Lumen International Conference Logos Universality Mentality Education Novelty (LUMEN 2013)

Relationships between Resilience, Self-Efficacy, and Thinking Styles in Italian Middle Adolescents

Elisabetta Sagonea *, Maria Elvira De Carolia

Abstract

The relationships between resilience and self-efficacy, resilience and thinking styles, and self-efficacy and thinking styles were examined in 130 Italian middle adolescents. We applied the Generalized Self-efficacy Scale (Sibilia et al., 1995), the Scholastic Self-efficacy Scale (Pastorelli et al., 1998), the Resilience Scale (Wagnild & Young, 1993), and the Thinking Style Inventory (Sternberg & Wagner, 1992). Results showed that the more the adolescents experienced high levels of resilience, the more they felt themselves able to cope with novelty in various domains of life, especially in scholastic context, and the more they tended to use almost all thinking styles. Significant correlations were noted between generalized and scholastic self-efficacy and thinking styles: the more the adolescents perceived themselves able to cope with stressful events, also at school, the more they adopted almost all thinking styles. Future research could deepen the relationships between sense of coherence, subjective well-being, and thinking styles.

Keywords: Resilience; thinking styles; self-efficacy;

1. Introduction

The focus of the present study has been represented by the analysis of the relationships between three relevant psychological dimensions recently explored by scholars in several and different fields of interest, e.g. mental health promotion, human development in life span, interpersonal relationships, and creativity (Putton & Fortugno, 2006; Castelli, 2011): resilience, self-efficacy, and thinking style. The first concept is referred to both the ability to successfully cope with change, misfortune or adversity (Wagnild & Young, 1993; Garmezy, 1996) and the

* Corresponding author. Tel.: +39-0952508021.
E-mail address: esagone@unic.it
dynamic process of overcoming the negative effects of risk experience with positive outcomes (Rutter, 1985) and avoiding the negative trajectories associated with these risks (Olsson, Bond, Burns, Vella-Broderick, & Sawyer, 2003). The second concept, that is, the perceived self-efficacy (Bandura, 1986), is defined as the belief of a person in his or her ability to organize and execute certain behaviors that are necessary in order to produce given attainments (Bandura, 1997). The last concept is referred to the thinking styles, that are related to “habitual patterns or preferred ways of doing something consistent over long periods of time and across many areas of activity” (Sternberg & Grigorenko, 2001, p.2). On the basis of recent empirical findings and the reduced deepening of the aforementioned psychological dimensions in Italian adolescents, the purpose of the current paper was to explore the relationships between resilience and self-efficacy, resilience and all thinking styles (according to Sternberg and Wagner’s theory), and self-efficacy and all thinking styles in a sample of middle adolescents.

2. Literature review

The analysis of scientific literature permitted to the authors to deepen the definitions and measures used in order to study the topics of this paper, that is, resilience, self-efficacy, and thinking style. In relation to the first one, Wagnild and Young (1993) defined the resilience as “a personality characteristic that moderates the negative effects of stress and promotes adaptation” and operationalized the measurement of the following five components of resilience in the first 25-item version of Resilience Scale for adults: 1) equanimity, that is, the balanced viewpoint of one’s life and experiences; 2) perseverance, that is, the persistence in spite of adversity and the willingness to continue the struggle to reconstruct one’s life; 3) self-reliance, that is, the ability to recognize personal strengths and limitations; 4) meaningfulness, that is, the understanding that life has a purpose and the estimation of one’s contributions; 5) existential aloneness, that is, the awareness that each individual’s life path is unique. These components have been grouped in two main factors: personal competence (e.g. self-reliance, independence, invincibility, mastery, resourcefulness, and perseverance) and acceptance of self and life (e.g. adaptability, flexibility, and balanced perspective of life). Subsequently, an unique factor has been considered in the version of Resilience Scale adapted to adolescents (Rew et al., 2001; Ahern et al., 2006). This dimension has been examined in different countries, using various measures applied to individuals from childhood to adulthood (Resilience Scale: Wagnild & Young, 1993; Dispositional Resilience Scale: Prati, 2010; Connor-Davidson Resilience Scale: Connor & Davidson, 2003; Resilience Scale for Adults: Friborg et al., 2003; Resilience Process Questionnaire: Laudadio, Fiz Pérez, & Mazzocchetti, 2011).

