



## Original Article

## Hope under the shadow of fear and uncertainty: Resilience factors among working adolescents

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## ABSTRACT

**Background & Aim:** Working adolescents need to cope with extreme situations they face, and it is important to identify what factors influence their resilience to better support their health and well-being. The purpose of this study was to explore resilience in working adolescents.

**Methods & Materials:** The directed content analysis approach based on the ecological-transactional resilience model was employed across five domains of resilience (Self, Family, Peers, School, and Community). Semi-structured interviews with a purposive sample of working adolescents were conducted. Inclusion criteria were being 12-18 years of age, Persian speaker, and direct experience of being forced to work for at least one year. Hsieh & Shannon (2005) instruction was used for data analysis.

**Results:** 17 participants were interviewed, 59% were male, 88% immigrants, and 41% had started working by age 6. Adolescents reported experience of significant adversity. A dichotomic range of resilience-related factors was identified within five domains, embedded with distinct themes. There was evidence of self-care, patience, empathy, and emotional insight within extremely difficult life circumstances. Peers and schools were identified as supporting resilience. Very few Family or Community resilience factors were identified; instead, adolescents reported hurt, alienation, and voicelessness within the family; and fear and insecurity in the community.

**Conclusion:** Working adolescents in this study revealed some dichotomic strengths and vulnerabilities. Individual, peer, and school factors were more evident than family and community factors in fostering resilience among working adolescents.

### Introduction

Child labour refers to work undertaken by children below the appropriate legal minimum working age. International Labour Organisation (ILO, 2017) estimates that there are more than 152 million working children. Of which, 73 million were in hazardous work (1). Poverty is the most common reason for child labour, and while it is uncommon in developed countries, it remains a significant issue in developing countries, including Asia (2).

Despite international and national efforts focusing on reducing child labour, this problem remains unsolved in Iran. The exact number of child labourers in Iran and many other countries is impossible to quantify (3). A systematic review (2014) showed that almost 80% of children and adolescents who work on Iran's streets were illiterate or have had less than eight years' education. They usually came from crowded, low socio-economic families. This study also determined near to 30% of child labourers who work on streets lived in single-parent families. Almost 100% of them had experiences of violence or being maltreated (3, 4).

Child labourers experience unreasonable parental and employer expectations, are often powerless in the face of exploitation,

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lack legal or other types of protection, and experience social exclusion and adverse conditions in their workplace (1). There is a range of psychological and physical impacts for working children, including a breakdown of their social networks and family relationships, abuse and neglect, lack of education, direct or environmental physical harm, stigmatization, and induction into crime, drug abuse, and peer exploitation (5). As the majority of working children belong to immigrant families, they experience fear and uncertainty due to increasing financial strains on families (6) and exposure to discriminant events (7).

There is evidence that working children use whatever opportunities are available for positive growth in the context of poor resources (5). Investigation of this positive development in the face of adversity is the focus of resilience research. Resilience has been defined as positive developmental outcomes in the face of adversity or stress or competence development despite chronic stress(8). For adolescents, such resilience factors are likely to include intelligence, problem-solving skills, and social support (9, 10).

Despite many studies focusing on an individual's capacities (11), resilience is also a feature of the individual's surrounding environment, such as family, school, and community (5). Therefore, resilience is defined as a dynamic process (12) in the context of an ecological-transactional model. This model describes an individual's environment as nested proximity levels, which is considered integration between societal, cultural elements, neighborhood and community settings, family environment, and individual factors (13). Each level of the environment contains transient or enduring risk and protective factors for the individual. Considering the relationship between these factors, investigating the resilience in each nested level is required to use a comprehensive approach that is identified by studies as the domains of individual, family, peers, school, and community. Gartland et al. (2011) developed a practical guide to define

adolescents' resilience based on an ecological-transactional model, comprising the five domains of Self, Family, Peers, School and Community, and 12 scales (14).

