# Is personality overlooked in educational psychology? Educational experiences of secondary-school students with introverted personality styles

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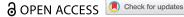Eva Godfrey 🔟 and George Koutsouris 🔟

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**ABSTRACT**

The biopsychosocial model has revolutionised the way need is considered in educational psychology. However, not all facets have received equal attention, with personality factors often being overlooked. This has implications for understanding the individual and how best to support them in education. This exploratory study investigated whether introversion, as an individual personality factor, is being taken into account in educational settings. The views and experiences of 11 students from five secondary schools in the UK who self-identified as having introverted personality styles (IPS) were explored, using semi-structured interviews and a personal construct psychology activity. Thematic analysis suggested that the educational environment was not considered to be optimally suited to the needs of students with introverted personalities. Participants reported feeling overlooked, and indicated that their personality created additional difficulties for them in navigating the school environment. Supportive relationships and awareness/acceptance of introversion were highlighted as key protective factors. The findings suggest professionals working in education need to consider a more holistic picture of students' personality styles within their wider environment.

## Introduction

This paper presents findings from research exploring the educational experiences of secondary schoolaged students who self-identify as having an introverted personality style (IPS), with a view to understanding the impact and importance of personality on academic and social participation, and building a more holistic picture of a young person.

The biopsychosocial model has received widespread attention in the field of psychology since it was first postulated by Engel (Engel, 1977, Fava and Sonino, 2007). This model has served to revolutionise the way educational psychologists (EPs) have thought about special educational needs and how young people's (YP) presentation is viewed and discussed, moving away from the traditional biomedical model which often pathologised difference (Norwich, 2016). However, while the biopsychosocial

model has made many positive contributions, there have also been criticisms that certain factors have attracted more interest than others (Benning, 2015). In this regard, social factors and environmental systems have become a particular focus while individual factors (seen as more "within child") have received less attention (Kranzler et al., 2020). One area that has been overlooked is the topic of personality, which traditionally has received limited consideration in the field of educational psychology, with very few papers dedicated to personality research in this discipline (for example, Moreira et al., 2021, Starley, 2019). However, meta-analyses have shown the importance of personality in understanding human behaviour and relationships, alongside environmental conditions (Ellis et al., 2009).

## Personality theory and introversion

Within the vast field of personality research, extraversion and introversion have attracted particular attention (Cain, 2013), since Jung first popularised the notion that introverts focus their attention on internal stimuli, while extraverts concentrate on external stimuli (Jung, 1921/1971). Since this time, the biological basis of these personality traits has been explored in Eysenck's (1967, 1970) work on baseline levels of cortical arousal and their interconnection with concurrent traits (such as neuroticism, openness to experience, agreeableness and conscientiousness) has been conceptualised by Costa and McCrae in the Five Factor Model (Costa & McCrae, 1976). However, research from the past century has primarily focused on introversion as an undesirable trait equivalent to a lack of extraversion, rather than as a nuanced, complex and independent personality structure (Lloyd, 2015). At the start of the 21st century there was a shift in focus towards more positive personality research, both in the scientific and lay community (Cain, 2013, Thom, 2020), with a focus on the distinctive contribution which can be made by introverted individuals (Kaufman, 2018, Seligman & Csikszentmihalyi, 2000, Hills & Argyle, 2001).

## The biological basis of personality

Whether there is a biological basis of personality remains debated (Ashton, 2023); the biological perspective has referenced a series of underpinning physiological, genetic, hormonal and neurological factors which have been considered as contributing to personality composition (Athota et al., 2020, DeYoung et al., 2010). Other research has instead focused on the social construction of personality and the influence of environmental factors in the shaping of personality types (Briley & Tucker-Drob, 2014). Ongoing debate in this arena is reminiscent of the nature/nurture discussion, with a range of positions along the continuum but a tentative consensus of the contribution of both factors (John et al., 2010).

This debated perspective is also reflected in the exploration of personality development over time. Research in early infancy considers temperamental disposition (Bornstein et al., 2019, Caspi, 2000), which is presumed to have a biological basis, but which can also be influenced by pre- and post-natal environmental events (Emde & Hewitt, 2001). Personality has been hypothesised by some researchers to remain relatively stable over time, into adolescence and adulthood, due to genetic influence (Lewis, 2001, Roberts

et al., 2006, Shiner & Caspi, 2003), while others highlight ongoing fluidity related to contextual influences (Soto & Tackett, 2015).

There have also been investigation and debate about the relative degree of biological underpinnings for different personality dimensions. Out of the five commonly discussed dimensions contributing to adult personality type, the extraversion/introversion continuum is considered to be one of the more stable across age groups, which has raised questions about the relative biological/environmental composition of this personality trait (Tackett et al., 2012, Soto & John, 2014). Research into potential biological underpinnings of introversion dates back to the research of Eysenck (1967) and continues to the current decade with specific genes being explored as predisposing this personality style (Hobgood, 2021); however, consensus remains elusive.

The impact of cultural and environmental factors has also been routinely considered in personality research. In this regard, Western cultures have tended to favour sociability and superficial involvements over attributes such as introspection, achievement and quietness which are more highly prized in Eastern cultures (Harris Bond, 1991), giving rise to what has become known as the Western extravert ideal (Cain, 2013, Cain, 2016). It is perhaps therefore unsurprising that educational systems have adapted to suit the predominant and most highly-valued characteristics in each country (for example, Ming & Chow, 2011, Murphy et al., 2017), leaving those who do not fit with the cultural norm at a relative disadvantage.

