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Psychological type and religious affect: A study among adolescent Baptists in Canada

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Abstract
A sample of 299 young people between the ages of 12 and 18 attending a week-long summer youth programme sponsored by the Canadian Baptists of Atlantic Canada completed the Adolescent form of the Francis Psychological Type Scales together with the Francis Scale of Attitude toward Christianity. The data demonstrated that a more positive attitude toward Christianity was associated with a preference for feeling (rather than thinking) and with a preference for judging (rather than perceiving), and that retention rates were lower for extraverts and for intuitive types. The article concludes by recommending psychological type awareness courses within youth ministry training programmes to enhance understanding attrition and retention of young people within Christian activities.

Keywords: personality, psychological type, attitude toward Christianity, religion
Introduction

The connections between personality and religion have long been of interest both to psychologists and to theologians. Precisely how these connections are conceptualised and investigated differ according to the discipline within which they have been shaped and according to the methods that are available for assessing those connections. Within theology it tends to be religious beliefs and practices that are thought to impact personality, while within psychology it tends to be personality that is thought to impact religious beliefs and practices. A major difficulty in reconciling these two approaches tends to arise from the amorphous nature of the notion of personality. For theologians, shaped in the Christian tradition, personality may seem to embrace the qualities described by the Apostle Paul in Galatians 5: 22 that distinguish between the works of the flesh (fornication, impurity, licentiousness, idolatry, sorcery, enmities, strife, jealousy, anger, quarrels, dissensions, factions, envy, drunkenness, carousing) and the fruit of the Spirit (love, joy, peace, patience, kindness, generosity, faithfulness, gentleness, self control). For psychologists, shaped in the individual difference tradition, personality may seem to embrace those characteristics described by the Major Three Dimensions model (extraversion, neuroticism, psychoticism) proposed by Eysenck and Eysenck (1975) or the Big Five Factor model (neuroticism, extraversion, openness, agreeableness, conscientiousness) proposed by Costa and McCrea (1992).

Any serious conversation between theology and psychology concerning the connection between personality and religion needs to begin with a clarification of terms. Francis and Village (2015), in their attempt to begin to develop a theology of individual differences, proposed working with the distinction between character and personality. For Francis and Village, character concerned those qualities of human life that reflect the doctrine of the fall (the Pauline works of the flesh) and reflect the doctrine of salvation (the Pauline
fruit of the Spirit). For Francis and Village, personality concerned those deep seated individual differences rooted in the doctrine of creation. For Francis and Village, the theology of individual differences was rooted in a strong reading of Genesis 1: 27:

So God created humankind in God’s image,
in the image of God, God created them;
male and female God created them.

This strong reading of Genesis 1: 27 argues that the diversity intended by the creator God involved not only sex differences, but ethnic differences, and certain differences in personality. On this reading female is neither more nor less than male created in the image of God, white is neither more nor less than black created in the image of God, extravert is neither more nor less than introvert created in the image of God. On this reading current instruments designed within the psychology of individual differences tradition to operationalise personality constructs need to be examined carefully to assess the extent to which the conceptualisation of these constructs may conflate the distinction between personality and character.

There remains, however, a further ambiguity within psychology as to whether models of personality are concerned solely with individual differences within normal personality or whether they properly embrace psychological pathologies as well. For example, the Eysenckian three dimensional model of personality intentionally embraces the threshold of neurotic disorders and psychotic disorders (see Eysenck & Eysenck, 1975, 1976). While eschewing the notion of psychoticism, the Big Five Factor model of personality retained the notion of neuroticism (see Costa & McCrae, 1992). Within the Big Five Factor model, neuroticism implies the absence of a desirable stability. The other four factors (extraversion, openness, agreeableness, conscientiousness) all imply good qualities and suggest the undesirability of low scores on these measures (Lloyd, 2015).
Within the broader field of personality measurement, Francis and Village (2015) identify the model of personality rooted in the psychological type theory proposed by Jung (1971) and operationalised in the Keirsey Temperament Sorter (Keirsey & Bates, 1978), the Myers-Briggs Type Indicator (Myers & McCaulley, 1985), and the Francis Psychological Type Scales (Francis, 2005; Francis, Laycock, & Brewster, 2017), as being most compatible with their developing theology of individual differences.

