

Humour types, assertiveness, self-efficacy, personality, and perfectionism in pre-service teachers

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Abstract

Teachers’ humour has a special place in the educational context with multiple benefits for themselves and their students. As a complex concept, humour is strongly related to individual personality, which is also complex and diverse. The current research aimed to investigate the correlations between four types of humour (affiliative, self-enhancing, aggressive, and self-defeating) and assertiveness, perfectionism, and Big Five personality traits (openness, conscientiousness, extraversion, agreeableness, and emotional stability) in pre-service teachers. The obtained results show that the adaptive type of humour (affiliative and self-enhancing) positively correlated with assertiveness, Big Five personality traits, and the adaptive form of perfectionism, and negatively with the maladaptive form of perfectionism. Also, the maladaptive type of humour (aggressive and self-defeating) negatively correlated with assertiveness, Big Five personality traits, and positively with the maladaptive form of perfectionism. An intriguing finding was the positive correlation between aggressive humour and assertiveness.

Keywords: humour, assertive communication, self-efficacy, personality, pre-service teachers.

1. Introduction

The effects of humour have aroused the interest of specialists for over six decades (Wolff et al. 1934; Brumbaugh 1940). During the 20th century, psychologists show increased interest in analysing and understanding individual differences in humour (Heintz & Ruch 2019) and in its positive effects on health and well-being (Fritz 2020). Humour is defined by Ruch & Hehl (1998: 110) as the ability to make other persons laugh (telling funny stories, jokes, etc.), considering that some individuals have the predisposition to be funny (Zillmann & Cantor 2017: 95). Martin & Ford (2018) claim that the humour of an individual can be conceptualised in

multiple ways, that is, as a personality trait, an attitude, a coping mechanism, an emotion-based temperament, an aesthetic preference, ability and competence, a virtue, and more recently, a character strength that could be frequently found in communication between people (Ruch et al. 2018: 11). People who are considered to have a good sense of humour are perceived as friendly, extrovert, kind, imaginative, and intelligent (Cann & Calhoun 2001).

In investigating humour, it is very important to consider it not in a single dimension (Ruch & Hehl, 1998) but as a multidimensional phenomenon, as highlighted by numerous authors (e.g., Martin et al. 2003; Heintz & Ruch 2019). Martin et al. (2003) proposed a 2 X 2 model of humour, according to which individuals may use both interpersonal and intrapersonal humour in more or less healthy ways. This adaptive/maladaptive dimension was quite ignored by researchers, an aspect that Martin et al. (2003) took into consideration when developing the Humour Styles Questionnaire (HSQ). The HSQ survey assesses two adaptive/positive forms of humour (*affiliative* and *self-enhancing* humour) and two maladaptive/negative (*aggressive* and *self-defeating* humour).

Affiliative humour is described as the tendency of an individual to make jokes with other people, in order to develop a positive relationship (Karahan et al. 2019: 2). Individuals with high scores on this dimension have the tendency to tell jokes, to amuse others, to have positive relationships without tensions (Martin et al. 2003: 53).

Aggressive humour is described as the tendency of an individual to be ironic, to use sarcasm, to criticise others, to manipulate others in order to increase his/her superiority (Martin et al. 2003: 54; Karahan et al. 2019: 2).

Self-enhancing humour is described as the tendency to be amused by the discrepancy of life, although the individual is confronted with stressful situations (Kuiper et al. 1993), to organize emotion, in the sense of using humour as an emotion regulation or as a coping strategy, and to “maintain a humorous outlook on life” (a way of warding off negative feeling, in order to improve the individual’s health and well-being) (Martin et al. 2003: 53).

Self-defeating humour is described as a tendency to make some self-derogatory affirmations and laugh along with other people when ridiculed, with the purpose of becoming accepted by others and of developing positive relationships with them (Karahan et al. 2019: 2-3; Martin et al. 2003: 54).

Other research on the relationship between humour and different personality traits has found that humour is related to self-esteem (Schermer et al. 2021), optimism (e.g., Jiang et al. 2020) extraversion, assertiveness, and cheerfulness (Katz & Wing-Paul 2020), creativity (Ruch & Heintz 2019), well-being (Fritz 2020), perfectionism (DiFabio et al. 2023), and openness to change values (Rad et al. 2019). Despite the fact that a century has passed, one of the questions that has remained unchanged among practitioners and researchers remains: What are the personal characteristics of effective teachers and is humour one of them?

2. Literature review

2.1. Teacher humour

Almost every adult can remember at least one teacher with a good sense of humour who made the courses enjoyable and anticipated by the students. While they are at school, students experience different social situations and a multitude of emotions: they can be happy, bored, interested, and curious (Bieg et al. 2019: 1). The emotions experienced by students in the classroom are relevant for education because it is well known that they influence/affect students’ cognitive processes, self-regulation processes attention, and memory processes (Pekrun & Perry 2014: 125; Pekrun et al. 2018: vii-vii).