### Introversion and the educational environment

The primary focus of personality related educational research has been in the area of learning and attainment (Jensen, 2015). The current dominant pedagogical discourse focuses on active learning (Flanagan & Addy, 2019), involving participation, collaborative learning, group work, class discussions, and debates. One of the purported advantages of active learning is promoting human voices in the classroom (Zafonte, 2018). However, for introverts this could prove problematic, as they might perform worse on cognitive tests when working in noisy background environments akin to those found in the classroom (Cassidy & MacDonald, 2007, Dobbs et al., 2011). Overall, active learning approaches have been shown to unconsciously favour extraverted personality styles (Iasevoli, 2018) and do not support introverted personality styles in terms of optimal person-environment fit (Thom, 2020).

Existing research has also raised important considerations about attitudes towards introversion in education. Studies have highlighted how students who identified as quiet felt misunderstood by their teachers, particularly in relation to their engagement in lessons (Barker, 2011). Moreover, teachers have traditionally perceived these students as passive, less intelligent and more likely to perform poorly academically than their more exuberant and talkative counterparts (Coplan et al., 2011, McCroskey & Daly, 1976, Paulhus & Morgan, 1997, VanSlyke-Briggs, 2014). These findings are concerning, given what is known about teachers' expectations, the Pygmalion effect in the classroom (Rosenthal, 2002), and the associated risk of students internalising their teachers' negative perceptions (Leung, 2015). Despite these findings, minimal consideration has been given to the impact of personality style on wellbeing or psychological adjustment of young people in the educational setting, overlooking individual-based factors in the

biopsychosocial model, and their potential impact on the needs, preferences and emotional wellbeing of these young people within the wider environmental system.

## Current study aims and research question

Extant literature regarding introversion in education has focused predominantly on adult views, retrospective accounts, and higher education groups (for example, Schwartz, 2015, Spooner et al., 2005, Zafonte, 2018). With at least a third of students likely to have an introverted personality style (IPS) (Cain, 2013, Fonseca, 2014), this is a sizeable demographic whose views have not been adequately consulted. This research aimed to explore whether inherent individual factors, such as introversion, and personality more broadly, are being taken into account in the education setting by understanding young people's subjective experience. The research question that guided this study was:

How do secondary school age young people who self-identify as having an IPS view introversion and experience the education environment?

## Methods

The research reported within this paper was part of a broader study about introversion and education that involved EPs, teachers and students. Within the broader study, the views and perceptions of EPs and teachers around introversion were explored via the use of bespoke online questionnaires. Within this paper, the research relating to the student experiences is reported.

### Design

The study was exploratory in nature and adopted pragmatism as the underpinning philosophical approach. A pragmatic approach afforded the chance to explore the novel real-world problems around personality and generate solutions (Dewey, 1960, Hassanli & Metcalfe, 2014) without being concerned by methodological impurity (the broader study adopted a mixed methods design). The researchers kept a reflexive researcher log throughout the process to remain aware of their influence on the research process and findings.

### Participants

A flyer with details of the research was disseminated via email to head teachers/SENCOs of 298 secondary schools across 14 local authorities within the South West region of the UK (from April to May 2021), inviting students from mainstream secondary schools who self-identified as introverted to contact the lead researcher for further information. Only one expression of interest was received via this approach, leading to further dissemination of the flyer (from April to October 2021) across a broader geographical area (whole of the UK) via social media posts (X, formerly Twitter), bulletins in professional networks (EPNET and the Association of Educational Psychologists EP newsletter) and communication with personal contacts.

**Table 1.** Details of research participants.

| Participant | Pseudonym | Age | School Attended | School Year | McCroskey Scale Score |
|---|---|---|---|---|---|
| 1 | Martha | 15 | 1 | 10 | 27 (Moderate) |
| 2 | Alexis | 15 | 2 | 10 | 36 (High) |
| 3 | Richard | 13 | 2 | 8 | 28 (High) |
| 4 | Katherine | 14 | 3 | 9 | 25 (Moderate) |
| 5 | Victoria | 15 | 2 | 10 | 26 (Moderate) |
| 6 | Kevin | 12 | 2 | 8 | 20 (Moderate) |
| 7 | Johanna | 11 | 2 | 7 | 24 (Moderate) |
| 8 | Lanie | 14 | 4 | 9 | 21 (Moderate) |
| 9 | Gina | 14 | 2 | 10 | 31 (High) |
| 10 | Meredith | 14 | 5 | 10 | 21 (Moderate) |
| 11 | Jenny | 11 | 5 | 7 | 23 (Moderate) |

Interested prospective participants were provided with a screening questionnaire (via Microsoft Forms) to confirm their self-reported IPS in order to ensure a standard criteria and degree of homogeneity in the understanding of introversion across the sample. The McCroskey Introversion Scale (McCroskey, n.d.) was employed for this purpose (see Appendix 1); an 18 item Likert scale based on the work of Eysenck (1967) which provides a measure of introversion as a distinct construct separate from communication, apprehension, and shyness (alpha reliability estimate of above 0.80; Richmond & McCroskey, 1998). Scores of 20 and above are indicative of introversion and confirmed admission to the participant sample. In total, 15 expressions of interest to participate were received. One withdrew for personal reasons, and three were excluded after not meeting screening questionnaire criteria. The final sample was formed of 11 young people between the ages of 11 to 15, from five schools (see Table 1). All participants had attended their current school since they transitioned from primary education.

## Data collection

Prospective participants (and their parent carers) were provided with a detailed information sheet after expressing interest in participating. Once informed consent was obtained, an interview date was mutually agreed. Individual semi-structured interviews took place via Microsoft Teams between May and October 2021 and lasted between 40 to 75 minutes. Participants were given the option of leaving their camera on or off during the call to help place them at ease. The interviews consisted of two main elements; a Personal Construct Psychology (PCP) activity and a semi-structured interview schedule (see Appendix 2), offering a novel approach to those previously used in related research (for example, Coplan et al., 2011, Harris et al., 2017). The interview schedule was developed using Tomlinson's (1989) hierarchical focusing stages and allowed for flexibility in exploring specific points relevant to the research question, while also permitting participants to take the lead and raise thoughts and insights in their own terms (Galletta, 2013, Robson & McCartan, 2015).