Several researchers found that resilient individuals were better at coping with difficulties, at adopting the hardiness in traumatic experiences and using problem solving strategies (Connor, Davidson, & Lee, 2003), expressed higher levels of optimism (Lee et al., 2008), perceived themselves as more supported by friends and their family (Kenny et al., 2002), and reported lower levels of hopelessness and loneliness (Karatas & Cakar, 2011) than non-resilient individuals. In addition, the more the individuals reported high levels of resilience, the more they perceived themselves efficient (Schwarzer & Warner, 2013), also in academic context (Kanevsky, Cork, & Frangkiser, 2008). In relation to this last dimension, it is possible to distinguish the dimension of “generalized self-efficacy” and the “specific self-efficacy”: the former is referred to the belief in one’s competence to cope with a broad range of stressful situations or challenging demands (Schwarzer, 1994; Schwarzer & Jerusalem, 1995), while the latter is considered as the belief in one’s ability to handle specific tasks (Caprara, 2001).

The efficacy beliefs influence the type of activity people choose to engage in, the levels of effort they spend, and their perseverance in the face of adversities: this assumption emphasized domain-specificity, suggesting that there are relationships between beliefs concerning personal ability in a specific task and the concrete realization of this task. Specifically, the more the individuals perceived themselves efficient in scholastic or academic performance, the more they tended to apply various thinking styles (Saroghad, Rezayee, & Masoumee, 2010;
Negahi, Ghashghaeizadeh, & Hoshmandja, 2012). For example, in a group of pre-university students in Shiraz, Saroghad et al. (2010) demonstrated the existence of significant relationships between self-efficacy and thinking styles (except for the introvert and holistic thinking styles) and, specifically, in a group of female students. More recently, in a sample of humanities and engineering students, Negahi and his colleagues (2012) found positive relationships between the judicial and legislative thinking styles and academic self-efficacy, but negative relationships between the executive thinking style and academic self-efficacy.

Thinking styles have been studied in Sternberg’s Theory of Mental Self-Government and this theory proposed that thinking styles are included in the five following dimensions that are similar to facets of government (Sternberg, Grigorenko, & Zhang, 2008): functions (legislative, executive, and judicial styles), forms (monarchic, hierarchic, oligarchic, and anarchic styles), levels (global and analytic styles), scopes (internal and external styles), and leanings (liberal and conservative styles). For the functions, individuals with the legislative style tend to solve problems in their own way, establish what to do and how to do it, and choose situations that they have never experienced; individuals who tend to use the executive style are prone to follow established rules and value problems that are pre-structured and prefer to solve problems by following other’s supervision; individuals with the judicial style are well-disposed toward the evaluation of existing rules and the critique of others’ work. With reference to the forms, individuals who adopt the monarchic style are focused exclusively on single activities of interest; individuals with the hierarchic style recognize the need to view problems from several perspectives establishing setting priorities; individuals with the oligarchic style show the tendency to consider simultaneously several goals of equal importance, but have difficulty with control of the conflicting demands; individuals with the anarchic style tend to handle problems randomly, contrasting the rigidity of systems. For the levels, individuals who use the global style choose to deal with large issues rather than details, while individuals with the analytic style have a preference for working with concrete problems and details. For the scopes, individuals with the internal style are more introverted and task oriented, but less socially sensitive, while individuals with the external style tend to benefit by working with the others. Finally, for the leanings, individuals with the liberal style look for the opportunities to go beyond existing rules and to maximize change, while individuals with the conservative style tend to prefer to follow existing rules, avoid unknown situations, and minimize change.

Thinking styles have been related to other psychological dimensions: e.g. academic achievement, personality traits, resilience, sense of purposefulness (Cano-Garcia & Hughes, 2000; Zhang, 2002; Fjell & Walhovd, 2004; Ahangar, 2010). For example, in a sample of university students from Hong Kong, Zhang and Sternberg (2001) found that students with significantly higher scores on Type I thinking styles (including the legislative, judicial, global, hierarchical, and liberal styles) reported significantly higher levels of self-esteem; by contrast, students with higher scores on Type II thinking styles (including the executive, analytic, monarchic, and conservative styles) reported lower levels of self-esteem.

