ORIGINAL PAPERS

The Impasse of Anomalous Experiences in Mental Health: Maturity, Social Support and Identity as Indicators of Benign Schizotypy in a Brazilian sample

Andréa dos Santos-Silva[1,2] · Tainá Lopes da Silva[1] ·
Jovana Giacobo Serra[3] · Letícia Oliveira Alminhana[4] ·
Irani Iracema de Lima Argimon[1]

Abstract

There is an impasse in mental health studies: anomalous experiences cannot be associated a priori with psychopathology, although those experiences are a risk factor for schizophrenia spectrum disorders. Schizotypy, or "schizophrenia phenotype," has been investigated within a dimensional perspective, where people with anomalous experiences fulfill the profile of positive schizotypy. The aim of this study was to investigate the characteristics of people with positive schizotypy, regarding to character maturity (self-directedness, cooperativeness, and self-transcendence); absence of anhedonia and impulsivity; presence of anomalous experience in life history (how they begun and were directed), as well as religious and spiritual coping. Seven women, who presented a positive schizotypy compatible profile, were interviewed face-to-face. The semi-structured interviews were recorded and later transcribed for thematic analysis according to the proposal of Braun and Clark (2006). The final analysis was carried out by three researchers who reached a consensus for the definition of the following thematic axes: (1) religion, goals, and meaning; (2) anomalous experiences; (3) family and social relations; (4) integration, identity, and re-signification. In conclusion, the solution to the impasse in considering anomalous experiences as non-pathological or pathological may be understanding the context of these experiences in each person's life. Thus, positive schizotypy, when associated with maturity of character (self-directedness, cooperativeness, and self-transcendence), positive religious and spiritual coping, and social support, do not characterize a risk for mental health, configuring a form of "benign schizotypy."

Keywords Mental health · Personality · Benign schizotypy · Anomalous experience, Spiritual and religious coping

✉ Andréa dos Santos-Silva
andrea.s@edu.pucrs.br

Extended author information available on the last page of the article

RESUMO

Existe um impasse nos estudos sobre saúde mental, onde a presença de experiências anômalas não pode ser associada a priori com psicopatologia, embora implique em risco para o desenvolvimento de Transtornos do Espectro da Esquizofrenia. A Esquizotipia, ou o "fenótipo da esquizofrenia" tem sido investigada dentro de uma perspectiva dimensional, onde pessoas com experiências anômalas preenchem o perfil da Esquizotipia Positiva. O presente estudo teve como objetivo principal investigar as características pessoas com Esquizotipia Positiva, no que tange a: Caráter Maduro (Autodirecionamento, Cooperatividade e Autotranscendência); ausência de anedonia e impulsividade; presença de EAs na história de vida, seu início e de que forma foram direcionadas, bem como Coping R/E. Para isso, foram realizadas entrevistas semi-estruturadas, presenciais, com sete mulheres que se caracterizaram dentro desse perfil, as quais foram gravadas e posteriormente transcritas para a realização de análise temática de acordo com a proposta de Braun and Clark (2006). A análise final foi feita por três pesquisadoras que entraram em consenso para a definição dos seguintes Eixos Temáticos: 1) Religião, Metas e Sentido; 2) Experiências Anômalas; 3) Família e Relações Sociais; 4) Integração, Identidade e Ressignificação. Concluindo, a solução para o impasse das experiências anômalas como não patológicas ou patológicas, pode ser a compreensão do contexto dessas experiências na vida de cada pessoa. Desse modo, a Esquizotipia Positiva quando está associada a um contexto de maturidade de caráter (Autodirecionamento, Cooperatividade e Autotranscendência); Coping R/E Positivo e apoio social não caracteriza risco para a saúde mental, configurando uma forma de "Esquizotipia Benigna".

Palavras-chave saúde mental · personalidade · esquizotipia benigna · experiências anômalas · coping religioso/espiritual

Introduction

Schizotypy

A study conducted by the World Health Organization (WHO) in 52 countries indicated a high prevalence of psychotic-like experiences in the general population (Nuevo et al. 2012). On average, 12.5% of the world population and 32% of Brazilians declared having at least one experience of a psychotic nature in the previous year, without being under the influence of alcohol or drugs. It is noteworthy that in only 10% of these cases were these psychotic experiences effectively associated with a diagnosis of psychosis (Nuevo et al. 2012).