The suitability of the schedule was explored by piloting the interview to check for appropriateness in language and structure (Braun & Clarke, 2006) and all interviews were conducted by the lead researcher to reduce variability in approach. However, limitations are acknowledged in relation to the influence of the researcher on the interview process

(Pezalla et al., 2012) and the risk of social desirability bias (Bryman, 2012). Attempts were made to mitigate these limitations through researcher reflexivity, and reassurances given to participants about anonymity and honesty in responses, and their potential impact is acknowledged in the interpretation of the data (Braun & Clarke, 2013).

## Data analysis

All interviews were video recorded on Microsoft Teams, including discussion from the PCP activity and semi-structured interview. A notation system was used for the orthographic transcription by the researchers (Braun & Clarke, 2013). Data contained within the transcriptions were analysed using reflexive thematic analysis (TA) aided by the software package NVivo (see Appendix 3). Reflexive TA does not consider nuances of interaction between participants and researchers and as such it was regarded as an appropriate method given the online interview method of data collection (Braun & Clarke, 2021). Inter-coder reliability (O'Connor & Joffe, 2020) was used in a broad sense, via discussions between the researchers about interview extracts and coding possibilities, to review and reflect on the coding and themes as the analysis progressed. Decisions taken were also considered against the checklist for good TA developed by Braun and Clarke (2006) to ensure the research quality.

## Ethical considerations

Approval for the research was granted by the University of Exeter Research Ethics Committee on 12.01.2021. Informed consent was obtained from young people and their parent carers via an "opt-in" process. The voluntary nature of participation and anonymity/confidentiality of the research was made clear, with opportunities to ask further questions. Participants were given the right to withdraw at any point before or during the interview, and up to one month after the interview, by which time interviews had been transcribed and recordings deleted.

COVID-19 restrictions at the time of data collection necessitated a remote interview approach. Careful ethical consideration was given to factors related to online interviewing (Bender et al., 2017, BPS, 2017), including the digital platform used, data storage methods and confidentiality issues. Wellbeing of the participants was also considered and monitored during the interview (via observation) and prior to ending the video-call (by verbal enquiry). Due to the remote nature of the interviews, the lead researcher ensured contact with a relevant adult at each school who would be available during and after the interview if any issues/feelings arose for the young person. The young person was signposted to this adult as an initial point of contact for support in school. In addition, contact details of an external confidential support service (ChildLine) were also provided to the young person within the information sheet.

## Findings

Interview findings are presented within the superordinate themes and subthemes generated during reflexive TA (see Table 2).

**Table 2.** Overview of superordinate themes and subthemes from reflexive TA.

| Superordinate Themes | Subthemes |
|---|---|
| *The puzzle of exploring our identity* | Growth and change |
| | We're all unique individuals |
| *The complexity of the social world* | Feeling at odds with societal expectations |
| | Understanding our preferences as social beings |
| *Should we be more extraverted?* | |
| *Experiencing participatory pressures in school* | Feelings of discomfort associated with participation |
| | Teachers' responses to participatory attempts |
| | Learning to cope with participation |
| *Living with others and not in a vacuum* | Friends as allies |
| | The modulating impact of others on the context |
| *The physical environment: Friend or foe?* | The presence of others heightening environmental challenges |
| | Finding restorative niches |
| *A roller-coaster of anxiety-related emotions* | |
| *The key impact of relationships* | Are we invisible? |
| | The not so accepting response of others |
| *School can (also) be a positive context for growth* | |
| *An interpersonal touch* | Please understand who I am |
| | Taking the time to build supportive relationships |
| *Relieving the pressure by providing choice* | |
| *A quiet and calm environment* | |

## The puzzle of exploring our identity

Theme one was developed from participants' experiences of exploring their identity and personality, and how they viewed introversion as part of this process.

### Growth and change

The transition to secondary education and associated developmental life-stage was presented as a pivotal moment of adjustment and growing self-awareness in participants' understanding of introversion, linked to the need to integrate with unknown peers, larger year group sizes and greater diversity in the young people in school. There was a noticeable difference in the accounts of the younger and older participants, with the latter being able to reflect on their journey and seemingly feeling more comfortable with their more introverted presentation as part of their identity. Young people mentioned how acquiring a greater understanding of introversion through discussions with friends or independent research had helped them to understand themselves and feel less alone.

> Alexis (Chronological Age [CA] 15): In secondary school there's like so many more people and there's so like, you're with different people in every class, and you're in a different classroom, and like, there's some, there's much much more wider variety of like, personality types.

### We're all unique individuals

Young people spoke about how individuals with introverted personality styles have characteristics in common, but may also have differing characteristics which do not conform to social stereotype. They described introversion as a continuum and explained how their presentation and behaviour may change depending on environmental circumstances. The diversity of characteristics in evidence in their narratives and the PCP activity is outlined in Table 3.

**Table 3.** Broad areas of participants' descriptions of introversion.

| Positives | Negatives |
| --- | --- |
| Enjoy spending time alone | Social interaction experienced as draining |
| Quietness | Shyness |
| A choice over social interactions/how to spend free time | Difficulties with confidence |
| Context-dependent | Moody |
| Diversity of presentation | Plain |
| Friendship preferences (smaller groups) | Dull |
| Positive academic presentation | More studious |
| Good sense of humour | More reserved |

> Victoria (CA 15): I feel like there're like certain different types of introversion. I feel like it's not just every introvert the same.

### The complexity of the social world

This theme was developed from participants' views on socialising, specifically in relation to the typical cultural norms for socialising in Western society, the impact of the context on social presentation and growing to understand this as an individual preference.

