Impact Of Positive Psychology To Reduce Perceived Stress In Learning With Children With ASD (A Field Study On Teachers In 'Normal' Primary Schools In Jijel)

Pr. Abdelkader Behtane [1], Dr. Salah Boudib [2], Dr. Djamel Kabar [3]

[1,2,3]*Department of psychology, SHS, University, Jijel, Algeria.*
Email: abdelkader.behtane@univ-jijel.dz ;ORCID: 0000-0001-8039-0448

Abstract

Inclusion of children with ASD in "normal" primary schools requires to be ready to facing some difficulties in self-efficacy, self-esteem, well-being and perceived stress and to be aware of the specific needs of children with ASD. We question how positive psychology allow to develop self-efficacy, self-esteem and well-being while reducing perceived stress of teachers of children with ASD in 'normal' primary schools? To answer that question we work out training to positive psychology based on positive emotions, benevolence, talents, strengths, virtues and qualities of teachers of children with ASD in 'normal' primary schools. This training spread on three months by reason of one day per weeks. This allows us to set up a follow-up. Also, we use Ryff Psychological Well-Being Scale, Teacher Self-Efficacy Scale, Self-Esteem Scale and Perceived Stress Scale to a sample of 25 teachers of children with ASD in 'normal' primary schools in Jijel. Our results show that before training, teachers of children with ASD in 'normal' primary schools have a weak self-efficacy, self-esteem, well-being and a high perceived stress. After six months of practice, we note a development of their self-efficacy, self-esteem, well-being and a diminution of their perceived stress. These results are useful to show positive psychology importance. Yet, pedagogy built on positive psychology needs a time of adaptation for teachers of children with ASD in order to obtain some beneficial results in terms of well-being, self-efficacy, self-esteem, perceived stress, mutual aid, autonomy and knowledge of the difference.

Introduction

Inclusion of children with ASD in "normal" primary schools is a goal pursued by institutions and teachers. It not only answers to a parental request but also to answer a principle of equality.

A lot of schools welcome children with ASD creating an educational environment in which they can improve their abilities and help them to social integration.

However, inclusion of children with ASD in "normal" primary schools requires to be ready to facing some difficulties in self-efficacy, self-esteem, well-being and perceived stress and to be aware of their specific needs.

Also, teachers working with children with ASD in 'normal' primary schools face a number of difficulties: lack of knowledge about the condition, need to adapt to difficult behaviours, burnout, lack of support, inadequate training and lack of time. All of these factors have an impact on their self-efficacy, self-esteem, perceived stress and well-being.

Positive psychology (Lopez, & Snyder, 2003; Snyder, & Lopez, 2002) is founded on the expansion of positive emotions like benevolence, kindness, enrichment of forces, virtues, qualities and talents of teachers of children with ASD in 'normal' primary schools.

Problematic

How positive psychology allow to develop self-efficacy, self-esteem and well-being while reducing perceived stress of teachers of children with ASD in 'normal' primary schools?

In order to emphasise to role of positive psychology on these concepts, we set up a training spreads on three months by reason of one day per weeks and based on positive emotions, benevolence, talents, strengths, virtues and qualities of teachers of children with ASD in 'normal' primary schools.

Hypothesis

- Before training to positive psychology, teachers of children with ASD in 'normal' primary schools would have weak scores of well-being, self-efficacy and self-esteem versus à high score of perceived stress.

- Once the training would take place, teachers of children with ASD in 'normal' primary schools would have a high score in self-efficacy, self-esteem and well-being and a weak score of perceived stress.

- Positive psychology helps teachers of children with ASD to develop effective teaching strategies.

Objective and importance of the study

Our aim is to study the role of positive psychology on self-efficacy, self-esteem, the sense of well-being, quality of life and perceived stress of teachers of children with ASD in 'normal' primary schools. To our knowledge, this study is the first focuses on this subject. Our results deepen the current understanding of understand the role of positive psychology in terms of self-efficacy, self-esteem, the sense of well-being, quality of life and perceived stress. Also, this study makes important contributions to the development of positive psychology approach for teachers of children with ASD in 'normal' primary schools.

Concept definitions

Self-efficacy is defined as the individual's belief in his or her ability to perform a type of behaviour according to expected and/or desired results. It is accompanied by a belief system that combines motivation, well-being, experience, personal control, risk involving, group effect and imagination. (Bandura, 1977, 1982; Friedman, 2003)

Self-esteem is defined as the judgement or evaluation one makes of oneself, of one's personal value. (Mills, 2003; Rosenberg, 1965; Schenker, 1985)

Perceived stress refers to disorders experienced by an individual following an unexpected event. It can have an impact on the way one thinks, feels and acts. The effects of stress can be physical (tiredness, increased heart rate); emotional (sadness, anxiety, irritability); behavioural (anxiety disorders, conduct disorders); psychological (forgetfulness, confusion, reminiscence). (Cohen et al., 1983)

Quality of life is defined as a well-being state. It is composed on aggregated dimensions such as economic, environmental, social, political, religious, professional success, marital status, having children, life success varying according to individuals. (Burckhardt, & Anderson, 2003)

Well-being definition, included in quality of life one, refers to a pleasant feeling provided by the satisfaction of various physical and psychological needs. At the same time, it is characterised by having a situation that enables the satisfaction of these same needs in terms of health, social success or self-realisation. This concept is composed of six main factors: autonomy (regulation of behaviour from within), mastery of the environment (control), positive

relationships (ability to create intimate relationships), personal growth (openness to new experiences), life goal (project) and self-acceptance (management of emotions). (Diener, 1984; Goldberg, & Williams, 1988; Huppert, & Whittington, 2003; Michalos, 2014; Ryff, 2006; Veit, 1983)

Positive psychology searches the individuals' optimal functioning. (Caprara et al., 2012; Caprara et al., 2017; Caprara et al., 2009; Caprara et al., 2010; Joseph, & Wood, 2010; Linley et al., 2009; Ruch et al., 2023) It works on the discovery of the forces, qualities, talents, innate or acquired capacities, virtues, interests, abilities, creativity, desire to do good by avoiding evil, benevolence, and positive emotions of the individual. (Lopez, & Snyder, 2003) In other words it applies to prove the role of positive characteristics on individual development focusing on practical based on kindness, perseverance, optimism, tolerance, forgiveness, empathy, curiosity, self-control, quality of life, well-being, self-efficacy, self-esteem, decrease of stress.

Seligman (2002; 2004) suggests that several positive characteristics such as positive emotions, engagement, life sense contribute to individual well-being. We consider them as fundamental values which make a sense to life. Others searchers (Cosden et al., 2006; Fredrikson, 2001; Linley et al., 2009) add optimism allowing to be coherent, satisfied, happy, engaged and resilient facing obstacles and pressures.

In summary, practical application of positive psychology helps individual to discover himself/herself concentring on positive point and not on negative ones in order to purchase his/her personal accomplishment.

Several tools worked out in order to measure the different needed dimensions to personal accomplishment with positive psychology. These tools based on different criteria (presence in several cultures, society valorisation, obvious antonym, being an ideal to reach, which not mean diminution of the other) allow to measure emotional, social and psychological well-being.