Working adolescents need necessarily to cope with extreme situations (15), and it is important to understand what factors influence their resilience to better support their health and well-being. There is not any published work to identify what the resilience factors are among working adolescents in Iran. Based on a directed content analysis approach, this study aims to explore resilience factors among working adolescents in Iran, using the Adolescent Resilience Questionnaire as a framework to support structured interviews.

## **Methods**

### *Study design*

A qualitative method with a directed content analysis approach based on an ecological-transactional model was employed across five resilience domains (Self, Family, Peers, School, and Community). The deductive or directed qualitative content analysis (DQICA) was used to guide the study (16).

### *Recruitment and data collection*

A purposive sample of working adolescents was recruited in Tehran through Child and Family Support Centers by directly approaching adolescents on the streets or in workplaces where adolescents were employed. Inclusion criteria included being 12-18 years of age, speaking Persian, and having direct experience of employment for at least one year. Maximum variation sampling took into consideration participants' demographic characteristics to ensure a wide range of experiences were captured. The main researcher conducted 17 individual face-to-face semi-structured interviews for 45-60 minutes. The data were collected between March and October 2015.

Interviews were audiotaped, with consent to record the interview obtained from participants before starting the interview. Adolescents were reminded at the time of the interview that they could stop participating at any time. Interviews were conducted in a classroom at the Child and Family Support Centers or a quiet place at the adolescent's workplace, depending on the participants' preference.

### ***Semi-structured Interview***

Researchers developed an 'interview guide' based on the study objectives, guiding resilience model, and method

before conducting interviews. The interview questions were derived from the adolescent resilience model presented by Gartland et al. (14). The interview guide consisted of nine structured demographic questions, twenty open-ended primary questions in five domains of individual, family, peers, school, and community, and some open-ended probing questions during interviews. Probing questions were asked for clarification or if a participant's response to the initial question did not address interest areas. The sample interview guide questions are presented in table 1.

**Table 1.** Interview guide

<b>Resilience domains</b>	<b>Scales</b>	<b>Sample questions</b>
<b>Individual</b>	Confidence (Self & Future)	<ul style="list-style-type: none"> <li>• <i>What do you think about your future?</i></li> <li>• <i>What are your reactions to the problems you face?</i></li> </ul>
	Emotional insight	<ul style="list-style-type: none"> <li>• <i>What do you usually do you do if you are feeling down?</i></li> <li>• <i>How do you modify your feelings about something?</i></li> </ul>
	Negative cognition	<ul style="list-style-type: none"> <li>• <i>What do you do if things go wrong?</i></li> <li>• <i>Can you control your feelings? What do you do?</i></li> </ul>
	Social skills	<ul style="list-style-type: none"> <li>• <i>Please describe how you make an important decision?</i></li> <li>• <i>Do you share your thought with others? Who? Please describe how?</i></li> </ul>
	Empathy/Tolerance	<ul style="list-style-type: none"> <li>• <i>What do you think about people who can't do things as well as you do?</i></li> <li>• <i>How do you give criticism?</i></li> </ul>
<b>Family</b>	Family availability	<ul style="list-style-type: none"> <li>• <i>Is there someone in your family that you feel particularly close to? Who is s/he? Please describe your relationship?</i></li> </ul>
	Family connectedness	<ul style="list-style-type: none"> <li>• <i>Do you spend your time with your family?</i></li> <li>• <i>Do your family members help you if you need it?</i></li> </ul>
<b>Peers</b>	Peer availability	<ul style="list-style-type: none"> <li>• <i>What do you think about making new friends?</i></li> </ul>
	Peer connectedness	<ul style="list-style-type: none"> <li>• <i>Do you trust your friends?</i></li> </ul>
<b>School</b>	Supportive environment	<ul style="list-style-type: none"> <li>• <i>Please describe your school environment.</i></li> <li>• <i>What are your teachers' expectations of you?</i></li> </ul>
	Connectedness	<ul style="list-style-type: none"> <li>• <i>Do you participate in class discussion?</i></li> </ul>
<b>Community</b>	Community connectedness	<ul style="list-style-type: none"> <li>• <i>Do you trust the people in your neighborhood?</i></li> </ul>

### ***Participants***

The demographic characteristics of participants are presented in Table 2. All participants identified their family

economic status as "very poor", and they had to work. None of the adolescents' parents had a permanent job or medical insurance.

