Resilience Analysis in the Teen Stage: An Approach to the Situation of Schools in the Basque Country

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Abstract:
The incessant social, cultural and economic changes in which society is immersed, does require developing coping skills towards change that allow teenagers to successfully develop as active subjects of society. Within this framework, the school environment is considered an ideal scenario to work resilience in the adolescent stage. Based on these considerations, the objective of this research is the approach to the reality of adolescents and their resilience. For this reason, a descriptive analysis is carried out with 193 teenagers from various schools in the Autonomous Community of the Basque Country (CAPV). The results show significant differences in resilient capacities related to the age and sex of the participating adolescents.

Keywords: Resilience, adolescence, formal education.

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INTRODUCTION

The term resilience is applied in different contexts, generally to refer to the abilities that individuals have to face in adversity scenarios. Grotberg (1995) already defined resilience as the ability of a person to face and overcome the adversities that occur in his life, and he referred to environmental and personal factors. Along these lines, Suriá (2012, 2015) points out that it is a protective factor that people have in difficult life situations, such as being diagnosed and treated with a chronic illness, or the loss of a loved one. In addition, considered resilience experts such as Barudy (2013) affirm that “resilience is the ability to succeed in an acceptable way for society, despite a stress or adversity that normally implies a serious risk of negative results” (p.56).

However, for Connor & Davidson (2003), resilience is a multidimensional construct. These authors aim to identify the degree of individual resilience, considered as a positive personality characteristic that allows the individual to adapt. But does resilience vary according to people’s vital stage?

On the one hand, placing ourselves in adolescence, Rutter (1993) already defined resilience as the set of characteristics of teenagers who do not have emotional or behavioral problems despite having been subjected to experiences of stress. In this sense, these adolescents, despite the adversities suffered, configure individual resistance responses and emerge stronger. That is, resilience, far from being the ability to deny a problem, is the ability to face and overcome, even transforming it into a positive one (Vanistendael, 1995). From this perspective, resilience focuses on social skills because it is a component to achieve socio-emotional development and because it favors school learning (Dascanio et al., 2015). Thus, resilience and social skills constitute two of the fundamental aspects in the development of the human being to face adversity on a personal, academic, family, work or social level (Donayre, 2017). Despite the absence of an agreed definition on the term of social ability, there is a general agreement on the fact that, when talking about social skills, we refer to a set of learned behaviors (Caballo, 2002).

On the other hand, adolescence is a relatively modern criteria that we must differentiate from puberty, since puberty is a biological event related to statistical criteria. However, adolescence is a broader process in which apart from psychological changes, psychosocial and emotional changes also occur. Adolescence was defined as a specific phase in the cycle of human life from the second half of the last century, being linked to political, economic, cultural changes, industrial and educational development, and the gender approach (Pineda & Aliño, 2002). The World Health Organization [WHO] (2011) understands that adolescence occurs between the ages of 10 and 19 in two phases, early adolescence (10-14 years) and late adolescence (15-19 years).

At this stage of life, the changes and evolutionary tasks that must be faced make adolescence a complicated and difficult period for young people, featuring empirical
evidence of increased emotional and depressive problems, increasing antisocial activities in some cases (Kraaij et al., 2003). However, not all people are affected equally by the stressors since the natural variability of the individual response has to do with certain mechanisms of vulnerability that can be explained in terms of resilience or resistance to adversity (Oliva, Jiménez, Parra, & Sánchez, 2008).

Several studies show that at this stage of transition there are risk factors linked to alcohol and drug use, early sexual practices or school violence (Gutiérrez & Romero, 2014; Corchado, Díaz-Aguado, & Martínez, 2017). At the same time, there are protective factors being those that mitigate or moderate risk factors on behavior and that can be of two types: the assets that are linked to internal factors such as self-esteem, and so-called resources that are located outside the individual such as family support, peer group or school (Rutter, 2006; Fergus & Zimmerman, 2005). In this sense, resilience materializes as a result when the teenager successfully exceeds the risk exposure (Corchado et al., 2017).

Likewise, in addition to the result, resilience is also identified with behavior; In the school years, adolescents develop relational social skills such as greeting, receiving criticism or expressing opinions, to do favors, a sense of humor, integrating into groups or considering points of view among others. Specifically, the most important personal qualities that facilitate resilience have been described as: a) consistent self-esteem b) positive coexistence, assertiveness, altruism c) flexibility of thought, creativity d) emotional self-control, independence e) self-confidence, feelings of self-efficacy and self-worth, optimism f) locus of internal control, initiative g) sense of humor h) morality. These and other individual characteristics associated with resilience are not innate but come from education, therefore, can be learned (Higgins, 1994; Melillo 2002).