### Feeling at odds with societal expectations

There was a strong narrative thread across participants about challenges in navigating the demands of the wider social world as a common feature of introversion, including a preference for staying in, having smaller friendship groups, presenting as quiet, and disliking excessive social interaction. A number of participants spoke about feeling drained by social contact and needing time to recharge at home alone.

> Alexis (CA 15): I have this [. . .] social battery, and when it gets to like a certain point you just kind of go like, like you can't, socialise anymore and it becomes really hard to keep like, keep being [. . .] your social battery just runs out [. . .] you would need like a couple of days to like recover [. . .] like it takes a while for you to get, like to basically just be sociable, like in the first place.

### Understanding our preferences as social beings

While challenges with regard to socialising were acknowledged, participants were keen to discourage what they saw as a popular myth about introverts not enjoying any form of socialising or lacking social skills. Instead, participants shared an understanding of their social needs and how best to meet these in different ways, for example, within close and trusting relationships, and in safe and familiar surroundings.

> Victoria (CA 15): I feel like some introverts are pretty good at speaking to people, it's just they're not really as interested in it [. . .] I don't think you have to not like social interactions to be an introvert.

### Should we be more extraverted?

A number of participants spoke about apparent social status, with more outgoing students seen as popular, and introverted students perceived as plain, dull and more

studious. Reference was made to being known as "the introvert" or "the quiet one" and participants spoke about having felt the need to present as more extraverted (than they actually felt) and having internalised cultural expectations that they should be acting in a more extraverted manner. Furthermore, some expressed annoyance or apparent feelings of guilt over being introverted and wished they could present in a more extraverted manner, as they believed that it would make their lives (and those of people around them) easier.

> Martha (CA 15): [It makes me feel] like I shouldn't be doing what I'm doing and try and change [. . .] If I'm sat next to quite a loud person, it's quite uncomfortable because it feels like I should be talking or like they're annoyed with me, like expecting me to talk and they don't really understand [. . .] I just sort of feel like I wish I could be more like that, and like talk more, 'cause it would be better for other people [. . .] Umm, they would be getting, like, something back instead of just talking to nothing.

### *Experiencing participatory pressures in school*

An aspect evident in the young people's narratives was the perception of a culture of a specific type of active participation which existed within school, from group work, to presentations, raising hands or being called on for answers.

### *Feelings of discomfort associated with participation*

Participants expressed feeling uncomfortable about the expectation to actively take part in classes, and nervous and overwhelmed when required to do so, often linking this to feelings of embarrassment in front of peers and not wanting to draw attention to themselves. Some indicated the requirement to participate interrupted their focus and hindered their ability to engage in learning, expressing instead a preference for lecture style teaching. Conversely, others expressed a desire to participate but found this difficult to achieve.

> Gina (CA 14): sometimes we're picked on to read in front of the class [. . .] that can be, ummm, very nerve-racking. Yeah, especially out of the blue, umm, and shaking the words and forgetting everything.

### *Teachers' responses to participatory attempts*

Participants spoke about some teachers confusing overt participation with engagement and learning, and how this negatively impacted on their own feelings of ability when struggling to meet these expectations. Conversely, some young people felt teachers mistook their lack of participation for comprehensive understanding of the subject (and hence not needing to ask questions), and as such they did not always receive support when it was required.

> Martha (CA 15): I think a lot of the time they [teachers] think it means I'm either doing well or I'm really confused. Like, some teachers move me to the front so that they can see my book cos they're not sure how well I'm doing if I'm quiet and some teachers just, umm, don't really pay attention cos they think I'm doing well If I'm quiet. So, it's sort of mixed.

### Learning to cope with participation

Participants spoke about ways of coping with participation, including building off other people's responses, typing/writing rather than verbally contributing, being provided with choices about participation, or teachers adopting a slower pace of delivery which provided more time to think and reflect before volunteering information.

> Richard (CA 13): Yeah, I did prefer putting it in the chat [during virtual learning on Microsoft Teams] 'cause it's like you don't have to worry as much[. . .] 'cause you can't really know what other people are thinking of what you're saying [. . .] and if you get it right, bonus. If you don't, it's just it doesn't really matter 'cause it's not like people are going to be looking at you and you'll see them and stuff like that.

### Living with others and not in a vacuum

Participants' accounts revealed the key role played by relationships and how they impact on the experience of the school environment.

### Friends as allies

Friendships were seen as a central source of support, safety and comfort in school, providing an opportunity to recharge (at break and lunchtime), and acting as allies in difficult or busy lessons. Some participants remarked on closeness with their friends and speculated their bonds may be stronger due to the reduced size of their friendship groups. However, finding the right friendships was seen as a difficult journey to navigate. The variety of young people in secondary school was experienced as a blessing, in the sense that potential friends must exist, but also a curse, as finding them could prove challenging.

> Meredith (CA 14): I think if you have a group of friends, and if you feel comfortable around at least some people at school, then it definitely helps you to feel, to like settle in better.

### The modulating impact of others on the context

Other people, outside the immediate friendship circle, were also reported to impact participants' feelings of comfort and willingness to actively engage. For example, participants expressed a preference for working with similar peers in smaller group sizes and with respect to whole class composition, a preference for familiarity and relationship building.

> Gina (CA 14): If you know everyone in your class then you feel, like better, more confident to share your views with the class because you know that people who know you they won't, perhaps judge you as harshly.

### The physical environment: friend or foe?

A number of participants considered the impact of the physical environment on their experiences of school, including the layout of the building, the location of classrooms, seating plans.