**Table 2.** Demographic characteristics of participants

Variable	N (%)
<b>Age</b>	
12-14 years old (early adolescence)	6 (35.29)
15-17 years old (middle adolescence)	8 (47.05)
18 years old (late adolescence)	3 (17.64)
<b>Nationality</b>	
Iranian	8 (47.06)
Immigrant	9 (52.94)
<b>Gender</b>	
Female	7 (41.17)
Male	10 (58.82)
<b>Marriage Status</b>	
Single	15 (88.23)
Married	2 (11.76)
<b>Age of starting to work</b>	
< 6 years	7 (41.17)
6 to 12 years	6 (35.29)
12 to 18 years	4 (23.52)
<b>Time working</b>	
< five years	3 (17.64)
≥ five years	14 (82.35)
<b>Parental status</b>	
Single parent	11 (64.70)
Two parents	2 (11.76)
Other caregivers	4 (23.52)
<b>Work location</b>	
Streets	11 (64.70)
Other*	6 (35.29)

\*workshops, garages, supermarkets, bakeries, minimarkets

**Data analysis**

All the interviews include non/verbal data, were transcribed verbatim immediately after each interview. The minimum unit of analysis was a sentence, a phrase, or a word. Verbal and non-verbal interaction together shape communicative meaning (17). Therefore, all non-verbal data such as the participants' silence before answering a question, all emphasis, speed, tone of voice, timing, and body posture were turned into transcription. As a result, the non-verbal data were relied on for shaping new questions during the interview and the analysis process subsequently. For example, if the participant frequently pauses when answering the question, "Do your parents support you when you need?" all pauses,

and body postures were transcript. If the verbal answer was "yes, they do" but the participant told "(silence)...emm!..yes (shaking head, chewing on the bottom lip, low voice tone, and closed posture) they (silence and sigh) do", the analysis was conducted with more reflection based on these pauses and gestures. In this case, although the participant's words seemed to indicate the parents' positive role of support, the way these words are said seemed to indicate the opposite. Therefore, the researcher asked probing questions, and the analysis was conducted based on the whole data. The transcribed data was imported to NVivo 8. The data were analyzed using directed content analysis, as this approach is appropriate in the circumstance where a theory or prior research exists about the phenomenon.

According to Hsieh and Shannon (2005), the textual data should read, and those parts of the text that, on the first impression, appeared to be related to the predetermined categories directed by a theory should be highlighted. In the next step, the highlighted text would be coded using the predetermined categories (18).

Two data analysts developed a codebook following Hsieh's guidelines. The codes were then searched for evidence of resilience that reflected the five domains of adolescent resilience. All codes that emerged from data were compared to this main framework and were grouped to match a domain or scale's definitions. The data were analyzed after each interview, and after the fifteenth interview, repetitive codes emerged. Data saturation was achieved after 17 interviews.

### ***Rigor***

To ensure the trustworthiness of the data, Lincoln and Guba's criteria for establishing rigor were used (19). To ensure credibility, the researchers immersed in the data, sought external review by colleagues, and asked some of the volunteer participants to look at the analysis's final results. So that they ensured us that their views were accurately reflected in our data analysis. To ensure meaningful data collection and interpretation, the main researcher also spent six months (over 400 hours) in the field as a health care provider to build her understanding of the context, experiences, and challenges faced by working adolescents. A complete and continuous recording of the decisions and activities regarding data collection and analysis was presented to the outside researchers to enhance the data's reliability. To achieve

confirmability, details of the research and its stages were recorded by the researchers, a report of the research process was prepared, and the validation of the findings by experts was undertaken. To enhance the results' transferability, the researchers provide descriptions and details of the participants' selection and characteristics and supportive quotations to facilitate the transferability of the findings to other contexts.

