Extroversion Personality Traits for Stress Management and Attitude Towards Climate Change Among Teacher Counsellors in Secondary Schools in Kakamega County Kenya

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Abstract

Climate Change is a global issue that touches the lives of all human beings, each with a different outlook while affecting their different personalities. This study examines the relationship between extroversion personality trait stress management and attitude towards climate change among teacher counsellors in secondary schools in Kakamega County Kenya. The study was guided by The General Adaptation Syndrome theory of stress management and Seligman's 3Ps theory of resilience. Correlation survey design was used. The population was 327 teacher counsellors in secondary schools. The proportionate, purposeful and simple random sampling designs were used to select 181 teacher counsellors. Data was collected using questionnaires adopted from the Big Five Inventory (BFI) tool with its published reliability coefficient of 0.8, and the Ego-Resiliency Scale (ER89) with its published reliability coefficient of 0.76. A pilot study was done in neighbouring Bungoma County. Content validity as well as expert opinion from psychology department Laikipia University was used to verify the validity of the instruments. Data collected was analysed using Pearson's correlation with the aid of Microsoft Excel statistics. Data was presented in frequency tables, graphs and charts. The study findings showed a strong relationship between extraversion and stress resilience. Extroverts were found to be oriented towards nature conservation for a safe environment. The results also showed that Extroverts with their social interrelating motivated others into climate change intervention behaviour. Extroverts were involved in societal civic engagements that educated others on matters of climate change control. The study indicated that extrovert teachers had high levels of stress management and positive attitude towards climate change because they openly shared their views on contemporary and other concerns. This conflicted with introverts who were found to be self-isolating and reserved. The study results are expected to assist teacher counsellors to understand the significance of personality traits and how they can use them to influence climate change.

Keywords: Climate change, extroversion, personality trait, stress resilience

Introduction

Personality traits are a significant asset in every individual's life (De Terte, 2014). A person's traits are the mark of their identity. An individual's behaviour, their inclinations and their habitual reactions reveal their nature. Personality traits are displayed in daily engagements, and are the source of the strength that enables an individual to perform competently at work (Darkwah, 2014). Personality traits help the individual to manage their reactions in emerging situations such as climate change. Climate change refers to the alterations evident in the ecosystem resulting from

natural occurrences or from human activities (Mongonia, 2022). Personality traits strengthen the individual's self-management in readiness to climate change adaptation. Human behaviour which is very significant in counselling is among the major elements that affect climate change. This study examines the relationship between extroversion personality trait for stress management and the attitude towards climate change among teacher counsellors in secondary schools in Kakamega County Kenya. Extroversion is one of the big five personality traits which are the major traits under which every individual falls (Fayambo, 2010). The rest of the big five personality traits are; neuroticism, openness, agreeableness and conscientiousness.

The purpose of this study was to investigate whether extroversion as a personality trait that influences the development of the teacher counsellors' stress management could empower them to embrace and instil positive attitude towards climate change in the communities within the secondary schools. Secondary schools have diverse communities that include the learners (and their parents by extension), the teaching and non-teaching staff, the stakeholders as well as the residents in the school neighbourhood. Teacher counsellors play a very important role in preparing the youth to identify and manage their issues early in life (Oketch & Kimemia, 2012). They handle all the psychological, academic and social issues that are harmful to learners and curtail their self-progression. These issues that harmful to learners include practices that are destructive to the environment thereby contributing to negative climate changes. Counselling plays a big role in the client's connection to nature or individual eco-wellness (Mongonia, 2022). Counselling guarantees individual psychological wellbeing, mental fitness and physical aptness (Nelson-Jones, 2011). It empowers individuals to find acceptance in the society. Teacher counsellors in secondary schools require strong personality traits that will enable them to be stress resilient because they occupy significant positions in school that give them the mandate to propagate a positive attitude towards climate change among their clients within all the school communities.

The big five personality traits have underlying qualities that support and build them. These underlying qualities are adjectives that display the character strength of each individual and reveal their personality. A study by van Aarde et al. (2017) showed that extroverts were rich in positive character. They had characteristics that gave them a positive outlook towards life. Extroverts are gregarious, assertive, energetic, talkative, initiative, outgoing, friendly and agile (Thompson & Goodvin, 2016). They were found to be generally agile and full of life because their underlying qualities made them resilient and be able to manage their stress satisfactorily. Resilience to stress for the extrovert teacher counsellors was seen to be a guarantee for competent counselling services to the learners. Psychology contributes immensely to climate change (Whomsley, 2021) through counselling.