3. Methodology

3.1. Hypotheses

In the present study, we predicted that: 1) adolescents with high levels of resilience will perceive themselves as more efficient in general and scholastic situations than adolescents with low levels of resilience; 2) adolescents with high levels of resilience will adopt the legislative, anarchic, analytic, internal, and liberal styles more than the others; 3) adolescents with high levels of self-efficacy both in general and in scholastic context will use the legislative, anarchic, analytic, internal, and liberal styles more than the others. Differences for sex and age will be examined.
3.2. Sampling

The sample of this study was composed by 130 Italian middle adolescents (70 boys and 60 girls), aged from 13 to 15 (M=14.1, sd=.80), randomly chosen among the students attending two Public High Schools at Catania (Sicily, Italy). The original sample was formed by 140 middle adolescents, balanced for sex, but some of them returned the incomplete questionnaire and were excluded (that is, ten girls) by the total sample.

3.3. Measures and procedure

The Resilience Scale (RS: Wagnild & Young, 1993) was formed by 10 items each valuable on a 7-point Likert scale (α=.70) ranging from 1 (strongly disagree) to 7 intervals (strongly agree). This scale measured the ability to cope with adversity and unfamiliar events. Score ranged from 10 to 70 points.

The Generalized Self-efficacy Scale (GSES: Sibilia, Schwarzer, & Jerusalem, 1995) consisted of 10 items on a 4-point Likert scale (α=.77) ranging from 1 (not at all true) to 4 intervals (exactly true) and was used to assess the general sense of perceived self-efficacy in order to predict coping with daily hassles as well as adaptation after experiencing all kinds of stressful life events. Score ranged from 10 to 40 points.

The Scholastic Self-efficacy Scale (SSES: Pastorelli, Caprara, & Bandura, 1998) was used to analyze the perceived self-efficacy in scholastic context and it included 12 items each valuable on a 5-point Likert scale (α=.81) ranging from 1 (not at all efficient) to 5 intervals (completely efficient). Score ranged from 12 to 60 points.

The Thinking Style Inventory (TSI: Sternberg & Wagner, 1992) was used to explore the 13 different types of thinking styles and consisted of 104 items on a 7-point Likert scale. Participants were asked how well each item described them on a 7-point Likert scale ranging from 1 (does not describe me at all) to 7 intervals (describes me very well). Cronbach’s alpha coefficients ranged from .75 to .83.

4. Data analysis

The data examination was carried out using the SPSS 15 with Pearson’s linear correlations and t-tests. Sex and age were used as independent variables and mean scores of resilience, generalized and scholastic self-efficacy, and types of thinking style as dependent variables. We divided participants in two sub-groups in relation to mean scores reported in resilience, generalized self-efficacy, and scholastic self-efficacy: high levels (n=62; 47.7%) vs. low levels (n=68; 52.3%) of resilience; high levels (n=54; 41.5%) vs. low levels (n=76; 58.5%) of generalized self-efficacy; high levels (n=60; 46.2%) vs. low levels (n=70; 53.8%) of scholastic self-efficacy.

5. Results

Descriptive analyses showed that all adolescents reported medium-high levels of resilience (range 25-67; M=52.4, sd=7.2), high levels of generalized self-efficacy (range 16-40; M=30.2, sd=4.7), and medium-high levels of scholastic self-efficacy (range 23-55; M=39.3, sd=7.3). These data indicated that the adolescents valued themselves moderately able to cope with adversity and to adapt themselves to new and unfamiliar situations, and perceived themselves as highly able to cope with demands especially deriving from scholastic context.