Humour was placed by old or recent researchers (Hart 1934; Murray 1983; Rianti et al. 2020) in the top five personality traits, since it influences teacher effectiveness which creates and develops a non-threatening learning environment (Shahid & Ghazal 2019). A possible explanation could be that a humorous teacher seems to be a more humanistic, less rigid/distant person, making learners feel accepted (Chabeli 2008) and, because of this, students could be more inclined to discuss their personal problems with him/her (Aylor & Oppliger 2003). Humour is appreciated by students and teachers, being considered an essential trait for a successful teacher (Jonas 2009). Gao & Liu (2013: 88) described a humorous teacher as an interesting and funny person who jokingly makes the class enjoyable. Also, teachers who can laugh with pupils and not at their pupils are considered very good at keeping classroom discipline, because teachers who accept and encourage the laughter in their classes are viewed by researchers to have fewer problems with classroom control, especially when teachers and students have a very similar social background (Van Praag et al. 2017). In this vein, Chabeli's (2006: 55) affirmation "[i]f we can laugh together, we can learn together" is very appropriate.

Teachers' humour plays an important role in the educational context, with a lot of positive consequences, such as increasing students' performance (e.g., Fabelico & Afalla 2020), students' engagement in online learning (Erdogdu & Cakiroglu 2021), reducing anxiety (Kholmatov 2021), developing a classroom environment for an excellent student learning (Pretorius et al. 2020), maintaining a teachers' good reputation (Lee 2006), removing monotony and boredom, gaining students' attention, intrinsic motivation, staying tuned (Szentes 2020), increasing students' enjoyment and emotion (Bieg et al. 2022), helping students to remember better the information, using a humorous image (Chabeli 2006).

Even though humour is considered a stable trait (Ruch & Hehl 1998), some recent authors argue that teacher humour could be seen as a learnable trait (e.g., James 2007: 3), information which brings a note of hope. Based on this, teacher-training departments play an important role in developing the skills to teach students in a humorous manner, where they can learn to use humour as a pedagogical tool (Szentes 2020: 88, 95). But, in order to become an instructional tool, the humour used by teachers must be related to the learning content (Wanzer et al. 2010) not to the personal aspects. Sometimes humour is not used properly by a teacher and this situation can cause a loss of control (Han & Han 2019), or may be perceived as offensive/humiliating (Frymier & Wanzer 2021).

Additionally, Chabeli (2008) claims that in some situations, inappropriate humour can affect both parties involved in the educational activity, such as decreasing the teacher's credibility and affecting the students' feelings, self-esteem, and attention in the classroom. We can observe that humour could be used as an adaptive coping mechanism (e.g., coping humour; Kfrerer et al. 2022), a defence mechanism (Steir-Livny 2021), or as a "social lubricant" (Neves & Karagonlar 2020: 5).

Humour among teachers is appreciated regardless of the way the classes are held, whether physically or online. Online humour represents a unique form of humour, which takes more of a linguistic form, due to the specific type of interaction that online teaching entails (James 2007: 3). Although before the pandemic online courses were not frequent (Goldsmith 2001), recent studies in this area have highlighted the benefits of humour in online classes (Rucynski & Neff 2022), as it is considered to be a supplementary factor to involve students in them.

2.2. Teacher assertiveness

Assertiveness represents a type of response that enables persons to behave in a specific manner: respecting their own interests, expressing their feelings without fear and anxiety, and respecting the rights of other individuals (Alberti & Emmons 2017). Infante (1987) sustains that assertive communication is seen as a constructive form of aggressive communication and different

persons could see assertiveness as being very close to aggressiveness because things are told in a very blunt manner. Alberti & Emmons (2017: 17) provided one of the most complete definitions of assertiveness: “Assertiveness enables us to act in our own best interests, to stand up for ourselves, without undue anxiety, to exercise personal rights without denying the rights of others, and to express our feelings and needs ... honestly and comfortably”. Generally, assertive individuals are confident, honest, direct in their communication, extrovert, and friendly (Sims 2017), develop better relationships, solve their problems in an active manner (Parmaksiz & Kılıçarslan 2019), sustain their opinions, thoughts, and emotions more openly (Moon 2009). The lack of assertiveness in individuals is related to low self-esteem, neglecting their rights, or considering themselves not valuable persons (Rosales et al. 2021).

In educational settings, assertiveness represents a significant skill (Samfira 2020) because “teaching requires assertiveness”, as Kim et al. (2019: 169) claim. Also, assertiveness is imperiously necessary for classroom management but also in the relationships with administrators and other decision-makers (Rajendran et al. 2020). Acting in an assertive manner could represent a “guide” for students who may choose to behave in a similar way, too (Brown 2011). Although assertiveness is a characteristic of Western culture (Eskin 2003), very good news for pre-service teachers is that assertiveness can be learned at every moment, at any age, because it is not an innate trait (Galinha & São-João 2021). Teachers’ assertiveness is positively correlated with teachers’ effectiveness, competence, well-being, and preventing stressful experiences (Carstensen & Klusmann 2021), leadership style (Sucan et al. 2016), students’ trust in their teachers and social competencies (Martínez et al. 2016), students’ acquiring more communication options (Willis 2020), and negatively correlated with social anxiety (Milovanovi et al. 2016) and emotional exhaustion (Carstensen & Klusmann 2021).