Whomsley explains that psychologists strive to change human behaviour that threatens climate change. They purpose to increase human connection with nature in a positive way to heal both man and the planet. They also provide support and psychological interventions for those affected by climate change. Additionally, they instil preparedness for negative outcomes while helping with adaptation and survival mechanisms. Extroverts have good stress management that motivates the teacher counsellors and gives them high self-esteem. The drive to create positive attitude towards climate change requires aggression and wholesome inclusiveness (APA Task Force, 2011). Extroverts' underlying traits described by Thompson and Goodvin (2016) make them competent in sensitizing the communities within the schools on climate change. These secondary traits empowered the teacher counsellors to steer the communities in secondary schools towards the right direction in the acquisition of positive attitude to climate change. School counselling offered by competent counsellors equipped the clients with the preparedness they

required to confront life's challenges and cope in a changing environment. A serene psychological state will crave and flourish in a serene environment (Morrissey & Riser, 2015). Thus, psychologically comfortable learners, staff and stakeholders will fight for positive climate change.

Secondary school learners, who enjoy competent counselling, transit to their next settings well prepared to function according to societal expectations. With everyone experiencing the bad impact of negative climate change, societal expectations include positive practices that are expected to boost climate change. Resilient teacher counsellors re-directed the attitude of the entire school communities to embracing positive climate change behaviour. Competent counselling earned the teacher counsellor the respect they required to take charge of the behaviour amendments that put controls on the climate change severity (Whomsley, 2021). Counsellors who are extroverts are assertive and outspoken and are able to professionally employ psychological skills to win the clients' trust and inspire behaviour change in favour of a suitable environment.

This paper looks at how personality traits enhance stress management and improves attitude towards climate change for the teacher counsellors in Kakamega County Kenya. Its objective was to determine the relationship between extroversion personality trait for stress management (resilience) and attitude towards climate change among the teacher counsellors in secondary schools in Kakamega County, Kenya. Consequently, the hypothesis stated was as follows:

H_{01} There is no statistically significant relationship between extroversion personality trait for stress management (resilience) and attitude towards climate change among the teacher counsellors in secondary schools in Kakamega County, Kenya.

Theoretical and Conceptual Framework

The study was guided by the General Adaptation Syndrome (GAS) theory of stress management which states that the body responds to stressful situations in three successive stages: the alarm stage; the resistance stage; and the exhaustion stage (Gross, 2015). The individual's awareness of the effect that stress has on them is an indication of the possibility to overcome the stress. The body responds to the stressor using the traits that the individual has within their personality. Adverse outcomes of climate change are stressful and harmful (Tomaka, 1993) to human beings and needs to be overcome through positive personality traits that inspire resilience. Teacher counsellors who are extroverts have supportive traits that enable them to overcome stress. Individuals will thus be encouraged to utilize their traits for the control of stress. They will require social value awareness and understanding (van Lange & Joireman, 2008), so that they direct their behaviour towards the benefit of the majority.

The study was also guided by Seligman's 3Ps theory of Resilience (Yates & Masten, 2004). This theory has its roots in positive psychology which advocates for an optimistic outlook on life. The theory looks at the obstacles that may hinder the growth of resilience in an individual. Seligman derived the title to this theory from the initials of three emotional realities: – Personalization, Pervasiveness and Permanence, which he uses to explain how resilience is emphatically restrained by cognitive distortions in unsuspecting individuals. When the individuals personalise stressful climate change issues and recline in them or accept them as being permanent, then they will make no effort to work towards attaining behaviour change. Considering negative climate change occurrences to be pervasive or inescapable leads to resignation and failure to elevate one's self. There is need to understand climate change risks and take preventive behaviour (Weinstein, 1988).

These two theories encourage the individual to utilize positive character traits to adopt behaviour that will improve situations in the wake of adverse climate change outcomes.

The conceptual framework of this study comprises the concepts that teacher counsellors who are extroverts possess strong underlying traits that render them stress resilient. The underlying traits include gregarious, assertive and outspoken, (Thompson & Goodvin, 2016). Stress resilient teacher counsellors are able to handle climate change repercussions individually and by sensitizing members of the school communities through counselling.