In relation to the different thinking styles, descriptive analyses indicated that the legislative (M=4.92, sd=.91), external (M=4.75, sd=1.01), monarchic (M=4.54, sd=.87), and liberal thinking styles (M=4.49, sd=.96) were widely adopted by adolescents, while the oligarchic (M=3.87, sd=.87), analytic (M=3.94, sd=.99), and conservative thinking styles (M=3.99, sd=1.13) were scarcely used. It meant that the adolescents were more likely to solve problems in their own way, establish what to do and how to do it, analyze exclusively single activities of interest, prefer to work with the others and look for the opportunities to go beyond rigid rules and
cope with the change. By contrast, they were less likely to consider simultaneously several goals of equal importance and control the conflicting demands, and to refuse to work with details and concrete problems, avoiding unfamiliar situations.

Results showed positive correlations between resilience and generalized self-efficacy \((r_{130}=.59, p<.001)\), and resilience and scholastic self-efficacy \((r_{130}=.36, p<.001)\): the more the adolescents experienced high levels of resilience, the more they felt themselves able to cope with novelty in various domains of human functioning and especially in scholastic context (Tab.1).

| Types of self-efficacy      | Levels of resilience | Means | Std. Deviat. | T-tests |
|----------------------------|----------------------|-------|--------------|---------|
| Generalized self-efficacy   | Low                  | 28.13 | 4.45         | -6.01*  |
|                            | High                 | 32.48 | 3.74         |         |
| Scholastic self-efficacy    | Low                  | 36.97 | 6.59         | -3.94*  |
|                            | High                 | 41.77 | 7.30         |         |

* Level of significance for \(p<.001\)

Significantly positive correlations between resilience and different types of thinking style were found: in fact, the more the adolescents experienced high levels of resilience, the more they tended to use mainly the legislative \((r_{130}=.45, p<.001)\), executive \((r_{130}=.34, p<.001)\), judicial \((r_{130}=.24, p=.005)\), oligarchic \((r_{130}=.25, p=.005)\), anarchic \((r_{130}=.34, p<.001)\), analytic \((r_{130}=.27, p=.002)\), internal \((r_{130}=.21, p=.016)\), and liberal thinking styles \((r_{130}=.32, p<.001)\) (Tab.2).

| Types of thinking style      | Levels of resilience | Means | Std. Deviat. | T-tests |
|------------------------------|----------------------|-------|--------------|---------|
| Legislative style            | Low                  | 4.60  | .88          | -4.54*  |
|                             | High                 | 5.27  | .80          |         |
| Executive style              | Low                  | 4.44  | .88          | -3.08** |
|                             | High                 | 4.67  | .92          |         |
| Judicial style               | Low                  | 3.90  | .98          | -2.90** |
|                             | High                 | 4.39  | .96          |         |
| Monarchic style              | Low                  | 4.41  | .98          | -1.78   |
|                             | High                 | 4.68  | .73          |         |
| Hierarchic style             | Low                  | 4.17  | .80          | -1.99   |
|                             | High                 | 4.49  | .99          |         |
| Oligarchic style             | Low                  | 3.63  | .84          | -3.38** |
|                             | High                 | 4.13  | .83          |         |
| Anarchic style               | Low                  | 3.85  | .79          | -3.48*  |
|                             | High                 | 4.39  | .81          |         |
| Global style                 | Low                  | 3.96  | .83          | -1.75   |
|                             | High                 | 4.23  | .96          |         |
| Analytic style               | Low                  | 3.69  | .89          | -3.10** |
|                             | High                 | 4.22  | 1.04         |         |
| Internal style               | Low                  | 3.98  | .84          | -2.48** |
|                             | High                 | 4.43  | 1.22         |         |
| External style               | Low                  | 4.65  | 1.07         | -1.19   |
|                             | High                 | 4.86  | .93          |         |
| Liberal style                | Low                  | 4.22  | .92          | -3.49** |
|                             | High                 | 4.79  | .93          |         |
| Conservative style           | Low                  | 4.00  | .97          | .10     |
|                             | High                 | 3.98  | 1.30         |         |