Values In Action Inventory (Peterson, & Seligman, 2004) gathers 24 forces: creativity, curiosity, future perspective, mind opening, learning, bravery, kindness, love, persistence, humour, excellence, humility, forgiveness, leadership, team working, social intelligence, vitality, equity, caution, self-control, spirituality, integrity, courtesy, hope.

Clifton Strengths finder (Asplund et al., 2007; Clifton, & Harter,

2003) regroups 34 forces: analyst, self-confidence, activation, futurist, caution, individualisation, intellectualization, charisma, development, command, contribution, communication, realization, importance, connection, positivity, context, maximization, convinced, relation, responsibility, empathy, discipline, arranger, equity, restoration, competition, include, strategy, focalization, adaptation, harmony, studious, idealist.

Realise2 (Govindji, & Linley, 2007; Linley et al., 2009) brings together 60 forces: bounce, adhesion, adventure, courage, projection, competition, gratitude, narration, catalysis, prevention, connection, centring, efficacy, humour, compassion, improvement, empathy, detail, consciousness (Sheier, & Carver, 1985), personalization, link, optimism, resilience, contradiction, incubation, ethical, inheritance, persuasion, optimization, creativity, deepening, engineering, mission, persistence, humility, order, solution, work, conduct, planning, responsibility, explanation, self-conscious, listening, authenticity, conscience, writing, pride, obliging, change, innovation, other acceptance, action, equity, action, judgment, curiosity, improvement, growth.

ASD is a developmental disorder that begins before the age of three and characterised by communication and interactional deficits, restricted abilities, stereotypies, intolerance to change and sensitivity dysfunction. (APA, 2013)

Previous studies

Sense of self-efficacy

Teachers' sense of self-efficacy sends back to the belief that a teacher can have an influence on children's scholar success. Several dimensions come into play in measuring teachers' self-efficacy: adaptation (unexpected events, difficult children), management (time, resources), children personality, experience, etc. (Caprara et al., 2006; Erdem, & Demirel, 2007)

Inclusion of children with ASD in "normal" primary schools is a challenge because this population have special needs. (Ozel et al., 2022)

Some searchers (Gaffney Catalano, 2018; Love, 2016; Love et al., 2019; Nazari, 2020) develops instruments measuring teachers' self-efficacy with child with ASD. They remark a link between high sense of self-efficacy, weak perceived stress and weak need of support.

Self-esteem

Baumeister et al. (2003) show that high self-esteem occasion high performance and well-being.

Fu et al. (2012) show the mediation effect of self-esteem on job burnout and self-efficacy of special education teachers. Their findings reveal that self-esteem has a mediator effect on job burnout and self-efficacy. This study does not correspond to our research theme as it focuses on the job burnout of special education teachers.

Khan et al. (2015) study the role of self-esteem and general self-efficacy in teachers' efficacy in primary schools. They point to the link between self-esteem and self-efficacy. This research is similar to our theme in that it concerns primary schools. However, it does not focus on teachers of children with ASD in 'normal' primary schools.

Şahin (2017) note that emotional intelligence and self-esteem are predictors of teacher self-efficacy. This research is interesting even if it does not deal with our research theme.

Yong et al. (2023) reveal a relationship between self-efficacy, self-esteem and empathy of teachers on autism. This study doesn't correspond to our research because it focuses on teachers' empathy towards child with ASD.

We think that authors included this concept in self-efficacy. Indeed, Bandura (1977), who theorized self-efficacy concept, evokes a link between this latter and self-esteem. Too, we find again this link in definition of these two terms. Self-efficacy refers the beliefs in capacities, while self-esteem is defined as the belief in its own value. Yet, we think that when an individual have confidence in his/her capacities, he/she has equally self-confidence and inversely. In other words, who says self-efficacy says self-esteem, one not going without the other.

Perceived stress

We found three studies (Klassen, & Chiu, 2010; Love et al., 2019; Ogba et al., 2020) regarding teachers' stress. All note that stress plays a role in self-efficacy. However, this role is weighted according to teacher's experience. More teachers will be experienced, less he/she will be stressed.

We impute these few studies that perceived stress of teachers seems to be included in quality of life and well-being studies. Thus, we suppose that perceived stress is link with quality of life and well-being. Effectively, having a good well-being and having a good quality of life means not to suffer from high level of stress. Equally, we think that perceived stress of teachers of children with ASD in

'normal' primary schools would be based on different factors: parental expectations, class management, time management, need for constant adaptation, ignorance of disorder and its symptoms.

Well-being

Studies on teachers' well-being are integrated in quality of life and happiness ones. (Collie, 2014; Michalos, 2014) These ones make a connection between having a good quality of life and being well.

Positive psychology

Literature (Bekhet et al., 2012; Celestine, 2016; Diener et al., 1985; Jarden, 2011; Joseph, & Wood, 2010; Pavot, & Diener, 2008) show that people who have a positive perception of problems they face develop more resources to help themselves and the others.

Some authors (Koegel, & Koegel, 1995) show that positive psychology reduces stress among parents with child with ASD.

In this sense, some training programs, based on positive psychology, have been set up for parents of child with ASD.

These programs have proved useful to reduce stress, anxiety, depression, burnout and develop self-esteem, self-efficacy, well-being and quality of life. (Ananpatiwet, & Blauw, 2016; Diener et al., 2020; Hongngam, 2003; Pongpanich et al., 2012)

Regarding teachers, researchers (Krata, 2013; Lopez, & Snyder, 2003; Swinson, & Harrop, 2012) suggest that positive psychology helps them to develop effective teaching strategies.

For children with ASD, positive psychology helps them to increase social, athletic and academic capacities. (Baker et al., 1998) Some (McEachin et al., 1993) notice that intensive and early approaches have convincing effects on this population.

Tertiary definition

Positive psychology

In our research, we designed by positive psychology a psychological well-being with high level of Self-efficacy (Dellinger et al., 2008), well-being (Ryff, 1989), self-esteem (Rosenberg, 1965) against perceived stress (Cohen et al., 1983) among teachers of children with ASD. Will be designated by the calculated degree (>=average) on the respective scales.

ASD

Our study concerns integrated pupils in relation to their "autism" in "normal" schools.

Procedure

Participant

Our sample (tab. 1) consisted of 35 teachers (15 men, 20 women) of children with ASD in 'normal' primary schools in Jijel.

Table 1: Sample's information

Gender	Frequency
Male	15
Female	20
Total	35

Method

The study objective is to explore the role of positive psychology in the increasing of teachers' self-efficacy, self-esteem, sense of well-being and decreasing perceived stress in learning with children with ASD in 'normal' primary schools in Jijel.

So we set up training to positive psychology based on positive emotion, kindness, talents reinforcement, forces, and qualities of teachers of children with ASD in 'normal' primary schools.

We performed two measurements of each scales: one just before the training, the other after six months of practice.

Tools

Firstly, we set up training spreads on three months by reason of one day per weeks and based on positive emotions, benevolence, talents, strengths, virtues and qualities of teachers of children with ASD in 'normal' primary schools.