Psychotic-like experiences can also be called anomalous experiences (AEs). AEs are experiences defined as unusual, irregular, which deviate from the generally accepted explanations to define reality, although they are not considered pathological a priori (Cardeña et al. 2000). Some examples of AEs would be seeing and hearing things that other people do not see or hear, near-death experiences

(NDEs), out-of-body experiences, lucid dreams, precognitive dreams, among others (Parra and Argibay 2018).

Due to evidence of AEs in non-clinical populations, recent studies have proposed the concept of schizotypy to better understand this phenomenon (Maraldi et al. 2020; Martins et al. 2017; Vencio et al. 2018). Schizotypy is the abbreviation of "schizophrenic phenotype" and was understood as a unique profile, although it presents approximations with etiological factors of schizophrenia. This concept adds features of vulnerability for psychotic disorders in the general population.

However, the categorical perspective present in manuals for classifying mental disorders, such as Diagnostic and Statistical Manual of Mental Disorders (DSM)—5th ed. (American Psychiatric Association 2014), does not seem to address the complex dynamics of schizotypy. According to the DSM, AEs fulfill criteria for schizophrenia spectrum disorders and specifically for schizotypal personality disorder (Barrantes-Vidal et al. 2015; Polner et al. 2018; Van Os and Linscott 2012). Nevertheless, schizotypy should not be understood as a personality disorder only (Fumero et al. 2018). Dimensional perspectives have managed to present other models to understand this topic aligned with the idea of a continuum of psychosis (Cicero et al. 2019).

According to this perspective, schizotypy can be understood as a personality trait, and not necessarily as an indicative of the presence of a mental disorder (Fisher et al 2004; Rawlings et al. 2008; Tan et al. 2022). At one end of the continuum, schizotypy would be a set of personality traits that present risk for psychosis. But in the other extreme, it would be related to mental health; creativity (Holt 2018; Holt et al. 2008; Mededovic and Dordevic 2017; Nettle and Clegg 2006; Wang et al. 2018); well-being; and paranormal, spiritual, or religious experiences, configuring a kind of "benign schizotypy" (Day and Peters 1999; Goulding 2004; McCreery and Claridge 2002; Schofield and Claridge 2007; Smith et al. 2009; Williams and Irwin 1991;Parra and Argibay 2018).

Considering the dimensional approach, the Oxford-Liverpool Inventory of Feelings and Experiences (Holt et al 2008; Mason and Claridge 2006) was created, based on previous scales to assess schizotypy. Two to four factors emerged from the inventory, depending on the items included. This study considers the dimensional perspective to understand schizotypy as a multifactorial construct with four core traits: (1) uncommon experiences and beliefs (UnEx); (2) cognitive disorganization with anxiety (CogDis); (3) introverted anhedonia (IntAn), and (4) impulsive nonconformity (ImpNon) (Mason et al. 1995; Mason et al. 1997; Mason and Claridge 2006; McCreery and Claridge 2002; Holt et al. 2008).

Once the factors were defined, different profiles of schizotypy emerged, some largely committed and close to the traits of schizophrenia, and other profiles without much similarity: (1) positive schizotypy—individuals with high scores in UnEx (presence of AEs) solely and with low scores in the other dimensions (anhedonia, disorganization, and impulsiveness); (2) low schizotypy—individuals with low scores in all dimensions and are not considered people prone to psychosis; (3) high schizotypy—people who score high on all dimensions and (4) negative schizotypy—those who score high on IntAn and CogDis (Goulding 2004; Goulding and Ödéhn 2009; Holt et al. 2008; Mason et al. 1995; McCreery and Claridge 2002; Ödéhn and

Goulding 2018; Rawlings et al. 2008; Simmonds-Moore and Holt 2007; Suhr and Spitznagel 2001; Tabak and Weisman de Mamani 2013; Williams 1994).

Schizotypy and Personality

Some studies have examined the relationships between schizotypy and the Psychobiological Model of Temperament and Character, developed by C. Robert Cloninger (Bora and Veznedaroglu 2007; Margetić et al. 2011; Hori et al. 2014). According to this model, temperament is described as a set of neurogenetic bases that underlie personality, determining differences in habits and behavioral responses, such as fear, anger, and aversion. The model has four temperament factors: (1) novelty seeking (NS); (2) harm avoidance (HA); (3) reward dependence (RD); (4) persistence (P). Character, on the other hand, is described as the development of self-concepts that correspond to the three factors of character: (1) self-directedness (SD); (2) cooperativeness (C); and (3) self-transcendence (ST) (Cloninger 2004; Cloninger et al. 1993).