### The presence of others heightening environmental challenges

For some participants physical spaces could result in feelings of discomfort and anxiety, with vast spaces making it easy to become lost and other areas, for example, corridors, feeling over-crowded. For others, seating arrangements were a key issue, with a range of expressed preferences from tables in rows to pairs to single seating. Seating in groups or hubs facing each other was seen as less desirable due to the perception of increased social pressure. There was a sense from the participants' narratives that while the physical arrangement of the tables had an impact, the people who were seated in the vicinity were equally as important.

> Martha (CA 15): If I'm sat at the back I feel more comfortable but when you're sat the front or near the front I feel, I find it hard to concentrate 'cause I feel like everyone can see me and everyone's watching me.

### Finding restorative niches

Participants spoke about how they physically coped with the pressures of the day, including knowing when to take a break and having time to recharge (alone or with friends) and seeking out quieter spaces in school, for example, libraries, as safe places in which to take refuge.

> Jenny (CA 11): I normally go to the library 'cause it's quiet in there so I can just do some drawing or something [...] outside it's really loud and there's a lot of people walking about.

### A roller-coaster of anxiety-related emotions

Participants named a variety of emotions about school, including feeling nervous, worried, overwhelmed, uncomfortable, scared/frightened or low in mood. These emotions often linked to perceived pressures (from teachers, peers, in lessons). There was a strong sense of participants seeking to socially conform, with comments being made about fears of not meeting expectations and worries about making mistakes. Some also spoke about physical symptoms accompanying these emotions, or how the overall emotional experiences in school could leave them feeling drained at the end of the day.

> Gina (CA 14): Well, after school I feel quite exhausted. Umm like, just when I got to my room and just stayed there all day.

### The key impact of relationships

Participants frequently mentioned the modulating effect of teachers and peers on their subjective wellbeing and emotional response to situations.

### Are we invisible?

Participants spoke about how they had felt overlooked, leading to feelings of frustration and isolation. They also implied that quieter students were not noticed by teachers who

instead spent their time on students with more externalising or outgoing presentations. Some participants expressed a sense of injustice about this, feeling under-supported and believing their positive achievements were not recognised as a result. Similarly, participants spoke about being overlooked by peers due to being quieter, with their views and ideas not being actively solicited in the same way as other students or being discarded when they were shared.

> Gina (CA 14): Students who are quiet often go under the radar, umm, or sometimes not noticed by teachers, especially if you behave well in class, umm, and you kind of aren't a problem, you're probably not going to be seen or picked on I suppose as much.

### The not so accepting response of others

Participants felt they were not always understood by their (more extraverted) peers, which sometimes manifested as a lack of interaction or negative comments and questions about their way of being. Some young people felt they were a "target" due to their perceived quieter natures and felt embarrassed about this, fearing how their peers might respond to them. This in turn led to them being hesitant to share their views or trying to hide their authentic presentation. There were also references to teachers not always being understanding of more introverted ways.

> Victoria (CA 15): I get people asking me like why I'm quiet and stuff and I don't really like those kind of questions 'cause, umm, it's kind of awkward. I don't really know what to say and it's just kind of unnecessary to ask really.

### School can (also) be a positive context for growth

Participants also mentioned some positive factors which they enjoy about school and which appeared to act in protective ways. In this regard, school was seen as an opportunity to expand their social network, and also as helping to grow confidence in new areas through being placed outside their comfort zone, for example, in student council/leadership roles.

> Victoria (CA 15): At school there's always going to be an element of talking to people you're not familiar with, and in some ways that's sort of a good thing.

### An interpersonal touch

When discussing changes which could be made to enhance the educational experience of participants, there was once again a strong focus on relationships and interactions with others within the school environment.

### Please understand who I am

Participants felt the educational environment would be enhanced by teachers and peers having a better understanding of introversion and how this manifests in the classroom. It was hoped that this greater level of understanding would discourage others from making

assumptions and lead to greater consideration of personality types when planning teaching or school events.

> Martha (CA 15): It would be helpful if teachers sort of understood when people are quiet and didn't really bother them that much.

### Taking the time to build supportive relationships

Participants spoke about how they would like to see more time dedicated to fostering supportive bonds with teachers and peers and how this would promote feelings of wellbeing in school. The idea of keeping class groups consistent over the course of secondary years was also suggested as a supportive measure.

> Meredith (CA 14): I think also that if they let you choose your groups that you work with, because you're not gonna work well with a group of popular boys, if you're trying to do work and they're just like talking about something that you just don't get because they're friends and you're not one of their friends.

### Relieving the pressure by providing choice

Another common thread in participants' narratives centred on providing choice in relation to factors within school and how this could relieve pressure and have a positive impact on wellbeing. Being sensitive about participation in the classroom, providing choice on seating arrangements, and making teacher support more accessible were some examples.

> Richard (CA 13): Maybe some sort of anonymous question thing so you can just sort of go online and then ask a question you wouldn't normally want to ask in the class. And then, but it would be anonymous so it's like nobody's gonna know that you've said it, so you won't have to worry about what other people are going to think of it.

### A quiet and calm environment to thrive

Finally, participants spoke about a preference for a calmer and quieter school environment. Suggestions about how this could be achieved included creating comfortable, quiet spaces within school to act as refuges and changes to the behaviour policies to lessen the negative impact of loud/disruptive behaviour in class.

> Martha (CA 15): It would be nice to have like a place to go if I was starting to feel uncomfortable [...] Umm, if there was like a room for each person or something that they could just go there and just be for a bit [...] Umm, just like a place to sit [...] Just breathe for a bit before you go back in the lessons.