### ***Ethical Considerations***

Permission to conduct the study was obtained from the Ethics Committee (93-02-28-26324-120513). Where adolescents expressed an interest in participating in the study, the researchers arranged a meeting with their parent(s)/caregiver (s). At this meeting, the researcher introduced themselves, explained the study, and outlined what was involved for the adolescent taking part. Study objectives were clearly described, and participants were assured of their anonymity and the confidentiality of the data collected. The opportunity to ask questions was provided, and questions answered simply and clearly to ensure adolescents (and families) understood. Participants and a parent/guardian each signed a written consent form. The researchers provided their contact information, including phone numbers, and an interview venue and time were agreed upon.

### **Results**

164 primary codes emerged from transcribed data and were categorized into the five domains. All the codes within each domain were then re-read and combined into a smaller number of final themes based on differences and similarities (Table 3).

## Resilience factors among working adolescents

**Table 3.** Adolescent resilience domains, scales, and themes

Domain	Individual					Family	Peer	School	Community
Scale	Confidence (Self & Future)	Emotional Insight	Negative Cognition	Social Skills	Empathy	Availability & Connectedness	Availability & Connectedness	Supportive Environment & Connectedness	Community
Theme	<i>future hope under the shadow of fear and uncertainty</i> <i>Self-esteem</i> <i>Purposeful life</i> <i>Flexibility</i> <i>Risk-taking</i>	<i>Self-care</i> <i>Learning from failure</i> <i>Decision making &amp; Problem-solving</i> <i>Emotional management</i>	<i>Being hostage to unpleasant feelings</i>	<i>Assertiveness</i>	<i>Patience</i> <i>Empathy with the oppressed</i>	<i>Being heard and understood</i> <i>A caring relationship with family members</i> <i>Support for autonomy and growth</i>	<i>Having friends who are more than a friend</i>	<i>Care and support from teachers</i>	<i>Safe community</i>
Codes	Total 63codes					Total codes 22	Total codes 18	Total codes 37	Total codes 24

### Future hope under the shadow of fear and uncertainty

Almost all of the participants were hopeful about their future, but it was full of uncertainty for them. They used “Black or White” or “Dark and Bright” to describe the future.

*“... The future, in my opinion, is full of darkness but I know I can overcome this darkness and change the darkness to light.” (Female, 15 years old)*

### Self-esteem

All of the participants, except one, were able to evaluate themselves as a worthy person.

*“... We are worthy because we support our family financially... It’s not all about money. I can do many things” (Male, 17 years old)*

### Purposeful life

All the participants talked about their plans and goals for their life, which varied greatly but related to their academic achievements, job positions, family, and personal desires.

*“I wish to be a doctor in the future. Although I can’t spend enough time to study, as much as normal students do, I do my best to study. .... I think everyone should have a goal for life” (Female, 16 years old)*

### Flexibility

The study participants had learned that flexibility is the key to successful adaptation. Change is unavoidable, and they have had to learn how to adjust to their unpredictable life.

*“I think there are many ways to do things. For example, if I can’t be a doctor in the future, I will change my mindset and maybe I will decide to be a teacher” (Female, 12 years old)*

### Risk-taking

Participants acknowledged that they take risks because they have to.

*“I like to try and see if something works... To tell you the truth, I think I have to take my courage in both hands. For children like me, it is unavoidable.” (Male, 18 years old)*

### Self-care

Although working children are limited in enacting self-care due to autonomy constraint, the study participants reported managing lives as much as possible to promote their health.