A recent study indicates significant differences between boys and girls, showing higher resilience scores in boys (Fínez & Morán, 2017). This data is not trivial since adolescents who show resilient behavior patterns avoid problematic behaviors influencing academic achievement. Therefore, teenagers who develop social skills such as resilience are more competent, responding to school demands (Donayre, 2017; Dascanio et al., 2015; Dowswell & Chessor, 2014).

Taking into account the incessant social and cultural changes of recent years, the school environment becomes a privileged space to work resilience in the adolescent stage (Olmo-Extremera & Segovia, 2018). Certainly, the school constitutes one of the spaces of socialization that acquires more power in the construction of its own identity. Likewise, different authors (Arguedas & Jiménez, 2009; Gaxiola, González, & Gaxiola, 2013) point out that formal education in the adolescent stage influences the development process of the individual and his/her future as a citizen, as well as helps to achieve necessary tools for the integral development of his/her person.
Besides, all adolescents who attend schools could suffer or may suffer traumatic, painful and even sometimes incomprehensible situations in their lives. That is why the classrooms must not only constitute spaces where teaching-learning processes are carried out, but they must facilitate and stimulate the construction of social skills such as resilience. Indeed, the development of resilience in the school environment can come together as a novel educational paradigm in which the educational community focuses on the promotion of protective mechanisms that provide students with coping tools in adverse situations (Acevedo & Mondragón, 2005). The promotion of these protection mechanisms contributes to the development of the resilient spirit of school children, whether they are in a difficult and adverse situation, or not. The results of various studies indicate that children have more internal protective factors as well as young adults, while adolescents and the middle adulthood group have got more than external protective factors (Rua, 2018; Gonzalez-Arratia & Valdez, 2013).

In short, the school, as a promoter of well-being, should favor the strengthening of resilience, so that teenagers can develop behaviors associated with it and become responsible, committed and happy citizens. That is to say, the process of building resilience should not only contribute to better academic performance, but should contribute to the improvement of the intrapersonal and interpersonal skills of adolescents, making them able to emerge strengthened for the adversities that may arise throughout their life cycle.

Based on the above assumptions, the purpose of this research focuses specifically on a descriptive analysis of resilience in the school context of the Autonomous Community of the Basque Country (CAPV), north of Spain, to get closer to the reality and obtain significant data that help us to elaborate Educational Programs.

**METHOD**

**Participants**

The participants of this research were a total of 193 adolescents from two schools of the Basque Country (Autonomous Community of the Basque Country), 71% (n = 137) of the participants came from the public school and 29% (n = 56) from the private school. The ages of the participants were between 12 and 17 years of age (M = 1.52, DT = .51) and with a mean and standard deviation in terms of sex; M = 1.55, DT = .50. Of the total of the sample, 92.5% were born in the Basque Country and the rest were from other communities in Spain or even abroad.

**Instruments**

of the following dimensions: (1) persistence-tenacity-self-efficacy (personal perception of effectiveness); (2) control under pressure (ability to protect one’s integrity); (3) adaptability and support networks (family as support network); (4) control and purpose (determine existential purposes and their quality of control); and (5) spirituality (understood as the search for meaning). The questionnaire is intended for adolescents and adults with the application time being 10 minutes. The instrument consists of 25 items (e.g., “I try my best to achieve anything”; “I can reach my goals” or “I know how to seek help when I need it”), which are presented in a 5-point Likert format scale where: 1 = “totally false”, 2 = “rather false”, 3 = “sometimes true”, 4 = “often true”, 5 = “almost always true”.

In the beginning, the test was used primarily in the evaluation of resilience in people with a diagnosis of post-traumatic stress, although later its use was extended, currently becoming one of the most widely used international scales when evaluating the builder of resilience (Henley, 2010).

In relation to each dimension, reliability shows lower α indices than taking it as a whole (total resilience): persistence-tenacity-self-efficacy α = .78; control under pressure α = .67; adaptability and support networks α = .66; control and purpose; α = .51 and spirituality α = .51.

**Process**

The approval of the Ethics Committee of the UPV / EHU [M10 / 2016/158] was obtained for the investigation. In order to manage the resilience scale and thus identify and describe the phenomenon itself among the participants, a first contact is made with the two schools via email and telephone (2017-2018). Once the directors of both centers are interested, they go to administer the tests to the participating teenagers via Google forms. On the day of the collection of the sample, informed consent was collected by the relatives of the participants, the participants themselves and the directors of the resources. Highlight that, for data collection, all the fees established by Organic Law 15/99 of Protection of Personal Data were followed. In addition, the voluntary nature of their participation was reported.