Levels of significance for * \(p<.001\) and ** \(p<.01\)
Significant correlations were noted between generalized self-efficacy and thinking styles: the more the adolescents felt themselves able to cope with novelty, the more they tended to adopt mainly the legislative ($r_{(130)}=0.44$, $p<.001$), executive ($r_{(130)}=0.25$, $p=.005$), judicial ($r_{(130)}=0.30$, $p<.001$), hierarchic ($r_{(130)}=0.23$, $p=.008$), oligarchic ($r_{(130)}=0.24$, $p=.006$), anarchic ($r_{(130)}=0.45$, $p<.001$), analytic ($r_{(130)}=0.23$, $p=.01$), internal ($r_{(130)}=0.27$, $p=.002$), external ($r_{(130)}=0.24$, $p=.007$), and liberal styles ($r_{(130)}=0.42$, $p<.001$) (see Tab.3).

Table 3. Types of thinking styles and levels of generalized self-efficacy – Total sample ($n=130$)

| Types of thinking style | Levels of generalized self-efficacy | Means | Std. Deviat. | T-tests |
|-------------------------|------------------------------------|-------|--------------|---------|
| Legislative style       | Low                                | 4.58  | .84          | -5.60*  |
|                         | High                               | **5.39** | .77         |         |
| Executive style         | Low                                | 4.21  | .87          | -3.06** |
|                         | High                               | **4.70** | .94         |         |
| Judicial style          | Low                                | 3.81  | .90          | -4.76*  |
|                         | High                               | **4.59** | .95         |         |
| Monarchic style         | Low                                | 4.44  | .89          | -1.58   |
|                         | High                               | 4.68  | .84          |         |
| Hierarchic style        | Low                                | 4.15  | .79          | -2.69** |
|                         | High                               | **4.57** | 1.01       |         |
| Oligarchic style        | Low                                | 3.69  | .83          | -2.81** |
|                         | High                               | **4.11** | .86         |         |
| Anarchic style          | Low                                | 3.79  | .68          | -5.69*  |
|                         | High                               | **4.56** | .84         |         |
| Global style            | Low                                | 3.97  | .78          | -1.86   |
|                         | High                               | 4.26  | 1.03         |         |
| Analytic style          | Low                                | 3.68  | .87          | -3.75*  |
|                         | High                               | **4.31** | 1.05       |         |
| Internal style          | Low                                | 3.93  | .90          | -3.50*  |
|                         | High                               | **4.56** | 1.16       |         |
| External style          | Low                                | 4.57  | .97          | -2.38** |
|                         | High                               | **4.99** | 1.02       |         |
| Liberal style           | Low                                | 4.15  | .86          | -5.20*  |
|                         | High                               | **4.97** | .90         |         |
| Conservative style      | Low                                | 3.91  | .98          | -9.6    |
|                         | High                               | 4.10  | 1.32         |         |

Levels of significance for * $p<.001$ and ** $p<.01$

Furthermore, as reported in Tab.4, the more the adolescents perceived themselves as efficient in scholastic context, the more they tended to use predominantly the legislative ($r_{(130)}=0.31$, $p<.001$), executive ($r_{(130)}=0.45$, $p<.001$), judicial ($r_{(130)}=0.33$, $p<.001$), monarchic ($r_{(130)}=0.22$, $p=.013$), hierarchic ($r_{(130)}=0.39$, $p<.001$), anarchic ($r_{(130)}=0.32$, $p<.001$), analytic ($r_{(130)}=0.32$, $p<.001$), internal ($r_{(130)}=0.22$, $p=.012$), and liberal style ($r_{(130)}=0.32$, $p<.001$).

Table 4. Types of thinking style and levels of scholastic self-efficacy – Total sample ($n=130$)

| Types of thinking style | Levels of scholastic self-efficacy | Means | Std. Deviat. | T-tests |
|-------------------------|------------------------------------|-------|--------------|---------|
| Legislative style       | Low                                | 4.66  | .88          | -3.67*  |
|                         | High                               | **5.21** | .85         |         |
| Executive style         | Low                                | 4.06  | .78          | -5.09*  |
|                         | High                               | **4.83** | .92         |         |
| Judicial style          | Low                                | 3.90  | .90          | -2.91** |
|                         | High                               | **4.40** | 1.04       |         |
| Monarchic style         | Low                                | 4.36  | .92          | -2.52** |
|                         | High                               | **4.74** | .78         |         |
| Hierarchic style        | Low                                | 4.03  | .72          | -4.28*  |
|                         | High                               | **4.67** | .99         |         |
6. Conclusions

