services Review*, 33(9), 1742-1748.
- Ungar, M., Brown, M., Liebenberg, L., Cheung, M., & Levine, K. (2008b). Distinguishing differences in pathways to resilience among Canadian youth. *Canadian Journal of Community Mental Health*, 27(1),1–13.
- Ungar, M., Brown, M., Liebenberg, L., Othman, R., Kwong, W.M., Armstrong, M. & Gilgun, J. (2008a). Unique pathways to resilience across cultures. *Youth Studies Australia*, 27(2), 63-64.
- Ungar, M., Ghazinour, M. & Richter, J. (2013). Annual research review: What is resilience within the social ecology of human development? *Journal of Child Psychology and Psychiatry*, 54(4), 348-366. Windle, G., Bennett, K. M. & Noyes, J. (2011). A

methodological review of resilience measurement scales. *Health and Quality of Life Outcomes*, 9:8, 9(1).

Yates, S. & Payne, M. (2006) Not So NEET? A Critique of the Use of 'NEET' in Setting Targets for Interventions with Young People, *Journal of Youth Studies*, 9(3): 329-344.

Table 1

Demographic characteristics of the population (%).

	Absolute value	Percentages
Total Participants	684	100.0%
Individual circumstances		
On Alternative Provision in		
Year 11	29	17.1
Care Leaver	20	11.8
Looked After / In Care	54	31.8
Refugee/Asylum Seeker	1	0.6
Supervised by YOT	30	17.6
Teenage Parent	24	14.1
Client disclosed Substance		
Misuse	2	1.2
Pregnancy	10	5.9
Total	170	100.0
Age		
16	115	16.8%
17	346	50.6%
18	223	32.6%
Total	684	100.0%
Gender		
Female	292	42.7%
Male	354	51.8%
Not Provided	38	5.6%
Total	684	100.0
Ethnicity		
Bangladeshi	1	0.1%
Chinese	1	0.1%
Other Asian Background	2	0.3%
Other Mixed Background	4	0.6%
Pakistani	4	0.6%
Gypsy/Roma	5	0.7%
Indian	5	0.7%
Any Other Ethnic Group	6	0.9%
Black	16	2.3%
Preferred not to say	41	6.0%
Information not obtained	235	34.4%
White	364	53.2%
Total	684	100.0%

Table 2

Demographic characteristics of the sample (%).

		Percentages
Area	East Midlands	3.1%
	North West	1.0%
	East Midlands	1.0%
	East of England	2.0%
	Eastern	3.1%
	London	23.5%
	South West England	2.0%
	West Midlands	11.2%
	Yorkshire and the Humber	51.0%
	No response	2.0%
Gender	Female	47.1%
	Male	52.9%
Ethnicity	White	42.2%
-	BAME	57.8%
Special Need or Disability	Yes	8.2%
	No	91.8%
School Attendance	Yes	26.8%
	No	73.2%

Table 3

Overall Resilience (Low Resilience Baseline)

-		Moderate	resilience			High resilience			Е	xceptional resili	ence	
	Baseline	SE	Model 2	SE	Baseline	SE	Model	SE	Baseline	SE	Model 2	SE
							2					
Age	0.996	0.26	1.029	0.30	0.937	0.25	0.814	0.24	1.253	0.32	1.391	0.45
Female	1.000	•	1.000		1.000		1.000	•	1.000		1.000	
Male	1.038	0.88	0.780	0.82	0.228^{*}	0.19	0.145^{**}	0.14	0.459	0.40	0.670	0.68
White	1.000	•	1.000		1.000		1.000	•	1.000		1.000	
BAME	9.918**	11.04	7.347	10.64	4.211	4.09	4.421	5.11	2.436	2.56	3.836	5.41
No SEN	1.000		1.000		1.000		1.000		1.000		1.000	
Yes SEN	19.241**	28.68	122.469**	255.44	4.348	7.21	6.041	14.57	2.873	5.38	1.696	3.92
Not attending school	1.000	•	1.000		1.000		1.000	•	1.000		1.000	
Attending school	15.064**	18.70	20.441**		4.119		3.228		19.694**		51.911***	
First quartile IMD	1.000		-		1.000		-		1.000		-	
Second quartile IMD	0.832	0.75	-		1.347	1.24	-		1.059	0.97	-	
Third quartile IMD	6.003	13308.22	-		50463602.221	80300000000	-		9011035.598	14300000000	-	
Fourth quartile IMD	2.260	2.58	-		2.401	2.68	-		0.395	0.58	-	
First quartile housing	-		1.000		-		1.000	•	-		1.000	
Second quartile	-		0.489	0.66	-		0.026^{**}	0.04	-		2.574	3.83
housing												
Third quartile housing	-		0.271	0.37	-		0.224	0.30	-		4.323	6.16
Fourth quartile	-		0.268	0.37	-		0.093^{**}	0.11	-		1.416	1.99
housing												
First quartile living	-		1.000		-		1.000	•	-		1.000	
Second quartile living	-		0.052^{*}	0.09	-		0.189	0.29	-		0.634	1.07
Third quartile living	-		0.807	1.08	-		13.506^*	18.79	-		0.280	0.43
Fourth quartile living	-		0.369	0.67	-		4.492	7.44	-		1.915	3.38