Introducing psychological type theory

The basic building blocks of psychological type theory distinguish between two orientations (extraversion and introversion), two perceiving functions (sensing and intuition), two judging functions (thinking and feeling), and two attitudes toward the external world (judging and perceiving). Within the broader field of the psychology of individual differences, psychological type theory is highly distinctive in two senses. First, it is based on the notion of typology, while other models are based on continua anchored by two opposing poles. Second, the two contrasting types within each pair are non-evaluative. In this model, introversion is not an absence of extraversion and both are deemed to be equally good, although different.

The two orientations are concerned with where energy is drawn from; energy can be gathered either from the outside world or from the inner world. Extraverts (E) are orientated toward the external world; they are energised by the people and events around them. They enjoy communicating and thrive in stimulating and exciting environments. They may be drained by silence and solitude. In contrast, introverts (I) are orientated toward their internal world; they are energised by their inner thoughts and ideas. They may feel drained by events and people around them. They enjoy solitude, silence, and contemplation, as they focus on what is happening in their inner life.
The perceiving functions are concerned with the way in which people receive and process information; this can be done through use of sensing or through use of intuition. Sensing types (S) tend to focus on specific details, rather than the overall picture. They prefer to be concerned with practical matters and tend to favour the traditional and conventional way of doing things. In contrast, intuitive types (N) focus on the possibilities of a situation. They prefer to concentrate on the overall picture, rather than specific facts and data. They aspire to bring innovative change to established conventions.

The judging functions are concerned with the way in which people undertake evaluations and make judgements; this can be done through use of objective impersonal logic, or through use of subjective interpersonal values. Thinking types (T) make judgements based on objective, impersonal logic. They value integrity, justice, truthfulness, and fairness. They consider that staying true to principles is more important than building harmony. In contrast, feeling types (F) make judgements based on subjective, personal values. They value compassion, mercy, tactfulness, and peace. For feeling types it is more important to cultivate harmony, than to stick to abstract principles.

The attitudes towards the external world are concerned with the way in which people respond to the world around them, either by employing their preferred judging function (feeling or thinking) that brings structure and order to their external world, or by employing their preferred perceiving function (sensing or intuition) to keep their external world open and flexible. Judging types (J) have a planned, orderly approach to life, relying on routine and established patterns. For judging types, it may be difficult to deal with unexpected disruptions of their plans. They prefer to make decisions quickly and to stick to their conclusions once made. In contrast, perceiving types (P) have a flexible, open-ended approach to life, enjoying change and spontaneity. They may find plans and schedules restrictive and tend to be
easygoing about issues such as punctuality, deadlines, and tidiness. Perceiving types are often good at dealing with the unexpected, and welcome change and variety.

**Exploring the connection between personality and religion**

The present study is rooted in the measurement tradition within the empirical psychology of religion. When Argyle (1958) undertook his first systematic review of empirical research within the psychology of religion, he concluded that insufficient consistent research had been thus far undertaken to establish reliable findings regarding the connection between personality and religion. Forty years later when Beit-Hallahmi and Argyle (1997, p. 164) re-examined the literature they concluded that, by that stage, there was enough secure empirical evidence to locate individual differences in religiosity within an established model of personality. The model that they identified was the dimensional model of personality proposed by the Eysenckian family of personality measures (Eysenck & Eysenck, 1975; Eysenck, Eysenck, & Barrett, 1985). This model comprised three dimensions, namely extraversion, neuroticism, and psychoticism. The shift that Beit-Hallahmi and Argyle (1997) identified was documented by a series of studies employing the Francis Scale of Attitude toward Christianity, as most recently summarised by Francis (2019).