## Discussion

This research highlighted the importance of introversion as a factor to consider in school wellbeing and experience as perceived by young people. The participants emphasised feeling overlooked on occasions by adults in the education arena and experiencing strong expectations to act in more extraverted ways. While there were some positive emotions

shared about school, there was also a noticeable focus on anxiety-related feelings of pressure, discomfort and nervousness and a sense that their personality style created additional difficulties in navigating the school environment, which adversely impacted on their emotional adjustment. Positive, empathic relationships with others were highlighted as a key protective factor against these areas of difficulty. However, there was a sense that introversion was not fully understood or considered by others, which could pose a barrier to such relationships, supporting the notion that individual internalised factors, including personality, have typically received less attention in schools. Participants proposed adults working in this field would benefit from greater knowledge about introversion as a construct, alongside a broader understanding of personality, to discourage unhelpful assumptions about their presentation, echoing similar themes from research by Barker (2011) regarding quiet high school students feeling misunderstood by their teachers.

### *The understanding of introversion*

The current research contributes fresh theoretical understanding about the concept of introversion (detailed in Table 3) compared to traditional definitions which have been quite broad in scope and not directly informed by young people's perspectives (APA, 2021, Davidson et al., 2015). While the participants referenced salient characteristics typically mentioned in the literature in relation to social interaction and a quiet external presentation (Helgoe, 2008, John et al., 2008, Orchard & Fullwood, 2010), there was also a focus on positive aspects with emphasis on social differences/preferences as opposed to social difficulties, and a recognition of the importance of avoiding reductionism and recognising each young person as unique. As such, novel facets of introversion were discussed, including a focus on friendships, emotional factors, sense of humour, shared interests and academic orientation.

Person-environment fit theory (Lewin, 2013) posits that an individual's behaviour and adjustment will be influenced by the congruence between their personality style and the environment in which they find themselves, with the assumption that personality style is stable. The current research reinforces the importance of context highlighted by this theory and previous studies on goodness of fit (Blevins et al., 2022, Davidson et al., 2015) and emphasises the importance of interaction between bio and psycho-social factors to obtain a holistic understanding of the individual (Bolton & Gillett, 2019). The current findings suggest the participants with IPSs could present quite differently across contexts and typically felt more comfortable in informal interaction settings, for example, with friends at breaktime, where they could make choices, than in the more formal classroom setting where decisions about interaction were often beyond their control.

While previous research has tentatively explored differences in learning environments, for example, online versus in-person (Amichai-Hamburger et al., 2004) and preferences in relation to the relative formality of learning tasks, for example, group participation versus structured lectures (Flanagan & Addy, 2019, Zafonte, 2018), wider consideration of differences between the formality of settings in education has not previously been undertaken. There are some similarities to extant research with adult populations in the workplace which suggest introverts tend to prefer more structured environments compared to more informal free-flow work situations (Needle, 2019). However, the current findings raise the

idea that informal environments need not always be more challenging for these young people, with choice and control seeming to be important mediating factors.

The literature suggests that despite a growing body of positively focused research on introversion, there continues to be a stigma attached to this personality type (Cain, 2013). The current research adds weight to this perspective via the direct accounts of secondary school aged young people. The participants spoke about the struggles of being introverted in school and how they felt it might be easier if they were more extraverted. There is a well-documented bias towards more overt socialisation and talkativeness in Western culture (Cohen et al., 2016, McCrae & Terracciano, 2005) and this appears to be reflected in the self-perception of the young people within this research, who spoke about feelings of guilt over their lack of extraverted characteristics and a sense that they should be more talkative. Their narratives implied they had internalised these societal expectations of interaction (a process explained by Elsenbroich & Gilbert, 2014) and saw them as goals to be obtained. However, prior research has shown such counter-dispositional acting can potentially lead to decreased feelings of authenticity and increased tiredness (Jacques-Hamilton et al., 2019). The participants also considered their personality style in the context of the education environment (the social context) and expressed reservations about the congruency between the current school context and their own preferences, with a number openly agreeing that the education environment was not well suited to them. These findings are broadly in line with the view that current teaching practices and education settings in Western culture are more closely aligned with the extravert ideal (Thom, 2020).

### *The importance of considering the individual*

The findings from the current research highlight the importance of considering the individual and their needs, preferences and emotions within the education environment to support their inclusion and optimal school experience. It would appear that these factors are not consistently explored within school; reinforcing previous research which has drawn attention to the lack of consideration of individual's beliefs and dispositions about their academic and social participation (Pillay, 2002).

The most recent trends in educational pedagogy have focused on an active learning approach, championing participation and group collaboration, and a focus on the creation of an environment to promote these techniques (Flanagan & Addy, 2019, Freeman et al., 2014). While there are associated benefits to this stance, there has been a theme of its equal promotion to all students without adequate consideration of individual preference and need. Similar trends are in evidence in the understanding and promotion of social relationships (Brown & Larson, 2009, Harris & Orth, 2020, Koutsouris et al., 2020). While the importance of social connection is not in dispute, the findings from the current study evidence how this can present differently in each individual, and if this is not adequately considered there is a risk of promoting particular expectations for social interaction, for example, expectations for social/friendship groups, due to wider cultural/environmental stereotypes (Cain, 2013).

Overlooking the individual could lead to risks of the young person feeling invalidated and unheard. Indeed, participants within the current research shared feeling at their best when others took account and were accepting of their way of being and made

adjustments to accommodate this within the pre-existing environment. This position is in line with previous research by Lawn et al. (2019) who found adults with IPSs have higher levels of overall wellbeing when they hold lower levels of extraversion-deficit beliefs (i.e. wishing to be more extraverted than they are in line with societal expectations and environmental pressures).