Methodology

The research method that was used in this study was the correlation research design. This is a design that investigates the relationships between variables without any controlling or manipulation (Price et al., 2017). The study concern was to examine the relationship between extroversion personality trait for stress management and attitude towards climate change among teacher counsellors in secondary schools. The data was collected using questionnaires and was analysed within the correlation research design with the aid of Microsoft Excel computer package.

The study was carried out in Kakamega County, Kenya. Kakamega County in Kenya is one among the forty seven counties in the country that has a high number of secondary schools as reported in the MOEST (2019). The schools had teacher counsellors who offered counselling services to the learners as required of them by the Ministry of Education (MOEST, 2016). These same teacher counsellors also taught two subjects as demanded of them by their employer (MOEST 2014), which is the Teachers' Service Commission (TSC). The teacher counsellors were additionally assigned other responsibilities by their administrators, like being a class teacher, co-curriculum teacher or teacher on duty (TOD) alongside the counselling assignments. These created additional tasks that greatly overwhelm teacher counsellors in secondary schools in Kakamega, thus causing them stress and curtailing their involvement in climate change sensitization. Curtailed involvement together with stress had adverse effects on the teacher counsellors. This caused them low self-esteem, poor interpersonal relationship, temperamental reactions and self-isolation (Rokonuzzaman & Rahman, 2011).

The negativities just described impeded the teacher counsellors' authority in spearheading the climate change campaign within the school communities. It is against this background that Kakamega County was chosen for the investigation of the relationship between extroversion personality traits that enabled stress management and how it helped improve attitude towards climate change among teacher counsellors in secondary schools. A pilot study was carried out in Bungoma, a neighbouring County that experienced similar challenges for the teacher counsellors in the secondary schools.

The population of the study consisted of all the teacher counsellors from the 327 sub-county secondary schools in the twelve sub counties demarcated by the Ministry of Education (MOE, 2019) in Kakamega County, Kenya. The sample size of this study was derived from Krejcie and Morgan's (1970) sampling table for fixed population sizes and was found to be 181 out of the 327 schools in the twelve MOE sub-counties. The participants in the study were the teacher counsellors from the 181 sampled schools. These participants were the teachers, who were entrusted with the responsibility of offering counselling services to the learners in those specified schools. The 181 secondary schools total was arrived at through proportionate stratified random sampling. This is an unequal sampling method that was done in proportion of the sample strata in relation to the size of the population identified (Borden & Abbott, 2016).

The specific schools that made up the 181 sample size required were identified through simple random sampling (Law, 2009). This was done by randomly assigning numbers to all the schools in each county then the needed total for that county was randomly picked from the lot of numbered schools. The number that was picked identified the name of the school that was sampled.

The participants for the study were selected from the named schools through the non-probability, purposive sampling procedure which selected participants basing on predetermined criteria as explained by Borden and Abbott (2016). Purposive sampling in this study was pegged on the criterion that the participants were the main persons in charge of the guidance and counselling programme in the selected secondary schools. Data was collected from these participants with the help of research assistants after official permission had been obtained from relevant authorities such as the National Commission for Science, Technology and Innovation (NACOSTI). The questionnaire return after distribution was 100 percent because the research assistants visited the particular schools to administer to only one participant and left the school with the filled in questionnaire. The study was done in adherence to research ethics.

The tools of data collection were the Big Five Inventory (BFI) developed by Naumann and Soto (2008) and the Ego-Resiliency Scale (ER89) that was developed by Block and Kremen (1996). Both tools are peer reviewed and have a published reliability coefficient. In addition, they were subjected to expert opinion from the Psychology department of Laikipia University and tested in a pilot study carried out in the neighbouring Bungoma County.

The data analysis was done by editing, coding and grouping the data collected in relation to the study variables and objectives before examination. The analysed data results were presented in form of frequency distribution tables and charts. They were analysed using Pearson's correlation with the help of the Microsoft Excel. Microsoft Excel was preferred because besides having all the qualities that the otherwise popular Statistical Package for Social Sciences (SPSS) has: - such as being effective and covering a wide range of general statistics and graphic data analysis, -it is contemporary and easy to use, it is also all-encompassing because it can be used for researches of all disciplines. The research was carried out with strict observation of all the moral obligations owing to the social sciences discipline. It was research that was based on one objective and one hypothesis extracted from a larger study that covered all the big five personality traits.