Some studies have found associations between AEs and self-transcendence. When this profile is associated with high self-directedness and cooperativeness, a healthy, imaginative, unconventional profile is often found, without mental illness and with a spiritual/existential search. This profile has been called "Happy Schizotype" or "Healthy Schizotype" (benign schizotypy) (Alminhana et al. 2016; Farias et al. 2012; Hori et al. 2014; Goulding 2004; Nettle and Clegg 2006). Bora and Veznedaroglu (2007) suggest that character maturity (high SD and C) is a protective factor for the development of psychopathology.

Therefore, an individual with a mature character (self-directed and cooperative) can integrate the tendency to fantasy and the existential/religious/spiritual search or the presence of AEs (self-transcendence) to a functional and, at the same time, creative lifestyle. Cloninger and Cloninger (2011) have understood the mature character as the healthy SD × C × ST relationship, where "×" means one dimension enhancing the others. On the other hand, a person without maturity, without social skills and anxious transform his self-transcending tendency in a puerile, selfish, and dysfunctional way, increasing the risk for the development of mental disorders (Alminhana et al. 2016).

Religious/Spiritual Coping

Research on religiosity/spirituality (R/S) developed the concept of religious/spiritual coping (RSC), which consists of using one's religiosity or spirituality as a strategy to deal with stressful situations (Panzini and Bandeira 2005). In some cases, RSC can have unfavorable health effects, for example: when religious beliefs and practices are used to justify inappropriate behavior, replace traditional medical care, induce guilt, shame, fear, anger, violence, and prejudice. In these cases, the individual is using negative RSC strategies (Pargament et al. 2000). On the contrary, when a person uses positive RSC strategies, the effects are usually favorable including health and well-being increase, actions for the benefit of oneself and others, seeking God's love and protection; help and comfort in prayer and religious readings; praying for

the good of others, interpreting difficult situations as an opportunity for personal growth, and solving problems in collaboration with God (Pargament et al. 2000).

It is quite common for people with AEs to interpret or re-signify their experiences in cultural and religious contexts. When the individual accommodates his EA in a network of religious/spiritual meaning, it can be considered as Positive RSC (Mohr and Claridge 2015). In Brazil, Machado (2009) found that 82.7% of her sample presented AEs and it was interpreted as extra sensorial perception or as a religious/spiritual experience. Other researchers found similar results in their studies in Brazil (Torres 2016; Reichow 2017). According to the authors, the way a person re-signify an AE is related to the attribution of causality made to the experience, which is coherent with his/her beliefs, religious, and cultural background. They also state that it is a "two-way street," because religious and beliefs background could also influence people to have AEs (Machado et al. 2016).

Although research in Brazil is still incipient, studies have shown that personality characteristics can fit as a criterion for differentiating mental health and psychopathology in people who have AEs. Therefore, the observation and investigation of the association of the positive schizotypy profile with personality characteristics can help define more accurate diagnoses and can provide better guidance for professionals (Hori et al. 2012; 2014; Alminhana et al. 2016).

In front of the scarcity of information on the subject, there is an impasse: although it is not possible to classify a priori people who experience AEs within the spectrum of schizophrenia, neither is possible to deny that the positive schizotypy profile presents a risk for the development of schizophrenia spectrum disorders, in general terms. Thus, the aim of this study is precisely to investigate characteristics of people who have anomalous experiences, which could constitute risk for psychopathology or are associated with mental health. To achieve this goal, self-directedness, cooperativeness and self-transcendence (SD×C×ST or "Mature Character") and R/S coping in people who present the profile of positive schizotypy, were observed qualitatively. In addition, this study sought to investigate the presence or absence of anhedonia and impulsiveness, especially in social relationships. And, finally, the presence of AEs, understanding how they started and how these experiences were managed in their lives.

Method

This is an exploratory descriptive study with a qualitative approach, and it is part of a sequential explanatory mixed approach study, which will be published in due course. The aim of the present study was to deepen the quantitative results obtained in the first study. The inclusion criteria were 18 years old or older and, at least, completed high school. Regarding ethical aspects, the project was approved by the Research Ethics Committee of the Pontifical Catholic University of Rio Grande do Sul, under CAAE nº 14,086,419.5.0000.5336. The participants were volunteers and unpaid.