Secondly, we use four questionnaires: Ryff Psychological Well-Being Scale (Ryff, 1989), Teacher Self-Efficacy Scale (Dellinger et al., 2008), Self-Esteem Scale (Rosenberg, 1965) and Perceived Stress Scale (Cohen et al., 1983).

Positive psychology training

Training spread on three months for a day per weeks. The choice was on Saturday because this is the only available day. This allowed us to put in place a follow-up of the application of positive psychology and to answer the different questions. Thus, teachers have been able to raise their difficulties and progress made by children.

Program's training built on knowledge of the trouble and its symptoms, teaching strategies, burnout, depression, mediation, stress, positive emotions, benevolence, talents, strengths, virtues, self-esteem, self-efficacy, well-being and quality of life.

It is based on those set up for parents of child with ASD. (Ananpatiwet, & Blauw, 2016; Diener et al., 2020; Hongngam, 2003; Pongpanich et al., 2012)

Ryff Psychological Well-Being Scale

Ryff Psychological Well-Being Scale contains 84 items. It is composed of six factors: autonomy (items 1, 7, 13, 19, 25, 31, 37, 43, 49, 55, 61, 67, 73, 79), environmental mastery (items 2, 81 14, 20, 26, 32, 38, 44, 50, 56, 62, 68, 74, 80), personal growth (items 3, 9, 15, 21, 27, 33, 39, 45, 51, 57, 63, 69, 75, 81), positive relations with others (items 4, 10, 16, 22, 28, 34, 40, 46, 52, 58, 64, 70, 76, 82), purpose in life (items 5, 11, 17, 23, 29, 35, 41, 47, 53, 59, 65, 71, 77, 83), self-acceptance (items 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84). The score is measured by a six-point Likert scale: 1 (strongly disagree), 2 (moderately disagree), 3 (slightly disagree), 4 (slightly agree), 5 (moderately agree), 6 (strongly agree). Items 1, 3, 8, 10, 11, 14, 16, 17, 18, 19, 21, 24, 26, 29, 33, 34, 35, 41, 42, 43, 44, 46, 54, 57, 58, 60, 61, 62, 64, 65, 66, 73, 74, 75, 76, 81, 83, 84 have a reversed score. Weak scores take place from 84 to 168; high scores between 420 and 504.

Teacher Self-Efficacy Scale

Teacher Self-Efficacy Scale includes 15 items. It is distributed in two factors: personal efficacy (items 1, 5, 6, 7, 9, 10, 12, 13, 14, 15) and general efficacy (items 2, 3, 4, 8, 11). The score is measured by a six-point Likert scale: 1 (strongly disagree), 2 (somewhat disagree), 3 (disagree), 4 (agree), 5 (somewhat agree), 6 (strongly agree). Items 2, 3, 4, 8 have a reversed score. Weak scores take place from 15 to 30; high scores between 75 and 90.

Self-Esteem Scale

Self-Esteem Scale contains 10 items. The score is measured by a four-point Likert scale: 1 (strongly disagree), 2 (somewhat disagree), 3 (somewhat agree), 4 (strongly agree). Items 3, 5, 8, 9, 10, representing positive self-esteem, have a reversed score. Weak scores take place from 10 to 20; high scores between 30 and 40.

Perceived Stress Scale

Perceived Stress Scale contains 14 items. The score is measured by a five-point Likert scale: 0 (never), 1 (almost never), 2 (sometimes), 3 (fairly often), 4 (very often). Items 4, 5, 6, 7, 9, 10, 13, providing positive situations, have a reversed score. Weak scores take place from 0 to 14; high scores between 42 and 56.

Results

Table 2: before the training in positive psychology (in %)

	Ryff Psychological Well-Being Scale	Teacher Self-	Self-Esteem Scale	Perceived Stress Scale

		Efficacy Scale		
Weak level	68	89	74	12
High level	32	11	26	88

Table 3: answers purcentage in scales after six practice months

	Ryff psychological Well-Being Scale	Teacher self-efficacy scale	Self-esteem scale	Perceived stress scale
Weak level	31	42	34	75
High level	69	58	66	25

Before training (tab.2), teachers of children with ASD in 'normal' primary schools have a weak score of self-efficacy, self-esteem and well-being and a high score of perceived stress.

After six months of training (tab. 3), levels of well-being, self-efficacy and self-esteem increased while level of perceived stress decrease.

Table 4 : correlations between the three scales of positive psychology and perceived stress

	M(sd)	Ryff psychological Well-Being Scale	Teacher self-efficacy scale	Self-esteem scale	Perceived stress scale
Ryff psychological Well-Being Scale	5.29(.72)	1	.78**	.69**	**-.71***
Teacher self-efficacy scale	4.93(.89)		1	.74**	**-.57***

Self-esteem scale	3.52(.37)			1	**-.62***
Perceived stress scale	1.83(1.3)				1

*<.05; **<.01; ***<.001

Scores (tab.4) are above of average at the level of all scales of teachers psychological well-being, versus weak scores of perceived stress scale.

Results show:

- Very significant positive correlations between Ryff psychological Well-Being Scale and Teacher self-efficacy scale (r$_{(35)}$ = .78 ; p<.01); Ryff psychological Well-Being Scale and Self-esteem scale (r$_{(35)}$ = .69 ; p<.01); Teacher self-efficacy scale and Self-esteem scale (r$_{(35)}$ = .74 ; p<.01)

- Very significant negative correlations between Ryff psychological Well-Being Scale and Perceived Stress (r$_{(35)}$ = -.71 ; p<.01); Teacher self-efficacy scale and Perceived Stress (r$_{(35)}$ = -.57 ; p<.01); Self-esteem scale and Perceived Stress (r$_{(35)}$ = -.62 ; p<.01)

Table 5: correlation between well-being (positive psychology) versus PSS

Subscale	Code	M (sd)	P1	P2	P3	P3	P4	P5	P6	S1	S2	PS
Autonomy	PWBS1	5.5 (.15)	1	.81**	.62**	.53**	.74*	.59**	.66**	.61**	.73**	-.58**
Environmental control	PWBS2	4.8 (.20)		1	.57**	.72*	.61**	.64**	.81**	.59**	.75**	-.71**
Self-growth	PWBS3	3.84 (.31)			1	.65*	.72*	.65**	.59**	.80**	.75**	-.56**
Positive relationships with others	PWBS4	5.23 (.19)				1	.061*	.63**	.64**	.59**	.71**	-.61**

							PWBS5	PWBS6	S-E1	S-E2	SES	PSS
Purpose in life (PWBS)	PWBS5	4.88 (.11)					1	.59*	.47*	.58*	.63*	-.55*
Self-acceptance	PWBS6	4.9 (1.4)						1	.70*	.65*	.66*	-.54*
General efficacy	S-E1	5.47 (.09)							1	.77*	.56*	-.66*
Personal efficacy	S-E2	4.76 (.41)								1	.52*	-.69
Self-esteem scale	SES	3.56 (.08)									1	-.75*
Perceived stress scale	PSS	1.14 (1.78)										1

*<.05; **<.01; ***<.001

Results (tab.5) show significant (intra)correlations (p<.05) between all subscales (autonomy, self-acceptance, personal growth, environmental mastery, purpose in life, positive relations with other, general efficacy, personal efficacy, self-esteem) of psychological well-being.