Within the educational psychology field, there has been recognition of the importance of individual factors in relation to understanding young people's unique perceptions, views and preferences. This is reflected in the focus of the profession in gathering and disseminating student voice, often underpinned by techniques based in PCP theory (Beattie, 2012, Harding & Atkinson, 2009, Smillie & Newton, 2020). However, there has been less enthusiasm for exploring inherent factors with a psychological or even biological basis, such as the explicit assessment of personality. This is in keeping with the ongoing trend to move away from focusing on within-child factors to broader systemic and contextual (social/environmental) issues (Law, 2018, Passenger, 2013). However, the reported relevance of personality by participants within the current research raises a question as to whether EPs are overlooking an important puzzle piece in building a holistic picture of a young person. This query is echoed in international literature, where personality factors have been tentatively flagged as offering a potentially unique contribution that is being missed by psychologists working in education (Crespi & Politikos, 2012, Flanagan, 2007).

A question remains about the relative biological and environmental basis of personality (Ashton, 2023, Briley & Tucker-Drob, 2014) and how personality factors might impact differently across the age groups and educational approaches at different life stages (Roberts et al., 2006, Soto & Tackett, 2015). Definitive answers to these broad dilemmas were beyond the scope of this study, although insights were provided into the process of growing self-awareness and developing self-acceptance of participants' personality style with the transition to later adolescence. Furthermore, the voice of young people within the research provided awareness of factors which were perceived as helpful or a hindrance for their adjustment in education irrespective of the biological or environmental nature of personality. Further research will be essential to further explore these links and wider implications across developmental stages.

## Limitations

One limitation of this study was the greater number of female participants, which raises questions about the skewed gender distribution in current research. There are a number of potential considerations for this, including female students having felt more comfortable talking about their feelings and experiences, male students having felt greater stigma in identifying as introverted, or the gender of the lead researcher (known to the participants through the flyer) influencing participation due to perceived similarities and identification (Montoya et al., 2008, Underwood et al., 2010). Gender differences in relation to personality is a matter that might be explored in further research.

A second limitation relates to undisclosed potential demographic differences among participants which could have acted as conflating factors in their experience of school, for example their academic attainment or assessed level of SEND. These factors were not the

focus of the current research and the potential links between introversion and SEND represent a gap in the literature. As such, possible interactions between differential educational backgrounds (for example, level of SEND, neurodivergent diagnoses), educational placements (for example, special, private/state, or grammar schools) and personality are areas for possible future research.

A final series of limitations relates to the size and composition of the sample and the use of a non-probability convenience sampling technique. A definitive consensus regarding the definition of IPS remains elusive, and while initial scoping questions on the flyer and the subsequent screening questionnaire were used to attempt to deliver a degree of homogeneity, it is recognised that the full range of individuals who would consider themselves as introverted will likely not be represented in the study. There is also a risk that views from particular clusters of participants, for example, those with moderate scores on the McCroskey scale or from the same school, could be over-stated, although it is worth noting that similar themes were identified across all interviews, providing a degree of confidence that there were not significant differences. Moreover, as with most qualitative research, the aim of the study was not to generalise, but rather to obtain a view of the participants' unique experiences and establish a degree of transferability (Treharne & Riggs, 2014). The researchers used the cut-off score on the screening questionnaire to ensure the self-reported nature of the participants' personality style met the criteria for the study. Participants were only admitted to the study if they scored above this level.

### *Implications for practice*

Notwithstanding the limitations of the study, a series of implications for educational psychology practice have been developed from the current research findings, supported by psychological theory and extant research, highlighting that EPs might be encouraged to:

- consider personality factors, including introversion, within their biopsychosocial formulation to understand the holistic complexity of the young person within their context, and differentiate between analogous presentations (for example, introversion, shyness, social anxiety). Personality focused input during postgraduate doctoral training and as post-qualification professional development courses would support development of this understanding in practice.
- raise awareness of introversion within schools, given the tendency of these students to be overlooked (Schwartz, 2015). Such awareness should be interwoven throughout EP involvement, including during consultations with school staff and parents, assessments with young people (via observation, self-report measures, psychometrics, etc.), and when making support recommendations to schools.
- support development of an empathic culture of acceptance of introversion within schools to reduce levels of extraversion-deficit beliefs, which are linked to decreased levels of wellbeing (Lawn et al., 2019). This will include being mindful of language used to describe these young people, celebrating their strengths and contributions, and recognising introversion is different to, but not better or worse than, extraversion/ambiversion.

- promote the voice of young people with IPSs to work collaboratively with students and staff to implement change at both micro and macro levels across the education environment.

## Conclusions

The current research has contributed towards the generation of knowledge in an area which was previously largely unexplored in the literature, with findings revealing overarching themes about the emotional impact of school, the importance of relationships and the experience of societal and educational pressures towards extraversion. The strength of feeling and consistency across the participants provide an important insight into their daily experience and supports the importance of considering personality factors alongside other key contextual variables in understanding young people's needs and functioning. While the biological/environmental basis of personality remains under debate, the findings from the current research support the need to consider individual/inherent factors (emotions, preferences, needs) within the biopsychosocial model to obtain a holistic picture of the person within their wider environment. It is hoped that this research will help to raise awareness and acceptance about the topic of introversion in schools and the unique experiences of children and young people growing up with this personality style. There are however a series of limitations within the current study, which have been acknowledged, and which imply a more tentative expression of the implications of the findings with further research required. Moving forwards, there is also scope to expand on the initial research carried out within this study to further explore the understanding and impact of personality within the education field.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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## Appendix 1. The McCroskey (nd) Introversion scale

*Below are eighteen statements that people sometimes make about themselves.*

   *Please indicate whether or not you believe each statement applies to you by choosing one of the five options* (a five point Likert scale was presented to participants with the options strongly disagree, disagree, unsure, agree and strongly agree).