The first study had a sample of 111 participants that answered the Oxford-Liverpool Reduced Inventory of Feelings and Experiences (O-LIFE–R) (Alminhana et al. 2020). According to the scores obtained, the participants were divided into four schizotypal profiles: (1) positive schizotypy; (2) low schizotypy; (3) high schizotypy; and (4) negative schizotypy. Sixteen people were classified as positive schizotypal who constituted the sample of the present study (to more data information about quantitative scores on each profile, see Santos-Silva et. al. submitted and Alminhana et al. 2020).

Semi-structured Interview

The semi-structured interview was composed of 07 questions that sought to qualitatively observe each of the study objectives, as shown in Table 1.

Data Collection

Participants classified as positive schizotypal profile ($N = 16$; F = 15, M = 1) were contacted by email. Two email addresses were invalid, 9 responded by accepting the invitation to participate in the research and the other 5 did not reply. At the end, only 7 interviews were carried out as two of the participants that accepted to participate did not confirm a schedule and a place for the interview.

The interviewers were two psychologists, and the interviews occurred between May and September 2019, in the city of Porto Alegre, State of Rio Grande do Sul. The interviews took place in the private office of one of the interviewers, at the university, in the workplaces of two participants, and in coffee shops. Before starting

Table 1 Guiding questions and researched topics

Guiding questions	Researched topics
1) How is your life in terms of objectives, goals, dreams?	Self-directedness and self-transcendence (SD×ST)
2) How is your social life, do you prefer being alone, isolating yourself or being with people?	Cooperativeness and anhedonia
3) Do you get angry easily or do things on impulse?	Impulsiveness
4) Have you ever had any experience that is usually seen as uncommon, religious/spiritual experiences throughout your life? If so: how did they start?	Occurrence and history of anomalous experiences
5) How was it for you to have these experiences, how did you feel? Was it accepted or not? How about your family? And the community?	Management of anomalous experiences
6) Do you have any religious and/or spiritual beliefs? Do these beliefs somehow relate to these unusual experiences?	Self-transcendence and R/S coping
7) Did these experiences affected/influenced your life in any way? Positively or negatively?	R/S coping R/E and mature character

the interviews, the interviewees were presented to the study, read, and signed the free and informed consent term, of which they received a copy. The interviews were conducted face-to-face, were audio-recorded, and lasted from 32 to 53 min, depending on each participant. The interviewees were identified by an assorted letter of the alphabet, with the intention of preserving anonymity.

Analysis

Thematic analysis was conducted accordance to the Braun and Clarke's proposal (2006), in which the authors recommend an initial coding of the most relevant themes, carried out by two judges. According to the authors, the themes of analysis do not emerge by themselves, so the researcher needs to take an active role in the analysis of the data. The themes that emerge should be compared and contrasted with the original text, and each theme must be consistent, coherent, and distinct from each other. After defining the themes, the interviews shall be reread and recorded. Finally, an interpretative analysis should be carried out, according to the epistemological positions assumed.

Analysis Proceedings

The interviews were transcribed verbatim and compared to the audio versions for error detection. After this step, each of the seven interviews was read and reread in full by two judges (ASS and TLS) to generate themes through a more in-depth process. In a later stage, a third judge (LOA) read the interviews and the themes generated by the previous judges, seeking to compare them with each other and with the original text. From that, a meeting was held between the three judges where the final themes that were most coherent, consistent, and distinct from the other themes, with total agreement between the judges, were defined. The theoretical assumptions for data and emerged themes interpretation were the personality models proposed by Claridge (2010) and Cloninger (Cloninger et al. 1993; 2004).

Results

Participants

Most of the participants were liberal/self-employed professionals: three psychologists (J, L, and M), one physiotherapist (R), and one yoga instructor (C). R and C were also undergraduate students in psychology. One participant had a degree in foreign trade (G), but, by the time of the interview, was dedicating herself exclusively to doctoral studies. The last participant (N) was retired by the time of the interview but had a degree in social work. Table 2 presents sociodemographic data.

Table 3 presents the four thematic axes founded by the three judges after transcription, reading, analysis, codification, rereading, and final analysis of the interviews.