Study Results and Discussions

The results of this study that examined the relationship between extroversion personality traits stress management and attitude towards climate change among teacher counsellors in secondary schools in Kakamega County Kenya, established that there was a strong relation between extroversion as a personality trait for stress management and attitude towards climate change. These findings showed that there was significant relationship between extraversion resilience and attitude towards climate change. Since the P-value of this study was 0.7, only values above 0.7 would allow for the acceptance of the hypothesis. The results of the Pearson's correlation analysis that was carried out in excel on the relation between extroversion resilience and attitude towards climate change was -0.5047 correlation coefficient. This indicated that there was a strong negative correlation between extroversion resilience and attitude towards climate change. Hence, the rejection of the null hypothesis at 0.05 significant level and the conclusion that there was a relationship between extroversion resilience and attitude towards climate change.

The study looked at all the Big Five personality traits and grouped the sampled 181 participants under Extroversion, Neurotic, Openness to experience, Agreeableness and Conscientiousness personalities. This grouping was done because the 181 sampled teacher

counsellors were not only extroverts but they belonged to all the big five personality traits. These five personalities were easily identifiable because the respondents were aware of their supportive traits as mentioned in the questionnaire items and responded to them by indicating whether they were Very Accurate (VA), Moderately Accurate (MA) or Inaccurate (IN) in reference to themselves. Those respondents who had the correct supportive traits that led to the specified major personality trait showed the trait they belonged to. The 181 sampled teacher counsellors were grouped per trait as shown in figure 1.
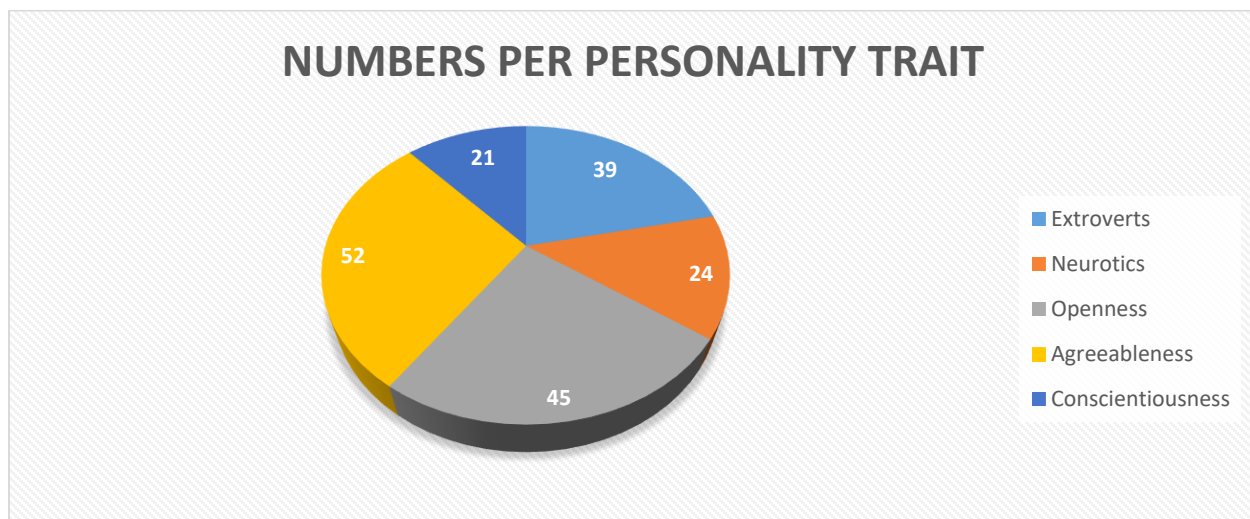

NUMBERS PER PERSONALITY TRAIT

■	Extroverts
■	Neurotics
■	Openness
■	Agreeableness
■	Conscientiousness

21, 39, 24, 45, 52

Fig. 1: Number of Teacher Counsellors per Personality Trait
Source: Field data

Grouping the participants in accordance to the big five personality traits, revealed the supportive traits that the teachers possessed. It revealed the positivity and strength that determined the individuals' potential in directing the communities towards climate change initiatives. The counsellors' world viewpoint as supported by their character, determines their passion for climate change. Human behaviour contributes to climate change and psychology regulates human behaviour through counselling (Swim et al. 2011). Teacher counsellors with resilient personality traits stand a great chance to manipulate the school communities into suitable behaviour change. Swim et al. (2011) also reported that counselling was crucial for mental health restoration during disasters caused by climate change. Climate change leads to natural disasters that generate stress (Morrissey & Riser, 2015). Counsellors must be at hand to instigate behaviour change or journey with the stressed victims. It is important that the individual teachers know their traits because personality traits direct their performance.