*“During my life, I have learned that caring for my body and my mind is essential. We have a hard life, if we don’t care about*

*ourselves, the others don't care" (Female, 16 years old)*

### **Learning from failure**

Failure is a real part of working adolescents' lives, but they spoke of learning from their experiences.

*"I'd had enough. I'm not the same guy...That was terrible, but I have learned. Sometimes I think that if failures didn't happen, I would not be here, maybe I was a dead man." (Male, 18 years old)*

### **Decision making & problem-solving**

The study participants tried to identify and select alternative decisions/solutions based on their values or preferences. This theme appeared to relate also to their flexibility.

*"When I want to decide my life, it is important to understand what I want? And how can I achieve it?" (Female, 14 years old)*

### **Emotional Management**

Working adolescent's lives were full of stressful situations, and they described having to manage their emotions to avoid being hurt. The most popular way to manage their emotions was to talk about their feeling with their close friends.

*"When I am sad, I usually talk to my friends about it. Although they can't do anything for me when I talk to them, I usually feel some sort of relaxation." (Male, 15 years old)*

### **Being hostage to unpleasant feelings**

Some participants acknowledged that they couldn't stop worrying about the future and those bad things that might happen. It was an aggravating thought that they couldn't get rid of.

*"Sometimes I feel that my head is full of bad things. It scares me. It is some sort of restriction. I can't get rid of it. ... I try to*

*free myself but sometimes it is impossible." (Male, 14 years old)*

### **Assertiveness**

Of the 17 participants, only 6 adolescents talked about their ability to be assertive person. The majority of participants reported a passive manner to express their thoughts and feelings to their family and other people, except for their friends.

*"What can I do? Nobody takes me into account. I can't tell them what I think about them." (Female, 13 years old)*

### **Patience**

Almost all of the participants talked about patience and believed that patience is a key element in adapting successfully to the adversity they faced in their lives.

*"Whenever my father whips us, I talk to my sisters that don't worry, be patient. One day it will be over. If we are impatient we can't survive. ...." (Female, 12 years old)*

### **Empathy with the oppressed**

All of the participants thought about other working children. Understanding and empathizing with other working children was easy for them.

*"When I see other working children, I feel sadness and sorrow. I feel that they experience adversity. I want to tell them 'be strong.'" (Female, 16 years old)*

### **Being heard and understood**

Participants emphasized the importance of being heard and understood as a positive motivational factor in being resilient, but they reported being they feel left out and not heard or understood:

*"No one helps me at home even when I am very tired. They [family members] don't listen to me. They don't care about me. They only want the money." (Male, 14 years old)*

### **A caring relationship with family members**

participants believed that caring relationships with family members, especially parents, is a key factor in becoming more resilient. However, almost all participants (94.1%) reported feeling ignored and unsupported by their families:

*“My family members don’t understand me. They even don’t understand what my needs are. We are ignored. ...”* (Female, 17 years old)

### **Support for autonomy and growth**

Participants emphasized the potential role of the family in terms of supporting their growing autonomy to foster resilience; however, they did not feel supported in this in their families:

*“They [family members] not only don’t help me to believe in myself, but they also destroy all of my beliefs. “* (Male, 18 years old)

### **Having friends who are more than a friend**

*“My friends are close to me, more than my brothers and sisters. They are more than a friend. They are true friends. ..., they can’t stand by and watch I am hurting myself; they treat me just like a real mother”* (Male, 16 years old)

### **Care and support from teachers**

*“I like my teachers. They protect me. I am an important person for them. If I need help, they will help me.”* (Male, 15 years old)

### **Safe community**

All participants lived in slums and reported fear of particular people in their neighborhoods, identifying them as thieves, smugglers, criminals, and murderers. As with the family domain, working adolescents were not able to identify many supports in their communities. Two themes

were identified related to the working adolescents' communities, and working adolescents reported a lack of each theme.