Table 2 Sociodemographic data

Participant	Occupation	Age	Marital status	Children	Education	Religion
J	Psychologist	45	Married	2	Postgraduate	Spiritualist
L	Psychologist	50	Married	2	Graduate	Spiritualist
M	Psychologist	36	Married	1	Postgraduate	Spiritualist
R	Physiotherapist	54	Married	2	Undergraduate	Spiritist*/rosycross **
C	Yoga instructor	52	Married	2	Undergraduate	Spiritist*/vedanta**
G	Doctoral student	32	Single	0	Postgraduate	No religion
N	Retired	57	Divorced	4	Postgraduate	Spiritist*

*A believer in a new age movement called Spiritualism (Doyle 1926);**a believer in Spiritist religion or "Spiritism." Spiritism postulates that the spirits of people who have died live in a "spiritual plane" and can influence and/or communicate with the material world. For more information, see Cavalcanti and Romera (2006)***—a second religion mentioned by the participant—vedanta: Indian religion based on Vedas, they believe in Karma and reincarnation (Deshmukh 2022); Rosycross: philosophical-spiritual movement that became popular in Europe, about a new esoteric order on the planet (Waite 2019)

Table 3 Thematic axes after analysis and report examples

Thematic axes	Examples
1. Religion, goals and meaning	"When I'm not in the… in the spiritual thing, things lose meaning for me." (J)
2. Anomalous experiences	"… so, I also always listened, I always talked to myself, because I answered. It was a being talking to me, so I answered…" (L)
3. Family and social relationships	"…my family is very large, so I spend a lot of time with them, (…) these are things that, I think, I value the most, you know?… family, friends…" (G)
4. Integration, identity, and re-signification	"…I had (…), I've always been very spiritual like that, ever since. From the first memories, I was very thirsty for God, so, I don't know, the way we're going to name it, spirituality, transcendent…" (J)

Discussion

The relationship between anomalous experiences (AEs) and mental health is still a recent topic in the academic literature. Therefore, it is important to investigate individuals with a positive schizotypal profile, who present AEs, without, however, meeting criteria for a mental disorder on the schizophrenia spectrum. Thus, the central point of this discussion is the impasse that arises when, although it is not possible to say that people within the positive schizotypal profile, who report AEs, present a priori a schizotypal personality disorder; nor it is possible to deny that the presence of AEs can mean a risk for developing a serious mental disorder Table 4.

Table 4 Thematic axes and their relationship with the study themes

Thematic axes	Study themes
1. Religion, goals and meaning	Self-directedness and self-transcendence (SD×ST)
2. Anomalous experiences	- Occurrence and history of anomalous experience - Management of anomalous experiences - Self-transcendence and R/S coping
3. Family and social relationships	Cooperativeness, anhedonia, and impulsiveness
4. Integration, identity, and re-signification	Mature character (SD×C×ST)

For all these reasons, the main objective of the present study was to qualitatively investigate characteristics of people with anomalous experiences, regarding to mature character (self-directedness, cooperativeness, and self-transcendence); absence of anhedonia and impulsivity; presence of anomalous experience in life history (how they begun and were directed), as well as religious and spiritual coping. With these objectives in mind, the three judges analyzed the interviews and found four thematic axes: (1) religion, goals, and meaning; (2) anomalous experiences; (3) family and social relationships; (4) integration, identity, and re-signification. Next, each of the axes will be presented, as well as examples and the theoretical discussion of them.

Religion, Goals, and Meaning

All participants seemed to integrate religious and spiritual beliefs into their lives in order to give a greater and deeper meaning to the activities they performed. According to them, if it was not so, they became sadder. That resumed the integration between beliefs and professional or academic activities, increasing life meaning. In this way, the purposes and goals were established according to the R/S beliefs, offering a kind of "background" of meaning, permeating the beginning, the middle, and the end of each participant's life activities.

> … "I have always been a little person, since I was young, so I prayed… and I had a connection, I felt that it was a strong connection, that there was something important to me in there…" (C)

Participant G reported that she was distressed, "… I was not well…", in the city where she lived with her boyfriend and with the work she was doing. She reported a big change she made in her life, quitting job and moving back to her hometown. She said that this happened when she realized that she had to make a reconnection with her spirituality. From then on, she searched for practices such as yoga and a spiritist center. After an anomalous experience, she decided to pursue an academic career. Today, she is pursuing her doctorate degree with a focus on business administration, she sought to associate the themes "Positive Psychology" and "Spirituality" in her master's thesis and now also in her doctoral studies.