Teacher assertiveness is considered a part of the personal characteristics of a “good teacher”, along with humour, empathy, humility, and patience, as concluded by different researchers (Raufelder et al. 2016; Rianti et al. 2020). In their qualitative research, Raufelder et al. (2016: 36-38) found that lack of assertiveness represented a repetitive sub-theme about “bad” teachers. The relationship between teachers’ assertiveness and humour is supported by different studies (e.g., Wanzer & Frymier 1999) which concluded that teachers’ high levels of humour are positively correlated with high levels of assertiveness and also recommended that teacher training should contain humorous components as pre-service and in-service teachers need to learn about humour in order to be aware of its positive and negative consequences.

2.3. Teacher perfectionism

Perfectionism is defined as striving for flawlessness, establishing high standards for performance, pressure to excel, and fears about own behaviours (Stoeber & Rennert 2008: 2). Before 1990, researchers identified two types of perfectionism: adaptive (positive) perfectionism and maladaptive (negative) perfectionism (Flett & Hewitt 2006). Adler (1956) is one of the authors who emphasised the existence of positive perfectionism, suggesting that it is an impulse of excellence that exists in all human beings.

After 1990, the concept evolved toward multidimensional and multifaceted personality traits (Frost et al. 1990; Hewitt & Flett 1991). Recently, Hill et al. (2004, 2016) delineated perfectionism as a construct with eight dimensions: high standards for others, striving for excellence, planfulness, organisation, need for approval, parental pressure, concern over mistakes, and rumination. Hill et al. (2004) described the two sub-scales, that is, conscientious perfectionism and self-evaluative perfectionism, after their conceptual similarities with the traits of Conscientiousness and Neuroticism from the Five-Factor Model (McCrae & John 1992).

In educational settings, perfectionism is considered an important issue, due to the relationship it has with stress, challenges (Shirazizadeh & Karimpour 2019), achievements, and

goal accomplishment (Flett & Hewitt 2016). The educational environment represents a specific context that encourages and sustains high standards (Rice et al. 2016) so that it constitutes a framework conducive to developing and supporting perfectionism, both in teachers and in students (Gilman & Ashby 2006). Teachers who are organised and carefully plan their work, are considered by Allinder (1994: 91) to have more experience in teaching activity, to have confidence in their instructional abilities, and to be more honest and just in dealing with their students and with stressful situations.

Also, teachers' striving for excellence, evaluated as a personal effort to be "the personal best" (Brown 2011: 57), could be seen as a method to enhance their performance and not as a competition (Brown 2011). Hill et al. (2004: 83) also found that pre-service teachers with a "tendency to pursue perfect results and high standards" are more inclined to work hard and to achieve excellence in their professional and personal work. All of these components mentioned above (organisation, planfulness, striving for excellence, and high standards) represent the components of the conscientious perfectionism sub-scale.

In some situations (e.g., singer-teachers), teachers feel extra pressure to be perfect from their colleagues or students, to present their voice or instruments perfectly during teaching/concerts, and to avoid mistakes in the classroom or concerts (Cupido 2018: 24-25). Perfectionistic teachers seek approval from colleagues and students because external validation gives them a sense of confidence (Cupido 2018: 30). As mentioned above, feeling the pressure, concern over mistakes, and seeking approval are the components of the self-evaluative perfectionism subscale.

Teachers' perfectionistic strivings (or adaptive perfectionism) positively relate with proactive coping strategies, such as self-efficacy (Samfira & Palos 2021), challenge appraisals, and eustress (Stoeber & Rennert 2008), high job satisfaction and flow experience during teaching (Shim et al., 2020), job engagement (Cao & Zhang 2022), student-dancers' creativity (Nordin-Bates 2020) and negatively correlated with loss appraisals, avoidant coping, burnout (Stoeber & Rennert 2008), and anxiety (Mahmoodi-Shahrehabaki 2017). In her research, Vlasova (2020) found that teachers' striving for excellence is not associated with occupational stress. Teachers' perfectionistic concerns (or mal-adaptive perfectionism) positively correlate with distress (Stoeber & Rennert 2008), anxiety (Mahmoodi-Shahrehabaki 2017), depression (Gluschkoff et al. 2017), burnout (Commerchero 2008), maladaptive coping strategies (Stoeber & Rennert 2008), custodial view (Samfira & Sava 2021), low job satisfaction and infrequent flow experience during teaching (Shim et al. 2020).