*“Have you ever seen a murderer in front of your own eyes? One of my neighbors is a killer. It is fearful.”* (Female, 13 years old)

### **Discussion**

This study presents some of the first data on resilience in working adolescents in Iran. The study revealed that over two-thirds of the study participants (41.2%) had begun working by the age of six, which matches figures reported by the ILO report (2013) that 44% of all child labourers in 2012 were aged 5-11 years. More than half (52.9%) of the participants were immigrants. Participants lived in significant poverty, the majority with a single parent. Few caregivers were educated, employed, or had access to health services. All participants reported regular physical and emotional abuse by a parent, employer, or neighbor, with many reporting being beaten to force them to work. The experiences of abuse replicate the findings of other studies of children working or living on the streets (3).

However, the study participants also showed evidence of skills and capabilities that facilitated their resilience in growing, developing, and making positive choices within the significant limitations imposed by their circumstances. The study findings also highlighted significant deficits in the support available to these adolescents, particularly in the family/caregiver and community domain.

Within the adolescents' 'self' domain, our findings confirm that individual characteristics were the key domain in which the working adolescents identified resilience. While the study participants experienced significant fear and uncertainty in their lives, they also expressed future hopes and goals for their future. Adolescents talked about having patience and endeavor so that their future could be better than their present and their lives purposeful. They expressed confidence and self-esteem in



being able to achieve this. Self-confidence and developing a sense of purpose have been highlighted in the resilience literature as elements that foster resilience (20).

Flexibility and considered risk-taking were also themes that emerged from data. While risk-taking is not commonly seen as a resilience factor, it was identified as important by the participants. It is important to note that the adolescents talked about 'considered' risk-taking rather than reckless behavior. In this highly adverse setting, it may be that risk-taking is necessary to survive or to achieve changes in their life circumstances and thus contributes to resilience (21, 22). Mental flexibility was also identified as a theme and is likely to be related to adolescents considered risk-taking. It has been identified as a particularly important resilience factor among children exposed to violence (23).

Even though the adolescents were extremely limited in their control over their own lives, the findings highlighted their emotional insight in the way they discussed their decision making, problem-solving, and efforts at self-care to promote their health and well-being. There is a positive and strong relationship between problem-solving skills and resilience (24). For these working adolescents, problem-solving is an essential and challenging daily reality, and they acknowledged the complexities.

Patience and empathy with the oppressed were the two themes that emerged in the empathy/tolerance scale. The study participants believed to be patient helped them be calm and more resilient in their lives and look towards the future. In Umberger & Riskos study (2015), participants also talked about patience as being related to positive growth resilience (25). Empathy is an interpersonal factor of resilience (14), and the study participants showed their empathy for other children like them.

It is important to acknowledge that resilience does not mean 'bouncing back' unscathed from ongoing and sustained adversity. Significant early life trauma and sustained adversity and trauma will

necessarily impact any child's behavior, development, and mental health (26). This was highlighted in the adolescents' responses to the "negative cognition" questions. The participants identified themselves as being 'hostage to unpleasant feelings' and found it difficult to stop worrying about the future and the bad things that may happen. In this study, the adolescents identified negative cognition as a barrier to being resilient. It may be that the Assertiveness theme, which emerged under 'Social Skills' similarly, reflected the challenging reality of these working adolescents' lives. Assertive people express their rights, thoughts, and feelings in a non-aggressive way, and it has been associated with resilience in Caribbean adolescents (27).

Resilience factors were also identified in the School and Peer domains for the participants. They were able to identify the school as a safe place and where they received care from their teachers. Schools were the only social institution that provided facilities for working adolescents and their families. However, the teachers who work in these schools do so voluntarily. They are committed to improving the lives of working children. In the context of working adolescents, teacher support and opportunities created by schooling may be a particularly powerful resilience promoting resource (28).

Peers were also identified as extremely important for participants; they spent their leisure time with their friends, experienced happiness in their friendships, and believed their friends are more than 'just friends'. However, the study participants believed they were isolated from the non-working adolescent population due to their different experiences and lives. The importance of relationships with peers may be contrasted with the deficits identified in participant's families and caregivers.