A study by Oliver et al. (2008) agrees that traits are very significant in the individual's life. They give the individual the stamina to act. Although personalities are not cast on stone, it is essential that one knows the basic characteristics that one possesses. One must be aware of their character inclinations and utilize them correctly. Weinstein (1988) emphasized understanding climate change risks and adapting preventive behaviour. Counselling informs about the effects of climate change.

Wolf and Weissing (2010) stated in their research findings that the big five personality traits did not have limitations over their underlying traits. They argued that each trait ran into the other and that they were all interrelated due to plasticity and stretching over boundaries. All the five

have positive character but extroversion was endowed with the relevant characteristics (Thompson & Goodvin 2016) for positive behaviour change. Extrovert teacher counsellors have resilience and motivate communities to self-appraisal in relation to preparedness for climate change. They had the characteristics that powered behaviour change that is the major instrument for climate change. The data results revealing the extrovert teacher counsellors' traits that enhance climate change behaviour was found to be as indicated in table 1.

Table 1: Extroverts' Response Frequencies to Behaviour Change Indicators

Traits supporting Extroverts	VA	MA	IN	N/A	DK	Tot
I am very talkative and can easily convince others.	28(73.8)	6	5	0	0	39
I am full of energy and inventiveness.	32(82.1)	4	3	0	0	39
I like to impress others and to stay in the limelight but I fear failure.	14(46.6)	16	9	0	0	39
I am assertive and explorative.	23(59.7)	12	4	0	0	39
I am very friendly, outgoing and sociable.	34(87.2)	5	0	0	0	39
Total Responses	131	43	21	0	0	-

Source: Field data

The data results showed the extroverts' frequency response for being talkative and convincing as 28 (73. 8%).Their being energetic and inventive was 32(82.1%). The data further showed that they were 23 (59.7%) assertive and explorative while 34(87.2%)of them were friendly, outgoing and sociable. These positive characters were found to be relevant for instilling attitude to climate change. The findings were in agreement with the findings of Thompson and Goodvin (2016) which indicated that extroverts had positive underlying adjectives that gave them character strength. These traits empowered the extroverts to influence others to have a view of life that was similar to their own view.

Similar results were posted by Saeed et al. (2018) in their findings that showed extroverts as having a rich positivity that kept them lively and cheerful and at the same time enabled them to cheer up those who were around them as well. Larsen and Buss (2010) also found the extroverts to be charmingly social and to enjoy a charisma that enhanced positive behaviour. They prevailed over community decisions as ambassadors of positive attitude towards climate change.

Extroverts were found to draw their energy from resilience. The data frequencies showed that they were inclined towards resilient practices as indicated in table 2.

Table 2: Extrovert Teachers Resilience Responses

Resilience Indicators	VA	MA	IN	N/A	DK	Total
I quickly get over and recover fast from being startled	32	6	1	0	0	39
I usually succeed in making a favourable impression on people.	35	4	0	0	0	39
I get over my anger at someone reasonably quickly.	27	9	3	0	0	39
I recover from emotional hurts considerably fast and move on.	29	8	2	0	0	39
I like to involve myself in doing new and different things.	16	13	10	0	0	39
Total responses	**139**	**40**	**16**	**0**	**0**	**--**

Source: Field data

Extroverts were found to be self-rejuvenated and in control of their stressors. These results are in agreement with the results that Martinez-Marti and Ruch (2017) found which indicated that there was great affiliation between extroversion and resilience as a distinctive force. The findings are further in agreement with Ercan's (2017) findings that showed that extroversion had many qualities that enriched character strength and improved self-management. This positivity was further supported by observations by Ganu (2014) which proved that extroversion had the predisposition to character strengths that made it more appropriate for the development of resilience and stress management than the rest of the big five personality traits. These positive underlying powers enhanced the teacher counsellors' authority to educate school communities to work towards understanding climate change risks and taking to preventive behaviour change as Weinstein (1988) emphasized.