The relationship between pre-service teacher perfectionism and humour as multidimensional concepts was approached by different researchers (Çalışandemir & Tagay 2015) who sustain that both concepts have positive and negative characteristics, and their positive components are strongly related to life satisfaction. Analysing the relationship between perfectionism and humour, Nugent (2000) highlighted that negative consequences of perfectionism could be explained by teachers to their students by using humour (e.g., the Crocodile in the Bedroom fable). These results represent a starting point to analyse the humour with other dimensions (e.g., conscientious perfectionism and self-evaluative perfectionism).

2.4. Teacher personality

Personality is defined as "those characteristics of the person that account for consistent patterns of feelings, thinking, and behaving" (Pervin et al. 2005: 6). In time, researchers have proposed and developed different personality frameworks to understand the complex construct of personality. The main examples of personality frameworks are the HEXACO (Ashton & Lee 2007), Myers-Briggs Type Indicator (Myers et al. 1998), 16 personality factors (Cattell et al. 1970), and the Big Five (McCrae & Costa 1987) which represents the most used frameworks.

The model developed by McCrae & Costa (1987) assesses Openness, Conscientiousness, Extraversion, Agreeability, and Neuroticism/emotional stability. All these Big Five dimensions are independent and could coexist within every person.

In educational settings, teacher personality has aroused the interest of researchers since the 1920s (e.g., Brubacher 1921) to outline the characteristics of the more successful and the less successful teachers, with over 1000 articles published in this field. Among the traits considered essential were the following: Adaptability, Enthusiasm, Responsibility, Cooperation, Poise, and Independence, traits that we can recently evaluate using the Five-Factor Model of Personality. Regarding personality traits, different researchers tried to identify how they affect the educational environment.

Conscientious individuals are generally described as achievement-focused, organised, and responsible, with high aspirations and leadership skills (McCrae & Costa 2008: 164). Research found that teachers' conscientiousness is positively correlated with students' intrinsic motivation and knowledge (Khalilzadeh & Khodi 2021), effectiveness measures (Kim & MacCann 2018), life satisfaction, happiness, optimism (Vorkapić & Pelozo 2017), reappraisal and positive mood (Berkovich & Eyal 2021), and negatively correlated with burnout (Kim et al. 2019), suppression (Berkovich & Eyal 2021).

Emotionally stable individuals are seen as being calm, secure, and with a high tolerance for stress (McCrae & Costa 2008: 164). Teachers' emotional stability has a positive correlation with creative teaching (Deng et al. 2020), life satisfaction, happiness, optimism (Vorkapić & Pelozo 2017), reappraisal, and positive mood (Berkovich & Eyal 2021), and negative correlation with burnout (Kim et al. 2019) and negative mood (Berkovich & Eyal 2021).

Extroverted individuals are described as being energetic and appreciating companionship (McCrae & Costa 2008: 164). Teachers' extraversion has a positive correlation with creative teaching (Deng et al. 2020), happiness, optimism (Vorkapić & Pelozo 2017), positive mood (Berkovich & Eyal 2021), and a negative correlation with burnout (Kim et al. 2019), negative mood and suppression (Berkovich & Eyal 2021).

Agreeable individuals are described as being kind, compassionate, cooperative, caring, and helpful (McCrae & Costa 2008: 164). Teachers' agreeableness has a positive correlation with teacher evaluation, individual rapport, and enthusiasm (Kim & MacCann 2018), diversity beliefs (Unruh & McCord 2010), life satisfaction, happiness, optimism (Vorkapić & Pelozo 2017), positive mood (Berkovich & Eyal 2021), and a negative correlation with teaching experience (Vorkapić & Pelozo 2017) and negative mood (Berkovich & Eyal 2021).

Opened individuals are described as being intellectually curious, and creative, with a need for novelty and change (McCrae & Costa 2008: 164). Teachers' openness is identified to positively correlate with diversity beliefs (Unruh & McCord 2010), life satisfaction, happiness, optimism (Vorkapić & Pelozo 2017), and positive mood (Berkovich & Eyal 2021) and negatively correlated with negative mood (Berkovich & Eyal 2021).

The importance of teacher humour has been emphasised since the first articles published on teacher's personality (Brubacher 1921). Likewise, humour has been considered a "window to the mind, an objective indicator of personality" (Ruch & Hehl 1998 :142). Also, Allport (1961) considered the sense of humour as a feature of a mature and healthy personality (e.g., a positive sense of self, insight, and friendly relationship with other persons).

In the educational context, we do not identify any research on the relationship between teachers' personality and humour styles, only in the cases of college students (Saroglou & Scariot 2002) or university students (Greengross et al. 2012; Tsukawaki & Imura 2023). In their research, Saroglou & Scariot (2002) affirmed that self-enhancing humour has positive correlation with Agreeableness and Openness, hostile humour has a negative correlation with Agreeableness and Conscientiousness, self-defeating humour has a negative correlation with Emotional Stability and Conscientiousness. Quite similar results were found by Greengross et

al. (2012) who showed that Openness has a positive correlation with Affiliative Self-enhancing humour, Conscientiousness has a positive correlation with Self-enhancing humour and a negative correlation with Aggressive and Self-defeating humour, Extraversion has a positive correlation with Affiliative and Self-enhancing humour, Agreeableness has a positive correlation with Self-enhancing humour and negative correlation with Aggressive humour, and Neuroticism has a positive correlation with Aggressive and Self-defeating humour and negative correlation with Affiliative and Self-enhancing humour.