In the same time, significant (inter) correlation between scales of well-being. (Ryff psychological Well-Being Scale, Teacher self-efficacy scale, Self-esteem scale)

We observe that negative perceived stress is significantly correlate (p<.05) with all subscales of psychological well-being.

Discussion

In accordance with our hypothesis, we observe a difference between before and after the training. Thus, starting from our results, we can affirm that positive psychology helps to increase self-efficacy, self-esteem and well-being and decrease perceived stress of teachers of children with ASD in 'normal' primary schools. Indeed, before training, teachers of children with ASD in 'normal' primary schools have a poor score of self-efficacy, self-esteem and well-being and a heavy score of perceived stress. After six months of training, levels of well-being, self-efficacy and self-esteem enhance while perceived stress

decline. So, we can assert that positive psychology application was be useful for these four dimensions for teachers of children with ASD in 'normal' primary schools.

Feeling of self-efficacy determines as the belief of the individual's ability to accomplish some behaviours expected by the society. (Bandura, 1977, 1982; Friedman, 2003)

Teachers' self-efficacy means teachers' belief that they can have an influence on children's scholar success. It holds different dimensions: unexpected events adaptation, facing children with different personalities, class holding, and time management. (Caprara et al., 2006; Erdem, & Demirel, 2007) For teachers of children with ASD in 'normal' primary schools symptoms management is added: behaviour trouble, stereotypies, adaptation difficulty to change and routine needs. (Baek et al., 2024; Ozel et al., 2022; Yong et al., 2023)

Self-esteem sends back to the judgement of individual's personal value. (Mills, 2003; Rosenberg, 1965; Schenker, 1985)

Searchers (Baumeister et al., 2003; Caprara et al., 2010; Fu et al., 2012; Khan et al., 2015; Şahin, 2017; Yong et al., 2023) reveal the mediator link of self-esteem on self-efficacy. This is confirmed by Bandura (1977) and the definition of these two concepts. This explains that there are not many studies on teachers' self-esteem. All that we can say is more their self-esteem is high, more their self-efficacy is heavy too and vice versa.

Perceived stress settles to psychical disorders experienced by an individual following an unexpected event or because of social pressure. (Cohen et al., 1983)

All studies on teachers' perceived stress (Klassen, & Chiu, 2010; Love et al., 2019; Ogba et al., 2020) notice the role of stress on self-efficacy and self-esteem. Nevertheless, this latter is moderated by teacher's experience.

Quality of life defines a well-being state composed on several dimensions. (Burckhardt, & Anderson, 2003)

Well-being denotes a pleasant feeling provided by needs satisfaction. (Diener, 1984; Goldberg, & Williams, 1988; Huppert, & Whittington, 2003; Michalos, 2014; Ryff, 2006; Veit, 1983)

Well-being and quality of life seem to go together: when someone has a good quality of life, he/she is well and vice versa. (Caprara et al., 2017; Collie, 2014; Csikszentmihalyi, 1990; Diener et al., 2020; Haller et al., 2019; Huppert, & Whittington, 2003;

King, & Napa, 1998; Michalos, 2014; Pavot, & Diener, 2008; Veit, 1983)

Positive psychology points out the individuals' optimal functioning by discovering individual's forces (Asplund et al., 2007; Clifton, & Harter, 2003; Govindji, & Linley, 2007; Linley et al., 2009; Peterson, & Seligman, 2004) and abilities and working on empathy, optimism (Cosden et al., 2006; Fredrikson, 2001; Linley et al., 2009), self-control, quality of life, well-being, self-efficacy, self-esteem and decrease of stress. (Caprara et al., 2012; Caprara et al., 2017; Caprara et al., 2009; Caprara et al., 2010; Joseph, & Wood, 2010; Linley et al., 2009; Lopez, & Snyder, 2003; Ruch et al., 2023; Seligman, 2002; Seligman et al., 2004)

Literature (Ananpatiwet, & Blauw, 2016; Bekhet et al., 2012; Celestine, 2016; Diener et al., 1985; Diener et al., 2020; Hongngam, 2003; Jarden, 2011; Joseph, & Wood, 2010; Koegel, & Koegel, 1995; Pavot, & Diener, 2008; Pongpanich et al., 2012) show that positive psychology has an impact on well-being and quality of life by decreasing stress, depression and burnout.

Besides, our results suggest that positive psychology helps them to develop their self-esteem, their self-efficacy, their well-being and their quality of life, and reduce

their perceived stress. (Krata, 2013; Lopez, & Snyder, 2003; Ozel et al., 2022; Swinson, & Harrop, 2012) Thus, with positive psychology, teachers of children with ASD develop a sense of self-efficacy, self-esteem and well-being.

In our study, we found that it can increase self-esteem and self-efficacy of teachers of children with ASD in 'normal' primary schools. We add that using positive psychology has an impact on the reducing of their perceived stress. We also underline that positive psychology helps them to develop effective learning strategies. (Krata, 2013; Lopez, & Snyder, 2003; Swinson, & Harrop, 2012)

ASD is considered as a developmental disorder characterised by several symptoms such as intolerance to change, restricted abilities, sensitivity dysfunction, stereotypies, communication and interactional deficits. (APA, 2013)

Searchers (Gaffney Catalano, 2018; Love, 2016; Love et al., 2019; Nazari, 2020) show that children with ASD are viewed as the most difficult to teach in "normal" primary schools because of their difficulties and a lack of teachers' knowledge about this disorder.

Positive psychology is viewed to help children with ASD to increase social, athletic and academic

capacities (Baker et al., 1998) with the proviso that it carries out intensively and precociously. (McEachin et al., 1993)

Existing tools for measuring strengths and weakness ensure that all individuals own qualities, virtues, capacities, talents. (Linley et al., 2009; McGrath, 2015; Rhee et al., 2001; Snyder, & Lopez, 2002; Wehmeyer, 2013) It is possible for teachers of children with ASD to motivate these children, increase their competence and develop effective teaching strategies.

Relation between well-being (positive psychology) and perceived stress

When teachers feel competent facing students with ASD (high degree (stat) of self-acceptance, autonomy, work environment adaptation, purpose in life, and positive relation of sufficient personal efficacy), they feel less (stat…) stress.

In the sense, some (Zee, & Koome, 2016) confirm that when positive emotions raise, teachers psychological practically arise. Thus, these individuals feel better when they are aware of the control of their work. (Sheldon, & Lyubomirsky, 2006) They perceive their self-efficacy and their psychological well-being. Yet, theya re better determined in terms of positive psychology.

Teachers enter satisfactory interactions with their environment. (Ryan, & Deci, 2000) According to our results, correlations are significant between element of positive psychology. Teachers are motivated and positive with their environment; they behave with autonomy and efficacy in their relationship with children with ASD; their integration programs reply to their self-esteem need obtaining better negative significant correlations with their perceived stress.

Bandura (1997) asserts that personal skills believes are effective in increasing the level of effort they spend on their work and ensuring their well-being. This would lead them to achieve the expected qualities related to academic success. (Bandura, 1993) In return, Gibson and Dembo (1984) confirm a less anxious and stressed feel, less professional exhaustion according to Chwalisz et al. (1992) and less negative emotional reactions according to Schwerdtfeger et al. (2008).