The Francis Scale of Attitude toward Christianity was initially proposed by Francis (1978a, 1978b) and Francis and Stubbs (1987) as a measure of the affective dimension of religion appropriate for use in Christian and post-Christian contexts during childhood, adolescence, and adulthood. A series of studies demonstrated the reliability and validity of the original English-language version in a number of different cultural contexts (see, for example, Francis, Lewis, Philipchalk, Brown, & Lester, 1995), and the successful translation of the instrument into a number of other languages (see, for example, Crea, Baiocco, Ioverno, Buzzi, & Francis, 2014). The construct has also been proven robust for translation into other religious traditions, including the Sahin-Francis Scale of Attitude toward Islam (Sahin &
Through a series of replication studies running the Francis family of measures of religious affect alongside the Eysenck family of personality measures in a range of linguistic, cultural, and religious contexts, a secure picture has emerged regarding the consistent pattern of relationship between individual differences in religious affect and the three major dimensions of personality. The core finding is that within this model of personality the dimension of personality fundamental to individual differences in religiosity is psychoticism (see Francis, 1992, 2019, pp. 15-18). As yet, however, much less is known about the association between psychological type theory and religiosity. In order to stimulate research in this field, Francis, Jones, and Craig (2004) shaped four hypotheses, extrapolating from psychological type theory, regarding the connection between psychological type preferences and individual differences in religious affect.

First, in terms of the two orientations, Francis, Jones, and Craig (2004) argued that there is good reason to predict that no significant difference will be found between introverts and extraverts in terms of religious affect. This prediction was based on two observations. The majority of studies employing the Francis measure of religious affect alongside the Eysenckian three dimensional model of personality failed to find an association between extraversion scores and religious affect (see, for example, Francis, Lewis, Brown, Philipchalk, & Lester, 1995). A series of studies has demonstrated the high correlation between the Eysenckian extraversion scale and the Myers-Briggs Type Indicator measure of extraversion, including Steele and Kelly (1976), Cann and Donderi (1986), Campbell and

Second, in terms of the two perceiving functions, Francis, Jones, and Craig (2004) argued that there is good reason to predict that sensing types will record higher scores than intuitive types in terms of religious affect. This prediction was based on studies like Francis and Ross (1997) that have found sensing types give greater value to aspects of Christian spirituality, like attending church services. On the other hand, there is also good reason to predict that intuitive types will record higher scores than sensing types in terms of religious affect. This prediction is based on studies like Francis, Craig, Whinney, Tilley, and Slater (2007) that have found higher proportions of intuitive types among clergy than in the general population.

Third, in terms of the two judging functions, Francis, Jones, and Craig (2004) argued that there is good reason to predict that feeling types will record higher scores than thinking types in terms of religious affect. This prediction was based on the theory that feeling types would be more attracted to the affective dimension of Christianity since it is concerned with personal values. Moreover, studies of church congregations have reported a higher proportion of feeling types in attendance (Francis, Robbins, & Craig, 2011; Robbins & Francis, 2011).

Fourth, in terms of the two attitudes toward the outer world, Francis, Jones, and Craig (2004) argued that there is good reason to predict that judging types will record higher scores than perceiving types on religious affect. This prediction was based on two observations. The majority of studies employing the Francis measure of religious affect alongside the Eysenckian three dimensional model of personality have found a negative association between psychoticism scores and religious affect. A series of studies has demonstrated that the Eysenckian psychoticism scales correlate quite highly with the Myers-Briggs Type
Indicator measures of judging and perceiving (Francis & Jones, 2000; Francis, Craig, and Robbins, 2007).

As yet only four studies have set out to test these four hypotheses alongside the Francis Scale of Attitude toward Christianity. The first study by Jones and Francis (1999) reported on data employing the Keirsey Temperament Sorter (Keirsey & Bates, 1978) among 82 university student churchgoers. The second study by Fearn, Francis, and Wilcox (2001) reported on data employing the Keirsey Temperament Sorter (Keirsey & Bates, 1978) among 367 students studying religion as an examination subject at school prior to seeking admission to university (A-level examinations). The third study by Francis, Robbins, Boxer, Lewis, McGuckin, and McDaid (2003) reported on data employing the Francis Psychological Type Scales (Francis, 2005) among 149 university students. The fourth study by Francis, Jones, and Craig (2004) reported on data employing the Myers-Briggs Type Indicator (Myers & McCaulley, 1985) among 552 first year undergraduate students. Of these four studies, two reported a positive association between feeling and religious affect; two reported a positive association between judging and religious affect; and one reported a positive association between sensing and religious affect. All four studies were based in the UK.