   *If you are unsure between two answers please chose the one that best describes you most of the time.*
   *Please be honest. There are no right or wrong answers.*
   *If you are unsure about the meaning of any of the questions, please ask the researcher.*

 (1)  Are you inclined to keep in the background on social occasions?
 (2)  Do you like to mix socially with people?
 (3)  Do you sometimes feel happy, sometimes sad, without any apparent reason?
 (4)  Are you more inclined to surround yourself with few people who you are close to rather than lots of people who you don't know well?
 (5)  Do you like to have lots of social contact?
 (6)  Do you have frequent ups and downs in mood?
 (7)  Would you rate yourself as a happy-go-lucky individual?
 (8)  Can you usually let yourself go and have a good time at a party?
 (9)  Are you inclined to be moody?
(10)  Would you be very unhappy if you weren't able to have lots of social contacts?
(11)  Do you usually take the first steps in making new friends?
(12)  Does your mind often wander while you are trying to concentrate?
(13)  Do you like to play jokes/pranks on others?
(14)  Are you usually good at socialising and small talk?
(15)  Are you sometimes bubbling over with energy and sometimes very sluggish?
(16)  Do you often "have the time of your life" at social events?
(17)  Are you frequently "lost in thought" even when you should be taking part in a conversation?
(18)  Do you feel happier at social activities than anywhere else?

## Appendix 2. Semi-structured interview schedule

### Level one: general experience of introversion

### *Level two: 1. Terminology and definitions used for introversion*

We're going to start off by doing a brief activity.

PCP Activity – Eliciting constructs around Introversion:

- Can you think of 3/4 young people who you know in your class, at school, or in your wider life who you would say are similar to you in the way they are? Can you write down their names (Group A).
- Can you think of 3/4 young people who you know in your class, at school, or in your wider life who you would say are different to you in the way they are? Can you write down their names (Group B).
- (Pick random pairing from one group and single name from the other). "Can you tell me something the two people have in common that is different to the other person?/In what way are they alike?"(elicit constructs) and then "What would you call someone who is not X?" (elicit their contrasting poles).
- Repeat process with multiple pairings and combinations of randomly chosen names from the groups.

- Explore responses with questions, such as "what do you mean by that?", "why do you think that is important?", "can you give me an example?".
- (Use a shared screen Power Point slide to represent the elicited constructs and their contrasting poles).
- Where would you place someone who has an introverted personality style on the continuum?

(1) Could you tell me a little bit about what you understand by introversion, in a general sense?
(1.1) Do you recall when in your life you first became aware of differences between people who are more introverted and those who are more extraverted?
(1.2) Has your perception of being introverted changed at different points in your life?

## Level one: experience of introversion in the school environment

### Level two: 2. Understanding what is support and challenging about school

In the next set of questions, I'd like to hear about your school experiences. When talking about your answers please feel free to use examples if that is helpful.

(2) Can you tell me about your experience of a typical day at school?
    (2.1) What do you find supportive/helpful about the school environment?
    (2.2) What do you find challenging/unhelpful about the school environment?
    (2.3) Thinking about your school, do you feel that the current secondary school environment is well-suited to students with more introverted personality styles? Why?

*Explore aspects such as timetables, changing classes for different subjects, seating arrangements*

### Level two: 3. Learning and academics

We are now going to focus a bit more on teaching and learning in the classroom.

(3) Can you tell me about the sort of teaching techniques which are used in your lessons? (If necessary clarify with examples, e.g. group work, individual learning, etc.).
    (3.1) How do these different teaching approaches make you feel?
    (3.2) Which teaching method is your favourite/the one that allows you to achieve to the best of your ability?
    (3.3) Which teaching method do you find the least helpful?

### Level two: 4. Perceptions of others

I'd now like to talk about some of the other people at school.

(4) Do you feel that other people in school have a good understanding of introversion and what school is like for introverted students?
    (4.1) How do you feel you are perceived by your teachers?
    (4.2) How do you feel you are perceived by other members of school staff?
    (4.3) How do you feel you are perceived by your peers?

### Level two: 5. Subjective experience, feelings and wellbeing

I now want to explore a little more about how school as a whole (environment, lessons, other people etc.) and how everything we've discussed so far makes you feel.

(5) What impact do you feel school has on your wellbeing and how you feel on a daily basis?
    (5.1) Do you think you would feel differently if changes were made to the school environment?
    (5.2) Based on your experience, what tips would you give to an introverted student who was about to enter secondary school?

### Level two: 6. Change moving forwards

We're reaching the end of the questions now, so finally I would like to hear your thoughts and ideas on what we could change about school and how it could be made better for students who are more introverted.

(6) What would you change about school so that it could better meet your needs?
    (6.1) What sort of support do you think would be helpful to students with introverted personality styles in school?
    (6.2) What recommendations would you give to teachers for teaching and better understanding students with introverted personality styles?
    (7) Is there anything else you would like to add?

## Appendix 3. Steps followed during reflexive thematic analysis (Braun & Clarke, 2021)

| Stage of reflexive TA | Steps undertaken by the researchers |
|---|---|
| (1) Familiarisation with the data | • Transcribed the interviews.<br>• Read and re-read the data in an active, analytical and critical way to ensure familiarisation. |
| (2) Coding | • Adopted a complete coding approach.<br>• Generated codes for all features of the data which might be relevant to the research question.<br>• Collated all the codes and relevant data extracts for subsequent analysis. |
| (3) Generating initial themes | • Examined the codes to identify larger patterns of meaning across the dataset.<br>• Identified candidate themes using visual mapping as an aid.<br>• Reviewed and revised the candidate themes. |
| (4) Developing and Reviewing themes | • Checked candidate themes to ensure their consistency with the story of the dataset and relevance to respond to the research question.<br>• Refined the themes by merging, splitting or discarding. |
| (5) Refining, defining and naming themes | • Developed a rich, interconnected and logical analysis for each theme.<br>• Named the themes in an evocative, concise and informative way. |
| (6) Writing up | • Presented the findings from the analysis.<br>• Weaved together the analysis narrative and data extracts.<br>• Contextualised the findings in the existing literature base. |