To the best of our knowledge, no research has explicitly focused on the relationship between teachers' personality (Big Five Model) and humour styles, and this represented one of the reasons that led to the present research.

2.5. Study rationale

Bearing in mind that resilience is important in managing stress and that the teaching profession is a profession with a high level of stress, we set out to evaluate some of the components proposed by Singh & Gujral (2018) that lead to the development of resilience: humour and assertiveness.

Additionally, we also considered that resilient people are efficient, with high expectations, self-disciplined, good problem-thinkers (Garmezy 1991), agreeable individuals, perseverant, with pro-social attitudes (Dyer & McGuiness 1996), and wish to develop a healthy balance in their perfectionistic beliefs (Holden 2020). Bearing all these aspects in mind, we proposed to add the assessment of personality traits and perfectionistic tendencies in relation to humour.

Based on the above arguments, we formulated the following research questions:

RQ1: What is the profile of pre-service teachers with Affiliative humour style, regarding assertiveness, Big Five, and perfectionism?

RQ2: What is the profile of pre-service teachers with Self-enhancing humour style, regarding assertiveness, Big Five, and perfectionism?

RQ3: What is the profile of pre-service teachers with Aggressive humour style, regarding assertiveness, Big Five, and perfectionism?

RQ4: What is the profile of pre-service teachers with Self-defeating humour style, regarding assertiveness, Big Five, and perfectionism?

3. Methodology

3.1. Participants

The sample consisted of 284 pre-service teachers (189 females, 95 males, M age = 19.9, SD age = 2.1) from the University of Life Science, in the Western part of Romania. Participation was based on their voluntary consent, the sample being selected from all students enrolled in the first year of the Teacher Training program, developed in the university.

3.2. Procedure

Data was collected, while ensuring anonymity. All the subjects who accepted to participate in this study signed an Informed Consent Form, according to the ethical standards in research with human subjects, and they were assured that could withdraw from the study whenever they wanted, without any negative consequences.

3.3. Instruments

The first part of the survey contained demographic information: age and gender. To assess pre-service students' humour styles, assertiveness, perfectionistic tendencies, and personality traits, the following questionnaires were applied:

Humour Styles Questionnaire (HSQ; Martin et al. 2003), a 32-item scale, assesses four dimensions of humour, using a seven-point Likert scale, from 1 - totally disagree to 7 - totally agree. Two dimensions were considered to be adaptive and conducive to psychosocial well-being such as Affiliative humour and Self-enhancing humour, and other two dimensions were considered to be mal-adaptive, supposed to be deleterious to well-being such as Aggressive humour and Self-defeating humour. Some item examples are "I enjoy making people laugh".

Rathus Assertiveness Scale (RAS; Rathus, 1973), a 30-item scale, assesses assertive behaviour, using a 6-point Likert scale, from +3 (strongly characteristic of me) to -3 (strongly uncharacteristic of me). Some item examples are "I strive to get ahead as well as most people in my position".

Perfectionism Inventory Scale (PI; Hill et al., 2004), a 59-item scale, assesses eight dimensions of perfectionism, using a 5-point Likert scale, from 1 - strongly disagree to 5 - strongly agree. The eight dimensions are compressed into two main sub-scale: Conscientious perfectionism and Self-evaluative perfectionism. An indicative item example is "I compare my work to others and often feel inadequate". The questionnaire was validated for the Romanian teachers' population by Samfira & Maricuțoiu (2021).

International Personality Item Pool (IPIP-50; Goldberg 1992; Romanian version, IPIP-50, by Rusu et al. 2012), a 50-item scale, assesses five domains of personality using a 5-point Likert scale, from 1 - strongly disagree to 5 - strongly agree. The five domains of personality are Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Emotional Stability. Some item examples are "I am the life of the party".

3.4. Data analysis

Statistical analysis was carried out using the Statistical Package for the Social Sciences (SPSS) 23. Correlation analysis was performed to examine the relationship between four types of humour (affiliative, self-enhancing, aggressive, and self-defeating) and five personality dimensions (open to experience, conscientiousness, extraversion, agreeableness, and emotional stability), two dimensions of perfectionism (conscientious perfectionism and self-evaluative perfectionism), and assertiveness.

4. Results

To answer the research questions, we performed all the required correlations, which are presented in Table 1.