Thus, this category shows the interconnection of skills related to self-direct-edness (i.e., the ability to set life goals and objectives; to take responsibility for oneself and for others), and to self-transcendence (the ability to go beyond self-centered goals, to transcend values and assume purposes associated with the search for spirituality and deep life meaning) (Cloninger et al. 1993). As an example, we can mention participants M and J who report:

> "...my dream is to set up an institute, something bigger, right? To work with psy-chology and spirituality, something that I feel that I can unite things in a more, ... in an ethical way and different from things I've been observing and that I don't agree with (...). So, my biggest dream is to create a space for people to develop themselves... and for me to develop myself in that too..."

> "… then when that happened, (…) I felt it was my mission. Oh! Now my life has more meaning, you know? 'Wow, this is real communication and we'll be able to bring some knowledge'. I felt that I could do something useful…" (J speaking about her spiritual experiences and the change in life and career she made)

The development of a mature and creative character takes place through the development of three integrated dimensions: self-directedness, cooperativeness, and self-transcendence. In this thematic axis "Religion, Goals and Meaning," maturity was observed through dimensions: $SD \times ST$, i.e., goals integrated with the meaning of life. According to Cloninger (2011 and 2017), the ability to set objective goals in life and to take responsibility for them (self-directedness) can be enhanced through the perception of a deeper meaning of life (self-transcend-ence). The authors define this "potentiation" as $SD \times ST$.

Among the results, it was clearly observed how much the search for something that was connected to an existential, religious, or spiritual sense potentiated objective choices and goals. This seems to have brought more clarity to decision making, as well as increased satisfaction after the choice was made. Therefore, the first category or thematic axis showed exactly, through the participants' reports, how much a positive schizotypal pro-file can be associated with well-being and mental health, when there is character maturity.

In other words, the tendency to present AEs (positive schizotypy) appears in the temperament and character model as self-transcendence. When self-direct-edness is added to self-transcendence, mature, and meaningful experiences are found at the same time. When participants report that they made professional changes, based on their abilities, but also on what was extremely important and meaningful to them, $SD \times ST$ was observed.

They could have made objective or concrete choices without any connection with what gives meaning to their lives. In this case, only self-directedness would be observed. On the other hand, they could have launched themselves into intui-tive and fanciful choices, without contact with reality and their previous profes-sional experiences. So, only self-transcendence or schizotypy would be observed. Low self-directedness would certainly carry more risks for mental illness. A complex choice, harmonizing aptitude, experience, concrete goals, and dreams seems to be a matured choice. For all these reasons, in the first thematic axis, it was already possible to identify criteria to consider the positive schizotypal pro-file as a healthy human characteristic.

Anomalous Experiences (As)

Most of the participants started their speeches saying that they always perceived themselves as more sensitive and intuitive people in relation to others. This perception may be associated with high self-transcendence and also with the presence of AEs. Several types of AEs have been reported, such as clairvoyance, clairaudience, premonitory or lucid dreams, out-of-body experiences, near-death experience (NDE), and spirit possession. Here are some examples:

> "… when I was a teenager, my friend broke up with her boyfriend and I didn't know it, but I dreamed that she came to me. In my room, the dream was in my house. She came and told me everything that had happened. In the morning after, someone knocked at my home´s door. It was her, her face was all swollen. I said: "you don't even have to tell me, I already know everything, you spent the whole night telling me…" (J).
>
> "…And when I was in the second pregnancy, I had a hospitalization, I had a very difficult condition, I was at risk for myself and for the baby (…) and in one of the nights I left the body and (….) and I saw the tunnel, I went, and I saw the tunnel. I knew that I was dying, and in that tunnel, I thought of my oldest daughter and her little eyes that she had gone to the hospital to see me, and I stared at that look of hers and I asked a lot to come back, I asked a lot, I asked a lot. And when I came back, I was on the roof of the hospital, glued to the ceiling of the room…" (L).