The main purpose of this study was to explore the relationships between resilience and self-efficacy, resilience and thinking styles, and self-efficacy and thinking styles for the first time in a sample of Italian middle adolescents. In relation to the first hypothesis, results demonstrated that the adolescents, highly resilient and resistant to adversity and stressful events, perceived themselves as more efficient both in general and in specific scholastic context, compared to the scarcely resilient ones. Confirming the prediction of the second hypothesis, results showed that resilient adolescents were thinkers able to solve concrete problems in their own way, contrasting the rigidity of the system, adopting the task-oriented strategy, and maximizing the change. In addition, resilient adolescent were also thinkers likely to respect the established rules by following others’ supervision, to criticize the others’ performance, and to simultaneously consider several goals of similar importance. In relation to the last hypothesis, results pointed out that the adolescents who perceived themselves as highly efficient both in general and at school were thinkers able to work on tasks that require creative strategies, to follow the established guidelines, to criticize the performance of other people, to view concrete problems from several perspectives, establishing priorities and reducing the incidence of the system, to adopt task-oriented strategies, and to maximize the change of existing norms.

Our findings constituted a further confirmation of the significant role of resilience and self-efficacy in different thinking style also in Italian school context. Resilient adolescents were highly efficient both in general and scholastic context, as recently reported by Schwarzer and Warner (2013); additionally, resilient adolescents were likely to adopt almost all thinking styles, as found in Ahangar’s investigation (2010); finally, adolescents who perceived themselves as efficient in general situations and at school tended to use almost all thinking styles, as recently noted by Saroghad et al. (2012). Results obtained in this paper showed no significant effects for sex and age of participants.

Among the limits of the present study, it is possible to indicate the importance to replicate this investigation with a large number of Italian middle adolescents for the representativeness of the sample and to consider other types of self-efficacy in order to emphasize the role of resilience on other different aspect of self-efficacy. Future research could deepen the relations between other psychological dimensions (e.g. sense of coherence and subjective well-being) and different types of thinking styles.

References

Ahangar, R.G. (2010). A study of resilience in relation to personality, cognitive styles, and decision making style of management students. *Africa Journal of Business Management, 4*, 953-961.
Ahern, N.R., Kiehl, E.M., Lou Sole, M., & Byers, J. (2006). A review of instrument measuring resilience. *Issues in Comprehensive Pediatric Nursing*, 29, 103-125.

Bandura, A. (1986). *Social foundation of thought and action: A social cognitive theory*. Englewood Cliffs, N.J.: Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman & Co.

Cano-Garcia, F. & Hughes, E.H. (2000). Learning and thinking styles: An analysis of their interrelationship and influence on academic achievement. *Educational Psychology*, 20, 413-430.

Caprara, G.V. (2001). *La valutazione dell’autoefficacia*. Trento, Italy: Erickson.

Castelli, C. (2011), *Resilienza e creatività. Teorie e tecniche nei contesti di vulnerabilità*. Milano, Italy: Franco Angeli.

Connor, K.M., & Davidson, J.R.T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18, 76-82.

Connor, K.M., Davidson, J.R.T., & Lee, L. (2003). Spirituality, resilience, and anger in survivors of violent trauma: A community survey. *Journal of Traumatic Stress*, 16, 487-494.

Fjell, A.M., & Wallhovd, K.B. (2004). Thinking styles in relation to personality traits: An investigation of the Thinking Styles Inventory and NEO-PI-R. *Scandinavian Journal of Psychology*, 45, 293-300.

Friberg, O., Hjemdal, O., Rosenvinge, J.H., & Martinsussen, 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, 65-76.

Garmezy, N. (1996). Reflections and commentary on risk resilience and development. In Haggerty, R., Sherrod, L., Garmezy, N., & M. Rutter (Eds.), *Stress, risk and resilience in children and adolescents: Processes, mechanisms and interventions* (pp.1-17). Cambridge: Cambridge University Press.