Positive significant correlation between positive psychology (well-being) and self-efficacy was probed by others searchers. (Klainin-Yobas et al., 2016) From our empirical results, we can confirm that self-acceptance,

autonomy, personal growth, positive relationship with other, environmental mastery, motivation, ambition are together significant correlated (p<.05), which they represent psychological well-being scheme.

Moreover, negative connection with stress (p<.05) allow us to say that positive psychology efficacy is a predictor of the perceived stress decreasing.

Limitations

We can't say if experience plays a role in perceived stress decreasing as highlighted on the subject. (Klassen, & Chiu, 2010; Love et al., 2019; Ogba et al., 2020) We have to do other searches including this parameter.

Pedagogy based on positive psychology needs adaptation time for teachers of children with ASD in 'normal' primary schools.

Conclusion

The findings of the present study contribute to the current literature. Thus they are useful for inform teachers working with children with ASD in 'normal' primary schools and the institution in order that this latter make the necessary to form teachers to care children with ASD.

Effectively, inclusion of children with ASD in 'normal' primary schools has some limits: teachers' depletion, feeling of rejection by the other children. Positive psychology can help teachers and the others children to develop some strategies in order to help children with ASD.

Indeed, positive psychology develop flexibility, judgement modification, means mobilization, self-esteem, well-being and self-efficacy improvement while reducing perceived stress.

In our study, teachers notice the benefits to welcome children with ASD in a "normal" class in terms of transmitting value to others children: mutual aid, autonomy, knowledge of the difference. They put forward the necessity of disposing approaches using positive psychology precociously and intensively in order to limit negative impacts. During training, these latters back up their difficulties according to accompaniment of these children with specific needs, lack of knowledge concerning this trouble and its symptoms, lack of support, lack of time, constant adaptation necessity, burnout risk, facing parental wills.

It would be interesting to put some training programs founded on positive psychology specially studied for teachers on the model of those which existed for parents.

Ethical statement

The authors agree with the ethical standards of publication. They ensure that the research described in manuscript has been carried out in accordance with ethical standards. All data are impersonal.

References

1. Ananpatiwet, S., & Blauw, J. (2016). The Development And Testing Of A Positive Psychology-Based Program For Increasing Happiness Among Parents Of Children With Autism Spectrum Disorder In Thailand. Assumption Journal, 106-121.

2. Apa. (2013). Diagnostic And Statistical Manual Of Mental Disorders: Dsm-5. Washington: American Psychiatric Publishing.

3. Asplund, J., Lopez, S., Hodges, T., & Harter, J. (2007). The Clifton Strengthsfinder® 2.0. Technical Report: Development And Validation. Princeton: The Gallup Organization.

4. Baek, C., Aguilar, S., & Warschauer, M. (2024). Exploring Teachers' Self-Efficacy And Willingness To Provide Accommodations In Teaching Students With Autism: An Intervention Study. Teaching And Teacher Education, 140. Doi: Https://Doi.Org/10.1016/J.Tate.2024.104488

5. Baker, M., Koegel, R., & Koegel, L. (1998). Increasing The Social Behavior Of Young Children With Autism Using Their Obsessive Behaviors. Journal Of The Association For Persons With Severe Handicaps, 23, 300-308.

6. Bandura, A. (1977). Self-Efficacy : Toward A Unifying Theory Of Behavioral Change. Psychological Review, 84(2), 191-215.

7. Bandura, A. (1982). Self-Efficacy Mechanism In

Human Agency. American Psychologist, 37(2), 122-147.

8. Bandura, A. (1993). Perceived Self-Efficacy In Cognitive Development And Functioning. Educational Psychologist, 28(2), 117-148.

9. Bandura, A. (1997). Self-Efficacy: The Exercice Of Control. New York: Freeman.

10. Baumeister, R., Campbell, J., Krueger, J., & Vohs, K. (2003). Does High Self-Esteem Cause Better Performance, Interpersonal Success, Happiness, Or Healthier Lifestyle? . Psychological Science In The Public Interest, 4, 1-44.

11. Bekhet, A., Johnson, N., & Zausznieswski, J. (2012). Resilience In Family Members Of Persons With Autism Spectrum Disorder: A Review Of The Litterature. Issues Of Mental Health In Nursing, 33(10), 650-656.

12. Burckhardt, C., & Anderson, K. (2003). The Quality Of Life Scale (Qols): Reliability, Validity, And Utilization. Health And Quality Of Life Outcomes, 1(60).

13. Caprara, G., Alessandri, G., Eisenberg, N., Kupfer, A., Steca, P., & Caprara, M. (2012). The Positivity Scale. Psychological Assessment, 24(3), 701-712.

14. Caprara, G., Barbaranelli, C., Steca, P., & Malone, P. (2006). Teachers' Self-Efficacy Beliefs As Determinants Of Job Satisfaction And Students' Academic Achievement: A Study At The School Level. Journal Of School Psychology, 44(6), 473-490. Doi: Https://Doi.Org/10.1016/J.Jsp.2006.09.001

15. Caprara, G., Eisenberg, N., & Alessandri, G. (2017). Positivity: The Dispositional Basis Of Happiness. Journal Of Happiness Studies, 18(2), 353-371.

16. Caprara, G., Fagnani, C., Alessandri, G., Steca, P., Gigntesco, A., & Cavalli-Sfoza, L. (2009). Human Optimal Functioning: The Genetics Of Positive Orientation Towards Self, Life, And The Future. Behaviour Genetics, 39, 277-284.

17. Caprara, G., Steca, P., Alessandri, G., Abela, J., & Mcwhinnie, C. (2010). Positive Orientation: Explorations On What Is Common To Life Satisfaction, Self-Esteem, And Optimism. Epidemiologia E Psichiatria Sociale, 19, 63-71.

18. Celestine, N. (2016). 10 Positive Psychology Surveys, Measures, And Questionnaires

From
Https://Positivepsychology.C
om/Positive-Psychology-
Surveys/

19. Chwalisz, K., Altmaier, E., &
Russell, D. (1992). Causal
Attributions, Self-Efficacy
Cognitions, And Coping With
Stress. Journal Of Social And
Clinical Psychology, 11(4),
377-400. Doi:
Https://Doi.Org/10.1521/Jscp.
1992.11.4.377

20. Clifton, D., & Harter, J.
(2003). Investing In Strenghts.
Positive Organizational
Scholarship: Fondations Of A
New Discipline, 111-121.

21. Cohen, S., Kamarck, T., &
Mermelstein, R. (1983). A
Global Measure Of Perceived
Stress. Journal Of Health And
Social Behavior, 24(4), 385-
396. Doi:
Https://Doi.Org/10.2307/2136
404

22. Collie, R. (2014).
Understanding Teacher Well-
Being And Motivation :
Measurement, Theory, And
Change Over Time.

23. Cosden, M., Koegel, L.,
Koegel, R., Greenwell, A., &
Klein, E. (2006). Strength-
Based Assessment For
Children With Autism
Spectrum Disorders. Research
& Practice For Persons With
Severe Disabilities, 31(2),
134-143.