Table 1. Correlations matrix between all variables

Variables	1	2	3	4	5	6	7	8
Affiliative Humour	.30**	.39**	.09	.52**	.28**	.25**	-.02	-.34**
Self-enhancing Humour	.22**	.26**	.18**	.29**	.25**	.32**	.17**	-.20**
Aggressive Humour	.21**	.08	-.24**	.21**	-.18**	.000	-.14*	-.06
Self-defeating Humour	-.14*	-.11	-.31**	.05	-.01	-.13*	-.21**	.13*

* p<0.05 ** p<0.01 (2-tailed); 1 = Assertiveness; 2 = Openness; 3 = Conscientiousness; 4 = Extraversion; 5 = Agreeableness; 6 = Emotional stability; 7 = Conscientious perfectionism; 8 = Self-evaluative perfectionism

First, we examined the correlations that addressed the first research question that investigated the profile of pre-service teachers with affiliative humour style from assertive communication, perfectionism, and Big Five personality traits' perspectives. We found that pre-service teachers with affiliative humour style are more likely to communicate in an assertive manner ($r = .30, p < .01$), are less inclined to manifest self-evaluative perfectionistic tendencies ($r = -.34, p < .01$), and are open-minded ($r = .39, p < .01$), extraverted ($r = .52, p < .01$), agreeable ($r = .28, p < .01$), and emotionally stable individuals ($r = .25, p < .01$). Data analysis does not reveal any significant connection between affiliative humour style and conscientiousness ($r = .09, p > .05$) or conscientious perfectionistic tendencies ($r = -.02, p > .05$). Although the relationship with conscientious perfectionistic tendencies is not a significant one, we can observe that there is a negative one, which highlights that those pre-service teachers with affiliative humour style are less inclined to manifest perfectionistic tendencies, although they are considered to be positive. Correlations are presented in Table 1.

Second, we examined the correlations that addressed the second research question that investigated the profile of pre-service teachers with self-enhancing humour from the aforementioned perspectives. We found that pre-service teachers with self-enhancing humour style are more likely to communicate in an assertive manner ($r = .22, p < .01$), are more inclined to have conscientious perfectionistic tendencies ($r = .17, p < .01$), are less inclined to have self-evaluative perfectionistic tendencies ($r = -.20, p < .01$), and are open-minded ($r = .26, p < .01$), conscientious ($r = .18, p < .01$), extraverted ($r = .29, p < .01$), agreeable ($r = .25, p < .01$), and emotionally stable ($r = .32, p < .01$).

Next, we examined the correlations that addressed the third research question that investigated the profile of pre-service teachers with aggressive humour style from prior mentioned perspectives. We found that pre-service teachers with an aggressive humour style are more likely to communicate in an assertive manner ($r = .21, p < .01$), are less inclined to have conscientious perfectionistic tendencies ($r = -.14, p < .05$), are extraverted ($r = .21, p < .01$), and are not agreeable ($r = -.18, p < .01$) or conscientious individuals ($r = -.24, p < .01$). Data analysis does not reveal any significant connection between aggressive humour style and openness ($r = .08, p > .05$), emotional stability ($r = .000$), or self-evaluative perfectionism ($r = -.06, p > .05$).

Finally, we examined the correlations that addressed the fourth research question that investigated the profile of pre-service teachers with self-defeating humour style from the above-stated perspectives. We found that pre-service teachers with a self-defeating humour style are less likely to communicate in an assertive manner ($r = -.14, p < .05$), are more inclined to have self-evaluative perfectionism ($r = .13, p < .05$), are less inclined to have conscientious perfectionistic tendencies ($r = -.21, p < .01$), are not conscientious individuals ($r = -.31, p < .01$), and are not emotionally stable persons ($r = -.13, p < .05$). Data analysis does not reveal any significant connection between self-defeating humour style and openness ($r = -.11, p > .05$), extraversion ($r = .05, p > .05$), and agreeableness ($r = -.01, p > .05$).

5. Discussion

The main purpose of the present study was to examine the correlations that outline the profiles of the four types of pre-service teachers' humour: Affiliative Humour, Self-enhancing Humour, Aggressive Humour, and Self-defeating Humour (RQ1 - RQ4) from the perspective of assertive communication, perfectionism, and Big Five personality traits.

First, we examined the correlations that addressed the profile of pre-service teachers with affiliative humour, to better understand if teachers who apply this type of humour adopt assertive communication, have perfectionistic tendencies, and what kind of personality traits they manifest. After the analysis, we claim that pre-service teachers who have the tendency to make jokes with other individuals (e.g., their students or colleagues) to develop positive relationships are more inclined to be assertive when they communicate with their educational partners (students, colleagues, or parents), so they will respect their own rights, interests, and feelings without fear of being judged but respecting at the same time others' rights, interests, and feelings, too. Our result is in line with other research conducted in this area (Wanzer & Frymier 1999; Salavera et al. 2020). Contrastingly, Campbell (2000) did not obtain any association between humour orientation and assertiveness.

To the best of our knowledge, no research has explicitly focused on the relationship between the in-service or pre-service teacher's affiliative humour and assertive communication. While studies before Martin et al. (2003) were focused only on teachers' humour orientation and assertive communication and not on some specific humorous behaviours, as the researchers explicitly mentioned, the present research brings something new in this area, being more specific and analysing separately the four types of humour.