Against this background, the aim of the present study is to extend previous research concerned with the association between psychological type and religious affect among adolescent Baptists in Canada.

**Method**

**Procedure**

All the young people attending the Tidal Impact week-long summer youth mission and service programme sponsored by the Canadian Baptists of Atlantic Canada in 2017, which was held in Halifax and in Bridgewater, Nova Scotia, were invited to complete a detailed questionnaire following the completion of seminars that provided training in spiritual
disciplines. Following an explanation of the nature of the survey and assurances of confidentiality and anonymity, the questionnaires were distributed to the young people. Participation was voluntary, but the overall level of interest in the topic meant that very few young people failed to complete the exercise. A total of 299 questionnaires were returned by participants between the ages of 12 and 18 years with data fully completed for the analyses reported in the present study. The research was approved by the Research Ethics Board of Crandall University in November 2016.

Participants

Of the 299 participants who provided full data, 109 were male and 190 were female; 17% were 12 years of age, 18% were 13, 23% were 14, 17% were 15, 11% were 16, 10% were 17, and 4% were 18 years of age. In terms of frequency of church attendance, 74% attended weekly, and a further 9% at least once a month, leaving 17% who attended less than monthly. In terms of frequency of personal prayer, 44% prayed daily, and a further 27% at least once a week, leaving 29% who prayed less than weekly. In terms of frequency of Bible reading, 9% read the Bible daily, 23% at least once a week, and a further 19% at least once a month, leaving 49% who read the Bible less than once a month.

Measures

*Psychological type* was assessed by the Adolescent form of the Francis Psychological Type Scales (Fawcett, Francis, & Robbins, 2011). This 40-item instrument comprises four sets of ten forced-choice items related to each of the four components of psychological type theory: orientation (extraversion or introversion), perceiving process (sensing or intuition), judging process (thinking or feeling), and attitude toward the outer world (judging or perceiving). Fawcett, Francis, and Robbins (2011) reported alpha coefficients of .82 for the extraversion and introversion scales, .67 for the sensing and intuition scales, .69 for the thinking and feeling scales, and .79 for the judging and perceiving scales.
Religious affect was assessed by the Francis Scale of Attitude toward Christianity (Francis, Lewis, Philipchalk, Brown, & Lester, 1995), a set of 24-items concerned with affective responses to God, Jesus, Bible, prayer and church. Each item was rated on a five-point Likert scale: disagree strongly (1), disagree (2), not certain (3), agree (4), and agree strongly (5). Francis, Lewis, Philipchalk, Brown, and Lester (1995) reported alpha coefficients of .97 within four samples of students from Australia, Canada, UK, and USA.

Analysis

The data were analysed by the SPSS package drawing on the frequency, correlation, reliability, and regression routines.

Results

- insert table 1 about here -

Table 1 presents the Pearson correlation coefficients between sex, age, religious affect, and the four continuous scale scores underpinning the four components of psychological type theory (with high scores representing extraversion, sensing, thinking, and judging). Four main findings emerge from those correlations. First, in terms of sex differences, females recorded higher scores on intuition, feeling, and judging, while males recorded higher scores on sensing, thinking, and perceiving. There was in this sample no sex differences on religious affect. Second, in terms of age, the proportion of extraverts decreased with age and the proportion of sensing types increased with age. This finding suggests that extraverts and intuitive types may cease to attend this kind of Baptist youth event at a younger age than introverts and sensing types. Third, in terms of the components of psychological type theory, there are a number of significant associations. This finding suggests that multiple regression may be needed to clarify the relation between these components and religious affect. Fourth, in terms of religious affect the individual
correlations suggest that higher religious affect is associated with extraversion, feeling, and judging.