24. Csikszentmihalyi, M. (1990).
Flow: The Psychology Of
Optimal Experience. New
York: Harper Collins.

25. Dellinger, A., Bobbett, J.,
Olivier, D., & Ellett, C.
(2008). Measuring Teachers'
Self-Efficacy Beliefs:
Development And Use Of The
Tebs-Self. Teaching And
Teacher Education, 24(3),
751-766. Doi:
Https://Doi.Org/10.1016/J.Tat
e.2007.02.010

26. Diener, E. (1984). Subjective
Well-Being. Psychological
Bulletin, 95, 542-575.

27. Diener, E., Emmons, R.,
Larsen, R., & Griffiths, S.
(1985). The Satisfaction With
Life Scale. Journal Of
Personality Assessment.

28. Diener, E., Scollon, C., Oishi,
S., Dzokoto, V., & Suh, E.
(2020). Positivity And The
Construction Of Life
Satisfaction Judgments:
Global Happiness Is Not The
Sum Of Its Part. Journal Of
Happiness Studies, 1, 159-
176.

29. Erdem, E., & Demirel, O.
(2007). Teacher Self-Efficacy
Belief. Social Behavior And
Personality, 35(5), 573-586.

30. Fredrikson, B. (2001). The
Role Of Positive Emotions In
Positive Psychology.
American Psychologist, 56,
218-226.

31. Friedman, I. (2003). Self-Efficacy And Burnout In Teaching: The Importance Of Interpersonal-Relations Efficacy. Social Psychology Of Education, 6(3), 191-215. Doi: Https://Doi.Org/10.1023/A:1024723124467

32. Fu, W., Tang, W., Xue, E., Li, J., & Shan, C. (2012). The Mediation Effect Of Self-Esteem On Jobburnout And Self-Efficacy Of Special Education Teachers In Western China. International Journal Of Developmental Disabilities, 67(4), 273-282.

33. Gaffney Catalano, C. (2018). Developing And Validating The Teacher Self-Efficacy For Teaching Students With Autism Spectrum Disorder In Inclusive Classrooms (Tse-Asdi) Scale. (Thesis), Montclair State University, New Jersey.

34. Gibson, S., & Dembo, M. (1984). Teacher Efficacy: A Construct Validation. Journal Of Educational Psychology, 76(4), 569-582.

35. Goldberg, D., & Williams, P. (1988). A Users Guide To The General Health Questionnaire. Windsor: Nfer-Nelson.

36. Govindji, R., & Linley, P. (2007). Strengths Use, Self-Concordance And Well-Being: Implications For Strengths Coaching And Coaching Psychologists. International Coaching Psychology Review, 2(2), 143-153.

37. Haller, R., Kennedy, K., & Capra, C. (2019). The Profession And Practice Of Horticultural Therapy. Boca Raton: Crc Press.

38. Hongngam, G. (2003). The Effect Of Group Counseling Towards Stress Of Parents Of Autistic Children. (Thesis), Mahidol University, Bankok.

39. Huppert, F., & Whittington, J. (2003). Evidence For The Independence Of Positive And Negative Well-Being: Implications For Quality Of Life Assessment. British Journal Of Health Psychology, 8, 107-122.

40. Jarden, A. (2011). Positive Psychological Assessment: A Practical Introduction To Empirically Validated Research Tools For Measuring Wellbeing.

41. Joseph, S., & Wood, A. (2010). Assessment Of Positive Functioning In Clinical Psychology: Theoretical And Practical Issues. Clinical Psychology Review, 30, 830-838.

42. Khan, A., Fleva, E., & Qazi, T. (2015). Role Of Self-Esteem And General Self-Efficacy In Teachers' Efficacy In Primary

Schools. Psychology, 6, 117-125.

43. King, L., & Napa, C. (1998). What Makes Life Good? . Journal Of Personality & Social Psychology, 75, 156-165.

44. Klainin-Yobas, P., Ramirez, D., Fernandez, Z., Sarniento, J., Thanoi, W., Ignocio, J., & Lau, Y. (2016). Examining The Predicting Effect Of Mindfulness On Psychological Well-Being Among Undergraduate Students: A Structural Equation Modelling Approach. Personality And Individual Differences, 91, 63-68. Doi: Https://Doi.Org/10.1016/J.Paid.2015.11.034

45. Klassen, R., & Chiu, M. (2010). Effects On Teachers' Self-Efficacy And Job Satisfaction: Teacher Gender, Years Of Experience, And Job Stress. Journal Of Educational Psychology, 102(3), 741-756. Doi: Https://Doi.Org/10.1037/A0019237

46. Koegel, R., & Koegel, L. (1995). Teaching Children With Autism: Strategies For Initiating Positive Interactions And Improving Learning Opportunities Baltimore: Paul Brookes Publishing Co.

47. Krata, J. (2013). Positive Psychology In Autism Spectrum Disorders. From Https://Autismspectrumnews. Org/Positive-Psychology-In-Autism-Spectrum-Disorders/

48. Linley, P., Harrington, S., & Garcea, N. (2009). Oxford Handbook Of Positive Psychology And Work. Oxford: Oxford University Press.

49. Lopez, S., & Snyder, C. (2003). Positive Psychological Assessment: A Handbook Of Models And Measures. Washington Dc: Apa.

50. Love, A. (2016). Development Of A Self-Efficacy Scale For Teachers Who Teach Kids With Autism Spectrum Disorder. (Thesis), University Of Kentucky, Kentucky.

51. Love, A., Findley, J., Ruble, L., & Mcgrew, J. (2019). Teacher Self-Efficacy For Teaching Students With Autism Spectrum Disorder: Associations With Stress, Teacher Engagement, And Student Iep Outcomes Following Compass Consultation. Sage, 1-8. Doi: Https://Doi.Org/10.1177/1088357619836767

52. Mceachin, J., Smith, T., & Lovaas, O. (1993). Long-Term Outcome For Children With Autism Who Received Early Intensive Behavioral Treatment. American Journal

On Mental Retardation, 97, 359-372.

53. Mcgrath, R. (2015). Character Strengths In 75 Nations: An Update. Journal Of Positive Psychology, 10(1), 41-52. Doi: Https://Doi.Org/10.1080/17439760.2014.888580

54. Michalos, A. (2014). Encyclopedia Of Quality Of Life And Well-Being Research New York: Springer.

55. Mills, D. (2003). Overcoming "Self-Esteem": Albert Ellis Institute.

56. Nazari, N. (2020). Developing And Validating The Teacher Self-Efficacy For Teaching Students With Autism Spectrum Disorder (Tse-Asd) Scale. Journal Of Intellectual Disability, 8, 673-676.

57. Ogba, F., Onyishi, C., Victor-Aigbodion, V., Abada, I., Eze, U., Obiweluozo, P., . . . Onwu, A. (2020). Managing Job Stress In Teachers Of Children With Autism: A Rational Emotive Occupational Health Coaching Control Trial. Medicine, 99(36). Doi: Https://Doi.Org/10.1097/Md.0000000000021651

58. Ozel, E., Cheng Loh, S., Danaee, M., & Bin Azizi, M. (2022). What Is The Effect Of General Education Teachers' Attitudes On Knowledge And Experience On The Education Of Asd Students? Journal Of Positive School Psychology, 6(4), 1869-1887.