The data collected for this study indicated that teacher counsellors in secondary schools in Kakamega County, Kenya carried out their services successfully. The frequency results for successful counselling were found as indicated in table 3.

Table 3: Extroversion and Successful Counselling in School

Indicators for Successful School Counselling	VA	MA	IN	N/A	DK	Total
Counselling is highly valued by staff and students in my school	16	15	5	2	1	39
The school administration supports counselling in school	12	9	17	1	0	39
We've many success stories from our counselling department.	26	12	1	0	0	39
Personality traits are very significant for service delivery.	37	2	0	0	0	39
Stress resilience allows for unrestricted navigation of counselling activities.	33	3	2	0	1	39
Total	**114**	**41**	**25**	**3**	**2**	**--**

Source: Field data

The results of the analysed data revealed that teacher counsellors worked competently despite the poor support from the schools' administrations. Many of the teacher counsellors interviewed (26 out of 39) indicated that they had many success stories about the counselling done in their departments. This showed satisfaction from both the client and the therapist. The participants agreed that personality traits were significant in service delivery (37) and that resilience allowed them to carry out counselling activities without restriction (33). These teachers were satisfied with the counselling done in the schools despite the low support from the school administrations. Counselling is core for behaviour change which is basic for climate change.

Findings
This study came up with a number of findings.
1. Everyone has personality traits that enable them to be active. The big five personality traits are the major traits and individuals fall under one of the five. None of the five traits dominates the other.
2. Resilience is essential for the strengthening of the big five traits. Extroversion has strong underlying traits that make it resilient.
3. Resilient extroverts contribute positively to climate change. The extrovert teacher counsellors are very instrumental in addressing climate change issues in the school communities.
4. Psychology, through counselling plays an immense role in climate change.

Conclusions and Recommendations
This study that examined the relationship between extroversion personality traits for stress management and attitude towards climate change among teacher counsellors in secondary schools was carried out in Kakamega County, Kenya. After scrutiny of the results of the analysed data, several conclusions were made.

Extroversion personality trait has strong resilience that gives authority to influencing behaviour change and addressing climate change. The teacher counsellors with extraversion as their major personality trait are able to manipulate their positive supportive traits to achieve counselling prowess that will provide expertise for climate change. Personality dictates reactions. Counsellors with extraversion are able to change human behaviour that threatens climate change. Psychological peace that comes with successful counselling will dictate behaviour that contributes to positive climate change.

The teacher counsellors' self-awareness and the value of the individual's personality traits as evident from the results of this study will empower the counsellor and break the negative effects of overwhelming assignments. They will be able to surmount their responsibilities and take charge of the institutions' climate change activities. This awareness will serve as a call for more teachers to enrol as counsellors in secondary schools and ease the work load.

Secondary school counselling can be a channel for climate change propagation thus more support from the schools' administration is required. The results of the analysed data indicated that counselling in secondary schools is successful. Support from the school administration will generate self-belief and enhance performance. Counselling is behaviour change and behaviour change is climate change.

Climate change interventions require aggression and self-belief. With the synergy which can be easily prompted by resilient extroverts, school counselling can be used as the drive for climate change appraisals, prevention and orientation. They will empower themselves to create

self-belief in the learners and encourage them to work together with the global youth to mitigate climate change challenges.

Extroversion has resilience that enriches the individual towards positive climate change activities. This study came up with a number of recommendations that will enhance climate change mitigations. Climate change be tackled from the individual point of view. Through personal engagements such as counselling, the individual can be made to understand the role they play and the impact of the repercussions on the self. More counselling needs to be involved in climate change and disaster management, and counsellors ought to be encouraged to take charge of climate change situations. Climate change should be linked to psychological peace such that the people equate the danger in neglecting your psychological wellness to the danger of messing with climate change. Everybody should be made aware that climate change does not start with the wild fires from heat waves and El Nino floods but with the litter carelessly thrown from your doorstep. More research should be carried out on factors considered less significant but that contribute to climate change. These may include individual attitudes, family upbringing or emotion interrelation where emotions within the individual should be harnessed by the individual for self-discipline that benefits not just the individual but everybody.

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