First quartile IDACI	-	1.000		-	1.000		-	1.000	•
Second quartile	-	1.651	2.45	-	2.568	3.67	-	0.089	0.16
IDACI									
Third quartile IDACI	-	0.626	0.73	-	0.140^*	0.17	-	0.389	0.43
Fourth quartile IDACI	-	4.704	6.55	-	1.093	1.38	-	1.058	1.43

Significance levels * 0.1 ** 0.05 *** 0.01

Table 4

Personal Resilience (Low Resilience Baseline)

		Moderate 1	resilience			High resili	ence			Exception	onal resilience	
	Baselin	SE	Model 3	SE	Baseline	SE	Model 3	SE	Baseline	SE	Model 3	SE
	e											
Age	0.889	0.21	0.867	0.23	1.039	0.25	0.998	0.30	0.912	0.27	0.656	0.23
Female	1.000		1.000		1.000		1.000	•	1.000		1.000	
Male	0.576	0.44	0.633	0.52	0.530	0.44	0.390	0.38	0.168^{**}	0.15	0.223	0.22
White	1.000		1.000	•	1.000	•	1.000		1.000		1.000	
BAME	6.312^*	6.14	1.485	1.75	17.565**	20.71	64.470**	119.	1.237	1.31	0.039^{*}	0.08
								52				
No SEN	1.000	•	1.000	•	1.000		1.000	•	1.000		1.000	•
Yes SEN	1.784	2.13	2.310	3.18	1.917	2.91	0.734	1.27	0.871	1.39	1.379	2.62
Not attending school	1.000		1.000	•	1.000	•	1.000		1.000		1.000	
Attending school	3.501	3.49	2.054	2.12	7.144^{*}	7.39	2.841	3.12	12.090**	12.38	9.605**	11.07
First quartile IMD	1.000		-		1.000		-		1.000		-	
Second quartile IMD	1.481	1.27	-		3.835	3.49	-		0.426	0.46	-	
Third quartile IMD	135317	145000	-		37178028.38	398000	-		2927460.5	31400	-	
-	83.004	00000			0	00000			42	00000		
Fourth quartile IMD	2.757	2.95	_		6.543	8.31	_		0.489	0.64	-	

First quartile housing	-	1.000		-	1.000		-	1.000	
Second quartile	-	0.669	0.79	-	0.000	0.00	-	3.187	4.48
housing									
Third quartile housing	-	0.305	0.32	-	0.705	0.78	-	0.805	1.10
Fourth quartile	-	0.101^*	0.12	-	0.028^{**}	0.05	-	0.398	0.54
housing									
First quartile living	-	1.000		-	1.000		-	1.000	
Second quartile living	-	0.335	0.45	-	0.607	0.93	-	0.016^{*}	0.04
Third quartile living	-	1.720	2.10	-	24.454	47.9	-	0.085	0.17
						4			
Fourth quartile living	-	0.363	0.58	-	48.738	115.	-	0.029	0.07
						88			
First quartile Income	-	1.000		-	1.000		-	1.000	•
Second quartile	-	6233759	1250	-	55708128.	1120	-	52623661.	1060000000
Income		0.901	0000		309	0000		417	00
			0000			0000			
Third quartile Income	-	3.326	3.42	-	1.728	2.28	-	0.935	1.17
Fourth quartile Income	-	1.138	1.27	-	0.652	1.14	-	0.285	0.41

Significance levels * 0.1 ** 0.05 *** 0.01

Table 5.