59. Pavot, W., & Diener, E. (2008). The Satisfaction With Life Scale And The Emerging Construct Of Life Satisfaction. Journal Of Positive Psychology, 3(2), 137-152. Doi: Https://Doi.Org/10.1080/17439760701756946

60. Peterson, C., & Seligman, M. (2004). Character Strengths And Virtues: A Handbook And Classification. New York: Oxford University Press.

61. Pongpanich, C., Ananpatiwet, S., Ruankratok, P., & Sraethawichaporn, S. (2012). The Effect Of Family Skills Training Program For Parents Of Children With Autism Spectrum Disorder Based On Positive Psychology Approach. The Nurse Alumni Association Of The Ministry Of Public Health, 22(1), 11-25.

62. Rhee, S., Furlong, M., & Turner, J. H., I. (2001). Integrating Strenght-Based Perspectives In Psychoeducational Evaluations. Californai School Psychologist, 6, 5-17.

63. Rosenberg, M. (1965). Rosenberg Self-Esteem.

Society And The Adolescent Self-Image.

64. Ruch, W., Bakker, A., Tay, L., & Gander, F. (2023). Handbook Of Positive Psychology Assessment. Ashland: Hogrefe.

65. Ryan, R., & Deci, E. (2000). Self-Determination Theory And The Facilitation Of Intrinsic Motivation, Social Development, And Well-Being. American Psychologist, 55(1), 96-78.

66. Ryff, C. (1989). Happiness Is Everything, Or Is It? Explorations On The Meaning Of Psychological Well-Being. Journal Of Personality & Social Psychology, 57(6), 1069-1081.

67. Ryff, C. (2006). Psychological Well-Being And Ill-Being: Do They Have Distinct Or Mirrored Biological Correlates? Psychotherapy Psychosomatics, 75, 85-95.

68. Şahin, H. (2017). Emotional Intelligence And Self-Esteem As Predictors Of Teacher Self-Efficacy. Educational Research And Reviews, 12(22), 1107-1111.

69. Schenker, B. (1985). The Self And Social Life. New York: Mcgraw-Hill.

70. Schwerdtfeger, A., Konermann, L., & Schonhofen, K. (2008). Self-Efficacy As A Health-Protective Resource In Teachers? A Biopsychological Approach. Health Psychology, 27(3), 358-368. Doi: Https://Doi.Org/10.1037/0278-6133.27.3.358

71. Seligman, M. (2002). Authentic Happiness: Using The New Positive Psychology To Realize Your Potential For Lasting Fulfillment. New York: Free Press.

72. Seligman, M., Parks, A., & Steen, T. (2004). A Balanced Psychology And A Full Life. Philosophical Transactions Of The Royal Society, 359, 1379-1381. Doi: Https://Doi.Org/10.1098/Rstb.2004.1513

73. Sheier, M., & Carver, C. (1985). The Self-Consciousness Scale: A Revised Version For Use With General Population. Journal Of Applied Social Psychology, 15, 687-699.

74. Sheldon, K., & Lyubomirsky, S. (2006). How To Increase And Sustain Positive Emotion: The Effects Of Expressing Gratitude And Visualizing Best Possible Selves. Journal Of Positive Psychology, 1(2), 73-82. Doi: Https://Doi.Org/10.1080/17439760500510676

75. Snyder, J., & Lopez, J. (2002). Handbook Of Positive

Psychology. New York: Oxford University Press.

76. Swinson, J., & Harrop, A. (2012). Positive Psychology For Teachers. London: Routledge.

77. Veit, C. (1983). The Structure Of Psychological Distress And Well-Being In General Populations. Journal Of Consulting And Clinical Psychology, 51, 730-742.

78. Wehmeyer, M. (2013). The Oxford Handbook Of Positive Psychology And Disability. Oxford: Oxford University Press.

79. Yong, F., Kong, M., & Fe, Y. (2023). Teachers' Self-Efficacy, Self-Esteem, And Empathy On Autism. Innovations(72), 110-123.

80. Zee, M., & Koome, H. (2016). Teacher Self-Efficacy And Its Effects On Classroom Processes, Student Academic Adjustment, And Teacher Well-Being: A Synthesis Of 40 Years Of Research. Review Of Educational Research, 86(4), 981-1015.

Appendix

1	2	3	4	5	6
Strongly disagree	Somewhat disagree	Disagree	Agree	Somewhat agree	Strongly disagree

Ryff Psychological Well-Being Scale

N°	Item	Scale	1	2	3	4	5	6
1	Sometimes I change the way I think or act to be more like the people around me	Autonomy						
2	Generally speaking, I feel in control of the situation I'm in	Environmental mastery						
3	I'm not interested in activities that would open me up to new horizons	Personal growht						
4	Most people see me as loving and caring	Positive relations with others						
5	I feel good when I think about what I've achieved in the past and what I hope to achieve in the future	Purpose in ife						
6	When I look back on my life, I'm happy with the way things have turned out	Self-acceptance						
7	I'm not afraid to voice my opinions, even when they are opposed to those of most people	Autonomy						
8	The demands of everyday life often depress me	Environmental mastery						
9	Generally speaking, I feel I'm learning more and more about myself as time goes by	Personal growht						

10	It was difficult and frustrating to maintain close and intimate relationships with others	Positive relations with others						
11	I live one day at a time without really thinking about the future	Purpose in ife						
12	In general, I'm confident and positive about myself	Self-acceptance						
13	Usually, my decisions are not influenced by what other people do	Autonomy						
14	I feel different from the people and the community in which I live	Environmental mastery						
15	I'm the kind of person who likes to try new things	Personal growht						
16	I often feel alone, as I have few close friends with whom to share my interests and concerns	Positive relations with others						
17	I tend to concentrate on the present, because the future almost always brings me problems. almost always brings problems	Purpose in ife						
18	I think a lot of people I know have got a lot more out of life than I have	Self-acceptance						
19	I tend to worry about what other people think of me	Autonomy						
20	I cope quite well with the responsibilities of everyday life	Environmental mastery						
21	I don't want to try new ways of doing things; my life is fine as it is	Personal growht						

22	I enjoy personal conversations with family and friend	Positive relations with others						
23	I have a direction in life and my life has meaning	Purpose in ife						
24	If I had the chance, there are many things about myself that I would change	Self-acceptance						
25	Feeling good about myself is more important to me than being approved of by others	Autonomy						
26	I often feel overwhelmed by my responsibilities	Environmental mastery						
27	I think it's important to have new experiences that challenge the way we see ourselves and the world	Personal growht						
28	I think it's important to listen when my close friends tell me about their problems	Positive relations with others						
29	My daily activities often seem insignificant and unimportant	Purpose in ife						
30	I like most aspects of my personality	Self-acceptance						
31	I tend to be swayed by people with strong opinions	Autonomy						
32	If my situation made me unhappy, I would take effective steps to change it	Environmental mastery						
33	Come to think of it, I haven't really improved over the years	Personal growht						
34	Not many people want to listen to me when I need to talk	Positive relations with others						