Kanevska, I., Corke, M., & Frangkiser, L. (2008). The academic resilience and psychosocial characteristics of inner-city English learners in a museum-based school program. *Education and Urban Society*, 40, 492-422.

Karatas, Z., & Oktar, F.S. (2011). Self-esteem and hopelessness, and resilience: A exploratory study of adolescents in Turkey. *International Education Studies*, 4, 84-91.

Kenny, M. E., Gallagher, L. A., Alvarez-Salvat, R., & Silsby, J. (2002). Sources of support and psychological distress among academically successful inner-city youth. *Adolescence*, 37, 161-182.

Laoudadi, A., Fiz Pérez, F.J., & Mazzocchetti, L. (2011). *La resilienza: teorie, modelli e strumenti di misurazione*. Roma: Carocci.

Lee, H.S., Brown, S.L., Mitchell, M., & Schiraldi, G.R. (2008). Correlates of resilience in the face of adversity for Korean women immigrating to the U.S. *Journal of Immigrant and Minority Health*, 10, 415-422.

Negahi, M., Ghashghaeizadeh, N., & Hoshmandja, M. (2012). The survey of the relationship between learning styles and thinking styles with academic self-efficacy in English language among the students of Islamic Azad university of Behbahan. *Journal of Life Science and Biomedicine*, 3, 75-82.

Olsson, C., Bond, L., Burns, J., Vella-Broderick, D., & Sawyer, S. (2003). Adolescent resilience: A concept analysis. *Journal of Adolescence*, 26, 1-11.

Pastorelli, C., Caprara, G. V., & Bandura, A. (1998). La misura dell’autoefficacia percepita in età scolare. *Età evolutiva*, 61, 28-40.

Prati, G. (2010). Proprietà psicometriche della scala della resilienza disposizionale. *Giornale di Psicologia*, 4, 293-300.

Rezayee, A.M., & Masoumee, F. (2010). The relationship between thinking styles and self-efficacy of pre-university male and female students in Shiraz. *Journal of Women and Society*, 1, 135-155.

Schwarzer, R. (1994). Optimism, vulnerability, and self-beliefs as health-related cognitions: A systematic overview. *Psychology and Health: An International Journal*, 9, 161-180.

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy Scale. In J. Weinman, S. Wright, & M. Johnston (Eds.), *Measures in health psychology: A user’s portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.

Schwarzer, R., & Warmer, L.M. (2013). Perceived self-efficacy and its relationship to resilience. In Prince-Embory A., & D.H. Saklofske (Eds.). *Resilience in Children, Adolescents, and Adults: Translating Research into Practice* (pp.139-150). New York: The Springer Series on Human Exceptionality, Springer.

Sibilia, L., Schwarzer, R. & Jerusalem, M. (1995). Italian Adaptation of the General Self-Efficacy Scale: Self-Efficacy Generalized. http://userpage.fu-berlin.de/health/italian.htm

Sternberg, R. J., & Wagner, R. K. (1992). *Thinking Styles Inventory*, Yale University, New Haven, U.S.A.

Sternberg, R. J., & Grigorenko, E. L. (2001). A capsule history of theory and research on styles. In R. J. Sternberg & L. F. Zhang (Eds.), *Perspectives on thinking, learning, and cognitive styles* (pp.1–21). Mahwah, NJ: Lawrence Erlbaum Associates.

Sternberg, R. J., Grigorenko, E. L., & Zhang, Li-F. (2008). Styles of learning and thinking matter in instruction and assessment. *Perspectives on Psychological Science*, 36, 486-506.

Wagnild, G.M., & Young, H.M. (1993). Development and psychometric evaluation of the Resilience Scale. *Journal of Nursing Measurement*, 1, 165-178.

Zhang, L. F., & Sternberg, R. J. (2001). Thinking styles, abilities, and academic achievement among Hong Kong university students. *Educational Research Journal*, 13, 41-62.

Zhang, F.L. (2002). Measuring thinking styles in addition to measuring personality traits? *Personality and Individual Differences*, 33, 445-458.