Caregiver Resilience (Low Resilience Baseline)

		Moderat	e resilience			High resili	ience]	Exception	nal resilience	
	Baselin	SE	Model 7	SE	Baseline	SE	Model 7	SE	Baseline	SE	Model 7	SE
	e											
Age	0.842	0.21	0.621	0.22	1.303	0.35	1.041	0.31	1.154	0.29	1.042	0.35
Female	1.000	•	1.000		1.000		1.000		1.000		1.000	
Male	0.531	0.40	0.161^{*}	0.18	0.485	0.45	0.530	0.53	0.154^{**}	0.13	0.196^{*}	0.19
White	1.000		1.000		1.000		1.000		1.000		1.000	
BAME	12.943*	13.42	397.317***	860.2	3.495	4.27	1.313	2.24	2.136	2.11	5.030	7.58
	*			1								
No SEN	1.000		1.000		1.000		1.000		1.000		1.000	
Yes SEN	8.493	12.80	380.587**	950.4	9.078	14.24	14.930	28.9	10.404	16.23	7.015	14.47
				3				7				
Not attending school	1.000	•	1.000		1.000		1.000		1.000		1.000	
Attending school	8.145**	7.83	8.232^{*}	9.66	6.903^{*}	7.82	7.946^{*}	9.49	4.392	4.40	9.007^{*}	10.57
First quartile IMD	1.000	•	-		1.000		-		1.000		-	
Second quartile IMD	1.394	1.14	-		1.432	1.53	-		1.017	0.91	-	
Third quartile IMD	8.225	14966.	-		84231239.96	117000	-		9010199.5	12500	-	
		85			0	000000			50	00000		
										0		
Fourth quartile IMD	5.170	5.90	-		6.051	8.44	-		1.146	1.39	-	
First quartile housing	-		1.000		-		1.000		-		1.000(.)	
Second quartile	-		0.006^{**}	0.01	-		0.195	0.32	-		4.086()	5.88
housing												
Third quartile housing	-		0.181	0.22	-		0.546	0.66	-		3.234()	4.24
Fourth quartile	-		0.029^{**}	0.05	-		0.850	1.10	-		0.732 ()	0.95
housing												

First quartile living	-	1.000	•	-	1.000		-	1.000	•
Second quartile living	-	0.024^{**}	0.04	-	0.043	0.09	-	2.483	3.92
Third quartile living	-	76.872**	143.2	-	0.797	1.56	-	1.003	
			5						
Fourth quartile living	-	3.589	6.96	-	0.295	0.64	-	20.9151.5	37.50
								8^*	
First quartile crime	-	1.000		-	1.000		-	1.000	
Second quartile crime	-	0.496	0.79	-	6.341	8.68	-	0.429	0.56
Third quartile crime	-	2.928	4.74	-	9.567	14.4	-	0.105	0.17
						7			
Fourth quartile crime	-	6.516	10.04	-	19.006^*	29.7	-	0.665	0.95
						5			

Significance levels * 0.1 ** 0.05 *** 0.01

Table 6.Mixed-methods result table

Factors	Theme and additional components	Quantitative	Qualitative
	Managing stressful situations		Resilience mediates the impact on individual wellbeing
Tu dissi dasa 1	Bouncing back		Resilience determines the ability bounce back
Individual and psychological theme	Gender and ethnicity	Male experience lower probability of higher levels of resilience than female participants in Overall, Personal, and Caregiver Resilience BAME experience higher probability of higher levels of resilience than White young people in Overall, Caregiver, and Personal Resilience	
	Education and Employment	Relative probability of having higher levels of resilience is higher for young people attending school than those not attending in the Overall, Caregiver, and Personal Resilience	Educational settings and pressure can reduce individual confidence and resilience Higher level of resilience allows young people to progress in school
Community and Society	Crime	Relative probability is higher for those in lower crime areas in Caregiver Resilience	Reduced quality of services and neighbourhood impacting individual resilience
theme	External pressure		Peer pressure, relationships and resources in the local community impact resilience Family and friends impact resilience
	Support and access to services	Relative probability is lower for those experiencing higher level of IMD in Overall Resilience	Support is essential in developing resilience

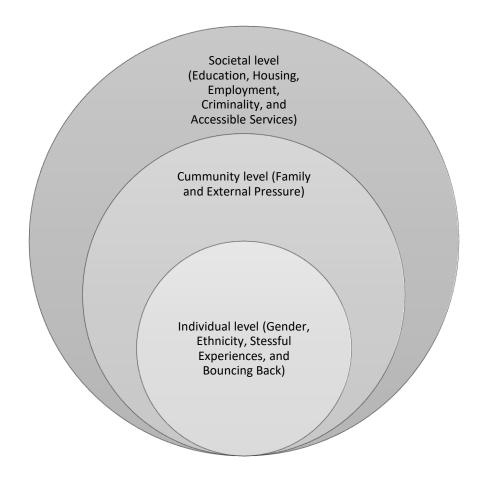


Figure 1.

Multiple levels with the factors that impact on resilience.