**Analysis of data**

The data analysis have been carried out using the statistical package SPSS v.25, several of the data have been categorized for further analysis (sex and age). Before beginning the analyzes, the assumptions of normality and homoscedasticity of variances have been verified, for the subsequent decision making to the use of parametric or non-parametric tests. In this case, the sample size is greater than 30 elements and a normal behavior will be assumed by the central limit theorem, which are confirmed with asymmetry and kurtosis indices that do not significantly depart from 0. As for the analyzes performed, highlight that they have been performed, descriptive analysis of the sociodemographic data of the
frequency in the responses of the items in addition to observing if significant differences occur in the scores of the resilience subscales according to sex and age. For this last, test $t$ from student have been performed for independent samples. Finally, and with the sum of the total resilience (the whole of the subscales), an analysis is carried out to observe the interaction of the total resilience taking into account both sex and age.

**RESULTS**

*Descriptive data of the sample*

The sociodemographic data of the sample have been categorized, in terms of sex, 54.9% ($n = 106$) were girls and 45.1% ($n = 87$) were boys. In relation to age, 47.7% ($n = 92$) are adolescents aged 12 to 14 years and 52.3% ($n = 101$) adolescents between 15 and 17 years of age.

In relation to the items that have been most frequently answered by these and these teenagers are the following: "I take pride in my achievements". The first item belongs to dimension (1) persistence-tenacity-self-efficacy (personal perception of effectiveness). Note that these items have been answered among Likert responses (1-5) with an average higher than 4.16 in the total sample.

*Resilience based on sociodemographic variables*

The following Table 1 shows, on the one hand, the different subscales of total resilience and gender differences. In this way, it can be seen how there are statistically significant differences between the persistence-tenacity-self-efficacy dimensions, specifically boys ($M = 32.11, DT = 4.46$) who show a higher average than girls ($M = 30.73, DT = 4.66$).

<table>
<thead>
<tr>
<th>VD</th>
<th>Sex</th>
<th>n</th>
<th>$M$</th>
<th>$DT$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence-tenacity-self-efficacy</td>
<td>Boy</td>
<td>87</td>
<td>32.11</td>
<td>4.46</td>
<td>1.52</td>
<td>.038*</td>
</tr>
<tr>
<td></td>
<td>Girl</td>
<td>106</td>
<td>30.73</td>
<td>4.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control under pressure</td>
<td>Boy</td>
<td>87</td>
<td>24.13</td>
<td>4.10</td>
<td>2.44</td>
<td>.140</td>
</tr>
<tr>
<td></td>
<td>Girl</td>
<td>106</td>
<td>23.25</td>
<td>4.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaptability and support networks</td>
<td>Boy</td>
<td>87</td>
<td>20.15</td>
<td>3.05</td>
<td>.99</td>
<td>.187</td>
</tr>
<tr>
<td></td>
<td>Girl</td>
<td>106</td>
<td>19.60</td>
<td>3.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control and purpose</td>
<td>Boy</td>
<td>87</td>
<td>12.00</td>
<td>2.05</td>
<td>.30</td>
<td>.319</td>
</tr>
<tr>
<td></td>
<td>Girl</td>
<td>106</td>
<td>11.71</td>
<td>1.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spirituality</td>
<td>Boy</td>
<td>87</td>
<td>5.91</td>
<td>1.57</td>
<td>.95</td>
<td>.474</td>
</tr>
<tr>
<td></td>
<td>Girl</td>
<td>106</td>
<td>6.10</td>
<td>2.04</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$p < .05$*
Therefore, Table 2 shows, the different subscales of the total resilience and the differences according to age categorized (12-14 and 15-17 years), again showing significant differences in persistence-tenacity-self-efficacy, specifically younger adolescents, 12-14 years ($M = 32.13, DT = 4.40$) and those showing a higher average than older adolescents ($M = 30.73, DT = 4.66$).