None of the working adolescents reported resilience factors within their family. The study participants expressed their hurt, pain, and alienation within their families. They spoke of being voiceless,

unvalued, not understood, and forced to do harmful things. In this study, the working adolescents presented with a stark lack of family love and support known to be important for resilient outcomes. Similarly, the theme that emerged in the Community domain was lacking for the participants. Research has shown the positive role of community support in fostering resilience (29). However, the participants in this study highlighted the fear, insecurity, and loneliness in their communities.

This study's strengths include the six months the researcher spent in the field before beginning data collection. As a consequence, very rich, comprehensive, and unique data were obtained. Participants were diverse in age, gender, work, life experiences, and data saturation. A theoretical framework guided the data analysis, and the findings were submitted to a rigorous group consultation process.

### **Study limitations**

The present study has some limitations in that the sample comprised adolescents from only one geographical urban region of Iran. Adolescents in different regions and settings may respond differently, and the results of this study may not be broadly generalizable to rural adolescents.

### **Conclusion**

Working adolescents in this study showed strengths and vulnerabilities in their resilience. Despite all vulnerabilities, working adolescents identified many individual resilience factors. In general, individual, peer, and school factors were more evident than family and community factors in fostering resilience among working adolescents.

### **Application for nursing practice**

The current study's findings are applicable to nurses who work in community settings to improve their knowledge and develop their community-oriented practice. Child protection is the

nurse's responsibility. Many of the nurses' roles regarding this, such as supporting families, parenting education, and service development (30), need to establish the context elements. Considering the family's inefficiency in fostering resilience among working adolescents, which is revealed by the current study findings, the community nurses' role is to develop an educational program, support the parents, and collaborate with non-governmental organizations are working in the child labour field.

### **Conflict of interest**

The authors declare no conflict of interest.

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### **References**

1. Global Estimates of Child Labour [Internet]. 2017 [cited 11 Jun 2020]. Available from: [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms\\_575499.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_575499.pdf).
2. Krauss A. Understanding child labour beyond the standard economic assumption of monetary poverty. *Cambridge Journal of Economics*. 2017;41(2):545-74.
3. Vameghi M, Rafiey H, Sajjadi H, Rashidian A. Disadvantages of being a street child in Iran: a systematic review. *International Journal of Adolescence and Youth*. 2014;19(4):521-35.
4. Vameghi M, Sajjadi H, Rafiey H, Rashidian A. The socioeconomic status of street children in Iran: a systematic review on