Table 2 presents two regression models on religious affect. Two personal factors were entered into model 1 (sex and age). Four additional psychological factors (extraversion, sensing, thinking, and judging) were entered into model 2 after the two personal factors. These data indicate that higher religious affect is associated with feeling (rather than thinking) and with judging (rather than perceiving). When these two components of psychological type theory are in the equation (the judging process and the attitude toward the outer world), no additional variance is explained by the orientations (introversion and extraversion) or by the perceiving process (sensing and intuition).

**Conclusion**

The present study set out to build on four earlier studies reported by Jones and Francis (1991), Fearn, Francis, and Wilcox (2001), Francis, Robbins, Boxer, Lewis, McGuckin, and McDaid (2003), and Francis, Jones, and Craig (2004) in order to test the association between psychological type preferences and religious affect among adolescent Baptists in Canada. Data were provided by 299 young Baptists between the ages of 12 and 18 while attending the week-long summer youth mission and service programme sponsored by the Canadian Baptists of Atlantic Canada in Eastern Canada in 2017. Two main conclusions emerge from these studies regarding the connection between religious affect and psychological type.

From the present study the first main conclusion is that positive religious affect is associated with preferences for feeling (rather than thinking) and with judging (rather than perceiving). These two core findings are now consistent across three of the five studies that have investigated this research question. If positive religious affect serves as a secure predictor of religious practice, church congregations are likely to attract higher proportions of
feeling types and of judging types. This observation is consistent with data from congregation studies conducted in England (Francis, Robbins, & Craig, 2011) and in Australia (Robbins & Francis, 2011). There may be aspects of the culture of church life that are particularly appealing to feeling types and to judging types.

The finding that the inherited culture of church life that appeals particularly to feeling types is being perpetuated by youth ministries is worth closer attention. The feeling preference is essentially a feminine way of evaluating the world. According to the population study reported by Kendall (1998), 70% of women prefer feeling, compared with 35% of men. According to a survey of 140 church congregations reported by Francis, Wright, and Robbins (2016), 60% of churchgoers prefer feeling, a proportion much closer to the profile of women than to the profile of men within the population as a whole. The feminisation of mainline denominations is clearly visible through the higher participation level among women. Indeed in the present sample 64% of the participants were female. Now psychological profiling brings into visibility the less obvious concentration of preference for feeling. As operationalised by the Francis Psychological Type Scales (Francis, 2005), the feeling preference prioritises gentleness over firmness, warm-heartedness over fair-mindedness, the quest for peace over the quest for truth, the concern for harmony over the concern for justice. In theological categories, the feeling preference embraces the God of mercy above the God of justice. The question for youth ministry concerns how the balance between these theological perspectives may best be evidenced within the presentation of the Christian Gospel among young people, that may resonate as much with the lived experience of thinking types as with the lived experience of feeling types.

The finding that the inherited culture of church life that appeals particularly to judging types is being perpetuated by youth ministries is also worth closer attention. The judging preference is essentially a way of life that desires the outer world to be structured,
predictable, and certain. According to the population study reported by Kendall (1998), 58% of the population prefer judging, compared with 42% who prefer perceiving. According to the survey of 140 church congregations reported by Francis, Wright and Robbins (2016), the balance is quite different among churchgoers, where 86% prefer judging, compared with 14% who prefer perceiving. As operationalised by the Francis Psychological Type Scales (Francis, 2005), the judging preference prioritises certainty over uncertainty, organised behaviour over spontaneous behaviour, a structured approach to life over an open-ended approach to life, an organised schedule over a spontaneous approach, and a love for routine over an aversion for routine. In theological categories, the judging preference embraces the predictable God of order rather than the unpredictable God of surprises. The question for youth ministry concerns how the balance between these theological perspectives may best be evidenced within the presentation of the Christian Gospel among young people, that may resonate as well with the lived experience of perceiving types as with the lived experience of judging types.