Next, we calculated the correlation between affiliative humour and perfectionism and we found that pre-service teachers who have the tendency to make jokes with other individuals (e.g., their students or colleagues) to develop positive relationships are less likely to have self-evaluative perfectionistic behaviours (e.g., the maladaptive form of perfectionism with concerns over mistakes, need for approval, ruminations, and perceived parental pressure). These aspects could reflect the protective role of affiliative humour which is focused on building relationships not on identifying/ruminating on mistakes). Our result is consistent with previous findings (Di Fabio et al. 2020) with a single mention that perfectionism was assessed from other perspectives, but very close to the self-evaluative perfectionism view.

Afterward, we calculated the correlations between affiliative humour and Big Five personality traits and we found that pre-service teachers who have the tendency to make jokes with other individuals (e.g., their students or colleagues) to develop positive relationships are open, agreeable, extraverted, and emotionally stable individuals. The above-mentioned personality traits all describe an individual's tendency to be kind, open-minded to know different people and to develop positive relationships with others (McCrae and Costa 2008), which constitute behaviours quite similar to those described for affiliative humour. These similarities could represent a possible explanation for our findings. Our results are in line with previous research (Plessen et al. 2020; Tsukawaki & Imura 2023) but at the same time opposite to other results (Di Fabio et al. 2020).

Second, we examined the correlations that addressed the profile of pre-service teachers with self-enhancing humour, to understand the characteristics of teachers who apply this type of humour from the precedent variables (assertive communication, perfectionism, and Big Five personality traits). After the analysis, we claim that pre-service teachers who have the tendency to smile, although they are confronted with stressful situations, are more inclined to be assertive when they communicate with their educational partners (students, colleagues, or parents), so they will respect their own rights and interests but, respecting at the same time others' rights

and interests, too. Our result is in line with other papers (Salavera et al. 2020). Contrastingly, Campbell (2000) did not obtain any association between humour orientation and assertiveness.

Next, we calculated the correlation between self-enhancing humour and perfectionism and we found that pre-service teachers who have the tendency to smile, although the individual is confronted with stressful situations are more likely to have conscientious perfectionism (i.e. the adaptive form of perfectionism with organization, planfulness, striving for excellence, and high standards for others). Our finding could help future teachers to understand that having a positive attitude when confronting classroom difficulties, does not mean abandoning the excellence in their work, but, on the contrary, continuing to strive although the results are not up to their expectations. Our result is consistent with previous findings that analysed the relationship between positive humour and different components of conscientious perfectionism (e.g., striving for excellence or other-oriented perfectionism: Çalışandemir & Tagay 2015) but contrastingly to other results (e.g., Stoeber, 2018). Our outcome follows the Çalışandemir & Tagay (2015) recommendation to develop positive humour and positive perfectionism within university teacher training.

To the best of our knowledge, no research has explicitly focused on the relationship between the in-service or pre-service teacher's self-enhancing humour and the eight sub-scales perfectionism questionnaire developed by Hill et al. (2004). Regarding the negative correlation between self-enhancing humour and self-evaluative perfectionism, our finding reflects that teachers with self-enhancing humour are not preoccupied with mistakes or other maladaptive perfectionistic behaviours. No research was found to sustain this relationship. Instead, in other studies, the findings sustained no correlation between these variables (Di Fabio et al. 2020).

Then, we calculated the correlations between self-enhancing humour and Big Five personality traits and we found positive relationships with all five personality traits. These positive correlations reflect that teachers with self-enhancing humour are open, conscientious, agreeable, extroverted, and emotionally stable individuals, very similar to teachers with affiliative humour, both having a personal focus. The results are consistent with previous research conducted in this area (Plessen et al. 2020; Tsukawaki & Imura 2023).

Third, we examined the correlations that addressed the profile of pre-service teachers with aggressive humour type so as to better understand if teachers who apply this type of humour adopt assertive communication, have perfectionistic tendencies, and what kind of personality traits they manifest. After the analysis, we sustain, contrary to our expectation, that pre-service teachers who have the tendency to be ironic and to criticise others, to increase their superiority, are more inclined to be assertive when they communicate with their educational partners (students, colleagues, or parents). This relationship was sustained by other authors, especially by Freud (1960: 129) who described hostile humour as “disguised aggressiveness” or by Glassner (2017), who claimed that in some situations an individual who tries to become more assertive, may push himself to behave in a more aggressive manner than he/she intended to behave. Our result is similar with the research conducted by Salavera et al. (2020) who found the same positive correlation between assertiveness and affiliative, self-enhancing, and aggressive humour types.

Then, we calculated the correlation between aggressive humour and perfectionism and we found that pre-service teachers who have the tendency to be ironic and to criticise others to increase their superiority, are less likely to have conscientious perfectionism (the adaptive form of perfectionism). This result could be explained that using aggressive humour, teachers bear in mind their superiority and maybe it is no longer necessary to strive for excellence or to help others to perform very well. The present result is in line with the results found by Çalışandemir & Tagay (2015) and in contradiction with the results found by Di Fabio et al. (2020).