In general, the presence of AEs was associated with well-being, even generating some transformations and changes in the participants' lives. According to Smith et al. (2009), it is not so important what someone believes or what experiences someone has, but how someone deals with them. Some participants reported experiences that made them make important changes in their lives, such as finding a career, profession, career change, or finding a new meaning, as seen below:

> "… And after that, from that time, I also started to feel different spiritual presences, in the spiritist center where I work. I went, I went, I wanted to know what was happening, right, all that was to new for me. Then they suggested that I had something to do with yoga. And I, I went to do it, I went looking for a yoga course that I may be interested in… And that practice changed me too. The way I see the world and relate to it, right…" (C).
>
> "… I call it a dream, ok, within the… related to the other things I studied, we would call it projection, anyway, but that was then someone telling me 'calm down, you will find your way', that he was on my side and that I just wasn't seeing him because of this anguish also because of what I was living, right. But I woke up at that moment and said: 'what's on my side, what's on my side?' And with time I came to understand that what was on my side, precisely, was my sister who has been a teacher for a long time. Uh, together… then I even re-signified it…" (G).

AEs that arise spontaneously can lead people to develop their religiosity/spirituality (R/S) and use this R/S as coping in difficult situations. Some participants went through stressful and even traumatic situations in their lives, such as R, who was adopted and at age 5 lost her adoptive mother. Or like participant L, who lost her husband in an accident at age of 19, after 2 years of marriage. In the excerpts below, it is possible to understand how anomalous experiences were used by them as positive religious coping:

"… I think that gave me strength, you know, to get where I am…" (R).
"… I always thought everything was right, even if I didn't understand it. I never despaired, there was always something I was going to do, I was going to get it" (L).

To have doubts about the experiences can be positive. According to Moreira-Almeida and Cardeña (2011), to perceive one's own experience as anomalous, to have the discernment to evaluate it as such and to be careful when sharing the report of the anomalous experiences with other people, is one of the several indicators for the differential diagnosis between an anomalous pathological or non-pathological experience. Besides, another qualitative study found the same indicators, comparing people with voice-hearing with and without diagnosis in the schizophrenia spectrum (Powers et al. 2017). According to them, the group without diagnosis referred to have control about their experiences, as well as less stress and more social support.

"… so, as I always say, after you're there, whatever comes to your mind— because we always say, right, 'am I creating this? How true is this?'…" (N).

However, these experiences are not always so positive. Some people may have difficulties in understanding them. They may feel bad because they come into direct conflict with their beliefs or because of the sensations generated, or even because of prejudices faced by society or by the family. Participant C reports her discomfort when some experiences started:

"...even my spiritual guide, since that moment in the spiritist federation, when I started to feel the presence of an Indian on my side, he was my spiritual guide... And that was, maybe, my experiences with mediumship. This was something very strong, I found it very strange, I complained. Because of this presence by my side, even though I didn't visualize it with the eyes of seeing, but I felt it and it scared me sometimes, because I had never felt it before. And from there it works, so this spiritual friend of mine is with me in everything I do..."

And participant M says that:

"... in a more intimate context, I mean, for people who know me, who have known me for a long time, right? I don't go around talking like that... Unfortunately, you can't talk much about these things, I don't think everyone understands...".

Family and Social Relations

It is important to note that the participants did not report having suffered rejection in relation to their experiences by any member of their families. On the contrary, they reported feeling accepted and respected by family members and friends. Family structure was associated with the presence of purpose in life and, in the case of some of the participants, the family assumed the same religious belief as them.

> "… ah they understand it, I mean, … if I tell it eventually… if I tell it to someone and how I tell it and it has a meaning, people usually understand it, … they understand, I mean, I feel accepted, I don't feel rejected at all, it's smooth…" (M).
> "… Yes, my family, husband and children, they are spiritists, you know…" (C).

Participant N grew up in a spiritist family, and she says that her AEs were always seen by her mother in a very naturally way. Her mother explained to her what the AEs were according to her professed religion: "… It's just that, in this case, it was very easy for me because I had a mother who was already a spiritist…" (N).

In addition to the family environment, participation in mediumship study or development groups in spiritist centers was reported by most (5) participants.

J was a catechist at the Catholic Church. Currently, J is a participant of groups that study religions, philosophies, and AEs with people who also present them, but without the character of a religious institution:

> "… I need to study things and then together, ah…studying what mediumship is, studying it, so I've been setting up groups throughout my life and we have made a lot of experiences with mediumship. So, in these groups, without dogma, we study everything, you know…". (Participant J).