From the present study the second main conclusion is that positive religious affect is associated with neither the perceiving process (sensing and intuition) nor with the orientations (extraversion and introversion). The lack of relationship with extraversion and introversion is now consistent across all five studies, while the lack of relationship with sensing and intuition is now consistent across four of the five studies.

In addition to the two main conclusions, two other features of the correlation matrix prompt further consideration. First, the absence of significant correlations between religious affect and both sex and age is unusual. Generally research finds higher levels of religious affect among females than among males (Francis & Penny, 2014). Generally research finds decline in levels of religious affect during adolescence (Kay & Francis, 1996). The distinctive features of the present sample can be accounted for by the higher proportion of females,
suggesting that the smaller number of males may be self-selected on the basis of positive religious affect, and by the lower number of participants aged 16 and over, suggesting attrition among those with lower levels of religious affect.

Second, the positive correlation between age and sensing and the positive correlation between age and introversion also offer clues about attrition of participation within this religious community. These clues suggest that intuitive types are more likely than sensing types to leave this religious community as they grow older, and that extraverts are more likely than introverts to leave the religious community as they grow older.

Much discussion has taken place within the youth worker community regarding the question of why some young people leave the Christian faith as they grow older. While the secularizing of western society, the influence of parents and peers, and other factors no doubt play a role, a seldom-explored line of thought is to what degree the presentation, teaching, and activities of youth ministry programming becomes less attractive to some young people of a particular psychological type preference as they age. While peers, parents, and youth workers have influence on whether a student continues to attend a youth ministry event, most students, especially as they grow older, ultimately decide for themselves. The data in this study have demonstrated that, among Canadian Baptist young people at least, a week-long summer youth mission and service programme, psychological type theory has been able to illuminate two main features of the attractiveness of the programme to young people. The first feature is that the programme holds greater appeal for feeling types and for judging types. This means that the programme holds less traction for thinking types and for perceiving types. The second feature is that the programme loses appeal for extraverts and for intuitive types as they grow older. In other words, the programme is being shaped primarily to appeal to introverts, to sensing types, to feeling types, and to judging types (ISFJs).
In one sense it may not be surprising that the Church is being most successful in nurturing young people with preference for the ISFJ profile. After all, ISFJs are the most over-represented group within church congregations (Francis, Robbins, & Craig, 2011; Robbin & Francis, 2011) and church leaders (including youth workers) are recruited from church congregations. There may be a tendency for church leaders (including youth workers) to involve their youth groups in events that seem appealing to them (often subconsciously assuming the event would also be appealing to their students). It is for this reason that initial and in-service ministry training programmes, including programmes for youth workers, offered by colleges, seminaries, denominations, and para-church ministries, can benefit from including courses designed to enhance practitioners’ awareness both of their own psychological type profile and of the different expectations of individuals who do not share their own profile. Enhanced awareness of this nature would help youth workers to reflect on whether the total menu of events and activities offered over the course of any given year appeal to all students with differing psychological type preferences.

Although this is now the fifth study that has explored the association between psychological type and religious affect, this research base remains much more slender than the number of studies that have documented the association between the Eysenckian three dimensional model of personality and individual differences in religiosity. The need remains for further replication studies in this field.

Declaration of conflicting interest

The authors declare that there is no conflict of interest.

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Table 1

*Correlation matrix*

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<th>Judging</th>
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<td>-.09</td>
<td>-.29***</td>
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<td>-.02</td>
<td>.33***</td>
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<td></td>
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<tr>
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<td>-.04</td>
<td>-.29***</td>
<td>.25***</td>
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<td></td>
</tr>
<tr>
<td>Sensing</td>
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<td>.12*</td>
<td>-.23***</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Extraversion</td>
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<td></td>
<td></td>
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<tr>
<td>Age</td>
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Note: Sex is coded: male (1) and female (2)

*p < .05, ** p < .01, *** p < .001
Table 2

*Regression models*

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<tr>
<td>Δ</td>
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<td>.13***</td>
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Note: ***p < .001