35	I don't really know what I'm trying to achieve in life	Purpose in ife						
36	I've made mistakes in the past but, on balance, I think everything has worked out for the best	Self-acceptance						
37	People rarely persuade me to do things I don't want to do	Autonomy						
38	In general, I take good care of my finances and personal affairs	Environmental mastery						
39	In my opinion, people of all ages are able to continue to grow and develop within themselves	Personal growht						
40	I have the feeling that I'm reaping a lot of my friendships	Positive relations with others						
41	In the past, I used to set myself goals to achieve, but now it seems like a waste of time	Purpose in ife						
42	In many ways, I'm disappointed with what I've achieved in life	Self-acceptance						
43	It's more important for me to be in harmony with others than to be alone with my principles	Autonomy						
44	I find it stressful not to realise all the things I have to do every day	Environmental mastery						
45	Over time, I've come to understand many things about life and this has made me a stronger and more capable person	Personal growht						

46	It seems to me that most people have more friends than I do	Positive relations with others						
47	I like to make plans for the future and work towards realising them	Purpose in ife						
48	On the whole, I'm proud of who I am and how I lead my life	Self-acceptance						
49	I trust my own opinions, even if they go against the general consensus	Autonomy						
50	I'm good at organising my time to fit in all the things that need to be done	Environmental mastery						
51	Over time, I feel I've developed a lot as a person	Personal growht						
52	People would describe me as a generous person willing to share my time with others	Positive relations with others						
53	I'm an active person when it comes to carrying out my projects	Purpose in ife						
54	I envy many people for the life they lead	Self-acceptance						
55	It's difficult for me to voice my own opinions on controversial subjects	Autonomy						
56	My days are very busy, but I get satisfaction from doing everything I have to do	Environmental mastery						
57	I don't like finding myself in new situations that force me to change my usual ways of doing things	Personal growht						
58	I haven't experienced many warm and trusting relationships with others	Positive relations with others						

59	There are people who wander aimlessly through life, but I'm not one of them	Purpose in ife					
60	The attitude I have towards myself is probably not as positive that most people have towards themselves	Self-acceptance					
61	I often change my mind when my friends or family disagree with my decisions	Autonomy					
62	I get frustrated when I try to plan my daily activities because I never manage to do everything I set out to do	Environmental mastery					
63	For me, life has been a continuous process of learning, change and growth	Personal growht					
64	When it comes to friendship, I often feel like I'm apart from everyone else	Positive relations with others					
65	Sometimes I feel like I've done everything there is to do in life	Purpose in ife					
66	Many times I wake up and feel discouraged about the way I've lived my life	Self-acceptance					
67	I'm not the kind of person who gives in to social pressures in the way I think or act	Autonomy					
68	My efforts to find the kind of activities and relationships I need were really fruitful	Environmental mastery					
69	I love realising how much my way of looking at things	Personal growht					

	has changed and matured over the years							
70	I know I can trust my friends and they know they can trust me	Positive relations with others						
71	My goals in life were more a source of satisfaction than frustration	Purpose in ife						
72	The past has had its ups and downs, but in general I wouldn't want to change it	Self-acceptance						
73	I care about how people evaluate the choices I've made in my life	Autonomy						
74	I have difficulty organising my life in a satisfactory way	Environmental mastery						
75	I gave up a long time ago on making major improvements or changes in my life	Personal growht						
76	I find it difficult to really open up when I'm talking to others	Positive relations with others						
77	I find it satisfying to think about what I've achieved in life	Purpose in ife						
78	When I compare myself to friends or acquaintances, I feel good about myself	Self-acceptance						
79	I judge myself on the basis of what I consider to be important, not on the basis of what others consider to be important	Autonomy						
80	I've managed to build a home and a lifestyle that I really enjoy	Environmental mastery						

81	There's truth in the saying that you can't teach an old monkey to make a face	Personal growht						
82	My friends and I sympathise about our respective problems	Positive relations with others						
83	All in all, I'm not so sure my life counted for anything	Purpose in ife						
84	Everyone has their weaknesses, but I seem to have more than others	Self-acceptance						

Teacher Self-Efficacy Scale

1	2	3	4	5	6
Strongly disagree	Somewhat disagree	Disagree	Agree	Somewhat agree	Strongly disagree

N°	Item	Scale	1	2	3	4	5	6
1	When a student does better than usual, it's often because I've made a little extra effort	Personal efficacy						
2	The hours spent in classroom have little influence on the students compared to the influence of their family environment	General efficacy						
3	A student's ability to learn is essentially linked to family background	General efficacy						
4	If students have no discipline at home, they are unlikely to accept any discipline	General efficacy						
5	When a student is having difficulty with an assignment, I can usually able to adapt it to the student's level	Personal efficacy						
6	When a student gets a better mark than usual, it's usually because usually because I've found more effective ways of teach them	Personal efficacy						
7	When I really try, I can overcome the most difficult students	Personal efficacy						
8	What a teacher can achieve is very limited because a student's home environment has a major influence on his or her performance at school	General efficacy						
9	When my students' grades improve, it's usually because	Personal efficacy						

	because I've found more effective teaching methods							
10	If a student quickly masters a new mathematical concept, it may be because I knew the steps involved in teaching that concept	Personal efficacy						
11	If parents looked after their children more, I could do more myself	General efficacy						
12	If a student can't remember the information I gave them in the previous lesson, I'll know what to do in the next lesson to make sure they do	Personal efficacy						
13	If a pupil in my class is noisy and disruptive, I'm sure I know some techniques for calling him or her to order	Personal efficacy						
14	If one of my students was unable to complete a task, I would be able to accurately assess whether the task was too difficult	Personal efficacy						
15	Even a teacher with teaching skills can have no influence on many students	Personal efficacy						

Self-Esteem Scale

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

N°	Item	1	2	3	4
1	I feel that I'm a person of worth, at least on an equal plane with others				
2	I feel that I have a number of good qualities				
3	All in all, I am inclined to feel that I am a failure				
4	I am able to do things as well as most other people				
5	I feel I do not have much to be proud of				

6	I take a positive attitude toward myself				
7	On the whole, I am satisfied with myself				
8	I wish I could have more respect for myself				
9	I certainly feel useless at times				
10	At times I think I am no good at all				

Perceived Stress Scale

0	1	2	3	4
Never	Rarely	Sometimes	Often	Always

N°	Items	0	1	2	3	4
1	Have you been upset because of something that happened unexpectedly?					
2	Have you felt that you were unable to control the important things in your life					
3	Have you felt nervous and "stressed"?					
4	Have you dealt successfully with irritating life hassles?					
5	Have you felt that you were effectively coping with important changes that were occurring in your life?					
6	Have you felt confident about your ability to handle your personal problem?					
7	Have you felt that things were going your way?					
8	Have you found that you could not cope with all the things that you had to do?					
9	Have you been able to control irritations in your life?					
10	Have you felt that you were on top of thing?					
11	Have you been angered because of things that happened that were outside of your control?					
12	Have you found yourself thinking about things that you have to accomplish?					
13	Have you been able to control the way you spend your time?					
14	Have you felt difficulties were piling up so high that you could not overcome them?					