- studies over a recent decade. *Children & Society*. 2014;28(5):352-65.
5. Libório RMC, Ungar M. Children's labour as a risky pathways to resilience: children's growth in contexts of poor resources. *Psicologia: Reflexão e Crítica*. 2010;23(2):232-42.
  6. Artiga S, Ubri P. Living in an immigrant family in America: How fear and toxic stress are affecting daily life, well-being, & health. Menlo Park, CA: Kaiser Family Foundation. 2017.
  7. Ayón C, Becerra D. Mexican immigrant families under siege: The impact of anti-immigrant policies, discrimination, and the economic crisis. *Advances in Social Work*. 2013;14(1):206-28.
  8. Nishimi K, Choi KW, Cerutti J, Powers A, Bradley B, Dunn EC. Measures of adult psychological resilience following early-life adversity: how congruent are different measures? *Psychological medicine*. 2020:1-10.
  9. Katz J, Mercer SH, Skinner S. Developing Self-concept, Coping Skills, and Social Support in Grades 3–12: A Cluster-Randomized Trial of a Combined Mental Health Literacy and Dialectical Behavior Therapy Skills Program. *School Mental Health*. 2019:1-13.
  10. Huang CC, Chen Y, Cheung S, Greene L, Lu S. Resilience, emotional problems, and behavioural problems of adolescents in China: Roles of mindfulness and life skills. *Health & social care in the community*. 2019;27(5):1158-66.
  11. Wagnild GM, & Collins, J. Assessing Resilience. *Journal of Psychosocial Nursing*. 2009;47(12):28-33.
  12. Masten AS. Ordinary magic: Resilience processes in development. *American Psychologist*. 2001;56(3):227-38.
  13. Cicchetti D, Lynch M. Toward an ecological/transactional model of community violence and child maltreatment: Consequences for children's development. *Psychiatry*. 1993;56(1):96-118.
  14. Gartland D, Bond L, Olsson CA, Buzwell S, Sawyer SM. Development of a multi-dimensional measure of resilience in adolescents: the Adolescent Resilience Questionnaire. *BMC medical research methodology*. 2011;11(1):134.
  15. Pasyar S, Rezaei S, Mousavi SV. Stress-coping Strategies, Attachment Styles, and Resiliency of Working Children in Tehran, Iran. *Child indicators research*. 2019;12(3):1083-105.
  16. Kibiswa NK. Directed qualitative content analysis (DQICA): A tool for conflict analysis. *The Qualitative Report*. 2019;24(8):2059-79.
  17. Slocum B. Pragmatics and legal texts: how best to account for the gaps between literal meaning and communicative meaning. *The pragmatic turn in law: inference and interpretation in legal discourse*. 2017:119-44.
  18. Hsieh H-F, Shannon SE. Three approaches to qualitative content analysis. *Qualitative health research*. 2005;15(9):1277-88.
  19. Grodal S, Anteby M, Holm AL. Achieving Rigor in Qualitative Analysis: The Role of Active Categorization in Theory Building. *Academy of Management Review*. 2020(ja).
  20. Wang K, Kong F. Linking Trait Mindfulness to Life Satisfaction in Adolescents: the Mediating Role of Resilience and Self-Esteem. *Child Indicators Research*. 2020;13(1):321-35.
  21. Fergus S, Zimmerman MA. Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annu Rev Public Health*. 2005;26:399-419.
  22. Zinn ME, Huntley ED, Keating DP. Resilience in adolescence: prospective self moderates the association of early life adversity with externalizing problems. *Journal of Adolescence*. 2020;81:61-72.
  23. Fritz J, de Graaff AM, Caisley H, Van Harmelen A-L, Wilkinson PO. A systematic review of amenable resilience factors that moderate and/or mediate the relationship between childhood adversity and mental health in young people. *Frontiers in psychiatry*. 2018;9:230.
  24. Fayyad J, Cordahi-Tabet C, Yeretian J, Salamoun M, Najm C, Karam E. Resilience-promoting factors in war-exposed adolescents: an epidemiologic study. *European child & adolescent psychiatry*. 2017;26(2):191-200.
  25. Umberger WA, Risko J. "It didn't kill me. It just made me stronger and wiser": Silver Linings for Children and Adolescents of Parents with Chronic Pain. *Archives of Psychiatric Nursing*.
  26. Cicchetti D. Resilience under conditions of extreme stress: a multilevel perspective. *World Psychiatry: Official Journal Of The*

***Resilience factors among working adolescents***

World Psychiatric Association (WPA). 2010;9(3):145-54.

27. Fayombo GA. The relationship between personality traits and psychological resilience among the Caribbean adolescents. *International Journal of Psychological Studies*. 2010;2(2):p105.

28. Mishra R, Sondhi V. Fostering Resilience among Orphaned Adolescents through Institutional Care in India. *Residential*

*Treatment for Children & Youth*. 2019;36(4):314-37.

29. Luthar SS, Kumar NL, Benoit R. Toward fostering resilience on a large scale: Connecting communities of caregivers. *Development and psychopathology*. 2019;31(5):1813-25.

30. Lee H-M, Kim J-S. Predictors of intention of reporting child abuse among emergency nurses. *Journal of pediatric nursing*. 2018;38:e47-e52.