Next, we calculated the correlations between aggressive humour and Big Five personality traits and we found negative correlations only with conscientiousness and agreeableness. After

the analysis, we can affirm that pre-service teachers who have the tendency to be ironic and to criticise others to increase their superiority, are less inclined to be conscientious, with a high level of aspirations and achievements, or agreeable individuals, with a disposition to cooperate with others and to be compassionated. Our result is in line with other findings (Mendiburo-Seguel et al. 2015; Di Fabio et al. 2020) and partially in line (no significant correlation with conscientiousness) with Tsukawaki & Imura's (2023) results.

Fourth, we examined the correlations that addressed the profile of pre-service teachers with self-defeating humour type, so as to better understand if teachers who apply this type of humour adopt assertive communication, have perfectionistic tendencies, and what kind of personality traits they manifest. After the analysis, we can affirm that pre-service teachers who have the tendency to make some self-derogatory affirmations, with the purpose to be accepted by others and developing relationships with them, are less inclined to be assertive when they communicate with their educational partners (students, colleagues, or parents). Our finding is in line with the research of Salavera et al. (2020).

Afterward, we calculated the correlation between self-defeating humour and perfectionism and we found that pre-service teachers who have the tendency to make some self-derogatory affirmations, with the purpose to be accepted by others and developing relationships with them are less likely to have conscientious perfectionism (the adaptive form of perfectionism), being instead more inclined to have self-evaluative perfectionism (the maladaptive form). Our finding could be explained as follows: for individuals who use a type of humour which makes them look foolish or have the tendency to make some self-derogatory affirmations, it seems quite difficult to work in an organised manner and to achieve excellence in their work. Instead, they resonate more with concerns over their mistakes and need for others' approval, as part of the negative perfectionism, highlighting their "dark" or foolish part as a way to be accepted. Our finding is similar to other results (Di Fabio et al. 2020). A different result was found in research conducted by Çalışandemir & Tagay (2015).

Our last analysis was to calculate the correlation between self-defeating humour and Big Five personality traits and we found negative correlations only with conscientiousness and emotional stability. We could sustain that pre-service teachers who have the tendency to make some self-derogatory affirmations, with the purpose to be accepted by others and developing relationships with them, are less inclined to be conscientious, with a high level of aspirations and achievements, or emotionally stable in their relationships. In other papers (Di Fabio et al. 2020) the authors found no correlation between these variables.

5.1. Limits of the study and future directions

Limitations of our study include, first, the low survey responses. The sample was not a representative one for the Romanian pre-service teachers and, for this reason, our results cannot be extrapolated to the entire population of pre-service teachers. A larger sample including pre-service teachers from other universities could help us to obtain more in-depth information about the correlations with humour styles. Second, in the absence of a longitudinal design, we cannot analyse these relationships in their dynamics. Third, in such a correlational study, the data analysis does not allow for causal inferences concerning the relationships between the involved variables. Further research is needed to understand how assertiveness, Big Five personality traits, perfectionism, and other personal characteristics (e.g., self-efficacy, resilience) could influence the pre-service types of humour. A longitudinal study with 3 waves (e.g., first year of the teaching program, last year, and their first year as in-service teachers) could reveal some possible changes.

5.2. Theoretical and practical implications

The results of the present study bring new insights into the pre-service teachers' humour styles, having both theoretical and practical implications. Our findings reveal new information about new correlates (e.g., Big Five personality traits, assertiveness, and conscientious/self-evaluative perfectionism) of humour's types in pre-service teachers. The more we know about pre-service humour correlates, the more we could help for positive consequences in the classroom (e.g., Bakar & Mallan 2022; Weisi & Mohammadi 2023). Practical implications are related to applying intervention to help pre-service teachers to develop and use healthy types of humour (affiliative and self-enhancing) quite similar to other interventions used with teenagers (e.g., Liao et al. 2023). Even though interventions for the development of humour in teachers could be seen as funny, research in the field shows us that the effects are very valuable.

6. Conclusion

To have access to their students' basic emotions, teachers must be trained to be able to mobilise their adaptive resources (e.g., assertiveness, self-protection, humour, conscientiousness, creativity), as Fosha et al. (2009) suggest. In the present paper, the authors borne in mind these aspects and analysed the relationships between teachers' humour and assertiveness, perfectionism, and Big Five personality traits. The results highlighted that teachers with positive forms of humour show a positive profile from assertiveness, perfectionism, and Big Five personality traits, and teachers with negative forms of humour show a negative one, excepting the positive correlation between aggressive humour and assertive communication. The general view is that teacher humour represents a very important trait in educational settings which should be supported and developed through psychological and educational training, especially for affiliative and self-enhancing humour (Martin & Kuiper, 2016). Our findings have theoretical and practical implications for teacher training programs' heads and school principals, in enhancing well-being in the classroom.

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