Table 2  
Subscales of age-based resilience

<table>
<thead>
<tr>
<th>VD</th>
<th>Edad</th>
<th>n</th>
<th>M</th>
<th>DT</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence-tenacity-self-efficacy</td>
<td>12-14</td>
<td>92</td>
<td>32.13</td>
<td>4.40</td>
<td>2.67</td>
<td>.008*</td>
</tr>
<tr>
<td></td>
<td>15-17</td>
<td>101</td>
<td>30.52</td>
<td>4.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control under pressure</td>
<td>12-14</td>
<td>92</td>
<td>24.83</td>
<td>3.90</td>
<td>.59</td>
<td>.556</td>
</tr>
<tr>
<td></td>
<td>15-17</td>
<td>101</td>
<td>23.48</td>
<td>4.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaptability and support networks</td>
<td>12-14</td>
<td>92</td>
<td>20.27</td>
<td>2.89</td>
<td>1.93</td>
<td>.055</td>
</tr>
<tr>
<td></td>
<td>15-17</td>
<td>101</td>
<td>19.41</td>
<td>3.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control and purpose</td>
<td>12-14</td>
<td>92</td>
<td>11.91</td>
<td>2.04</td>
<td>.54</td>
<td>.592</td>
</tr>
<tr>
<td></td>
<td>15-17</td>
<td>101</td>
<td>11.76</td>
<td>1.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spirituality</td>
<td>12-14</td>
<td>92</td>
<td>6.15</td>
<td>1.89</td>
<td>1.02</td>
<td>.308</td>
</tr>
<tr>
<td></td>
<td>15-17</td>
<td>101</td>
<td>5.88</td>
<td>1.80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$p < .05*$

Resilience based on sex and age

The following analysis shows the interaction according to the sex and age of the participants in the sample. In this way, the interaction between total resilience and independent sex and age variables is observed together. As can be seen in Figure 1, the interactions of both variables together do not show significant differences, $F (1,189) = .13, p < .91$, however, separately, the age variable is the one that shows significant results with the total resilience, $F (1,189) = 4.26, p < .040$. 
The results reveal that as age increases, resilience shows lower scores. That is, the degree of resilience could be decreasing as age increases. Certainly, as it has been shown through the results obtained in the present study, adolescents between 12 and 14 years of age, in terms of the persistence-tenacity-self-efficacy dimension, show higher scores than the teenagers of the 15 to 17 year old section. In addition, when the interaction of total resilience with sociodemographic variables is performed, it is age that shows significant differences. It should be noted that there are not many previous investigations that allow us to establish causal relationships between the age variable and resilience. However, we could say that our findings are in correspondence with the scientific literature, since there are several investigations that point to this relationship, so it is expected that, at an older age, the resilience of adolescents will be lower (Bragado, 2010). Therefore, it can be affirmed that age is a variable that must be taken into account as recent studies do (Rua, 2018).

Regarding the sex variable, as shown in the results of this study, it is boys who have higher scores than girls in the dimension of persistence-tenacity-self-efficacy (Fínez & Morán, 2017). In fact, statistically differences were found significant regarding gender; however, they point out the opposite to other previous studies, where resilience is shown to be greater in women (González-Arratia et al., 2009; Morales & Díaz, 2011).

Therefore, it is persistence-tenacity-self-efficacy, the dimension of resilience that shows significant differences in both sex and age. This dimension aims to analyze the persistence of tenacity and self-efficacy of people to achieve their goals, so that this result
may be linked to what Vanistendael (1995) already commented, that is to say, the ability to overcome adversity and transform it into positive.

This study affirms the need to work on resilience in the different educational programs, being that, as Caballo (2002) pointed out, human beings are “social animals” that we spend much of our time in interaction with other people, that is why our lives is partially determined by the range of our social skills. In this way, resilience can be worked to help people find key points in their future integral development, as pointed out by some authors (Arguedas & Jiménez, 2009; Gaxiola et al., 2013). In short, it seems especially relevant to continue the development of research focused on studying the variables linked to the resilience and emotional health of people in general.

Finally, highlight how through this preliminary study an approach has been made to the social ability of resilience in adolescence, in order to obtain significant data that help us design and implement Educational Programs and guide us in future lines of investigation.

**CONCLUSION**

Resilience framed within social ability is a behavior that can be learned and therefore taught. In this sense, we put the focus on education to influence in the different stages of adolescence so as to they could enter strengthened into adulthood. In addition, we find in the Educational Programs the key to developing this capacity in an equitable way in the different sexes avoiding the culture of the gender roles established.

In order to achieve this objective, we consider a key point designing and developing Educational Programs implemented on a consolidated theoretical foundation. In addition, to achieve structured programs from the empirical base it is necessary to expand the sample.

Regarding the limitations of the present study, we would like to point out that it is a preliminary study conducted only in a particular autonomous community, and with a reduced sample statistically. However, it helps to have a vision of the phenomenon studied and to have it as a reference for future studies.

Being the case of a preliminary study conducted only in a particular autonomous community, the results obtained are only descriptive and with a small sample size, this can sometimes create biases in the study. The analyzes have been used to evaluate the scale used as well as the dimensions that compose it, in order to verify reliability. However, since it does not show many statistically significant results, it is proposed to use this same reduced scale of 10 items to identify predictive variables that can help identify resilience in the classroom.
REFERENCES