The participant R also reports her experiences in different religious and philosophical groups:

> "… I entered the Rosycross order at the age 18, so I have 35 years within the Rosycross, … where you study a lot of philosophy, you develop your intuition, right? … you take part of meetings, right? Within the Rosycross, ah, there is another order called the Martinist that you study pure Catholicism, … about 14 years ago I was invited to work in a spiritist center here in Porto Alegre…" (Participant R)

Social adjustment, the absence of impairment in affective relationships, in addition to being part of a community that shares the same beliefs, indicate the presence of protective factors for the development of serious mental disorders (Menezes and Moreira-Almeida 2009). As this is a sample that presents characteristics phenomenologically related to psychotic disorders, it is likely that the category "Family and Social Relationships" represents the criterion for differentiating between healthy and pathological experiences.

"…I have a lot of social life. It's unusual, I even look for a few moments to be more isolated, because it's rare, I have many friends, they are lifelong friends, others I met more recently, I meet regularly with people, you know…" (J).
"…but we have a lot of friends, very close to the family and I am very involved with what a social life is too, because when you are in study groups, you meet a lot with the group's staff…" (L).

Integration, Identity, and Re-signification

This last theme intends to encompass the common perception that, in an indirect way, permeated all the above categories. It seems clear that the participants built their sense of individuality and their identity by bringing together their AEs with R/S beliefs, which ended up accommodating their own experiences in a network of meaning. But it does not happen as a separate aspect or dimension of their lives, where they develop their spirituality and then go back to their daily activities. AEs and beliefs seem to be elements that make them recognize who they are, forming their own identity. Thus, it is clear that the integration that occurs in different aspects of their lives: in the family and in social relationships; in establishing life goals and objectives; in the sense of life; in professional choice. As an important part of what defines each participant, R/S beliefs and the presence of AEs will naturally appear in all areas of their lives. In other words, the integration of beliefs and AEs in the participants' lives occurs because this seems to be part of their identity.

The participants integrated R/S into their lives not only through religious/spiritual practices, but many of them used it for seeking professional activities in which they could contemplate significant aspects of their lives. They indicated in their interviews that R/S were aspects of great importance to them and that, in part, these aspects contributed to being who they are as people. All psychologist participants sought theoretical or technical approaches that, in some way, could integrate their beliefs into their work.

"…the idea is to be able to use my knowledge of Ayurveda practice and yoga to help with mental health, which helps a lot with (silence), oh no, I don't want to repeat mental health, but so, there are several illnesses that with this oriental vision it is very clear to identify… "… I love what I do, I really love it…" (C).
"… I won't be able to work with psychology, therapy, spirituality, all together, right? But I honestly confess to you that I don't know how I'm going to do it, because I can't take it out, right? Even after age 60, I'm going to work with psychology, I can't get the physiotherapy out of me, right? When I look at a person, I look at the whole being, right, I look at the physical part, I look at the spiritual part and I look at the emotional part." (R).
"…what I want to do in my doctorate…is not a pretension, you know, but…but I understand that science and spirituality can go together, I mean, and I think it's pretty pretentious, but I … I see that science, it is obvious, that it can evolve a lot, it still has a lot to discover, but I think this is one of the paths science will have to look at, there is no point, because it runs

through a lot of… of the human being, of… so despite of… of being very crawling, I think that's the way things are heading, right…" (G).

Therefore, identity promotes integration and the re-signification of all life events. Belief and faith offer a deep meaning, appearing in the speech of the participants as the confidence of being "led by a greater force." Some participants even report feeling like "an instrument of spirituality."

Thematic Axes and Their Relationship with the Study Themes

Participants in this study reported hearing voices, having out-of-body experiences, precognitive dreams, NDEs, contacts with "spiritual guides," among other AEs. The maladaptive profile of schizotypy has as main characteristics: social anxiety, impulsiveness, aggressiveness, displeasure in relationships and contacts with people, as well as cognitive disorganization (Holt 2018; Hori et al. 2014; Alminhana et al. 2016). This brings us to the impasse between considering positive schizotypy as a non-pathological human characteristic a priori and, at the same time, as a profile that increases the risk of developing mental disorders on the schizophrenia spectrum. Our findings seem to bring some light on this impasse, by providing qualitative information about the life context of people who have AEs.

For better understanding of the relationship between AEs and mental health, we must consider the cultural environment of a large country such as Brazil. According to the last census (Instituto Brasileiro de Geografia e Estatística [IBGE] 2010), 97% of Brazilians belong to a religion. This single information can help us to understand all thematic axes, when AEs are really integrated with career, family, and identity of participants. The Brazilian environment is also very syncretic, and people are familiar with more than 2 or 3 religions. Finally, to re-signify AEs as part of the spiritist religiosity world vision is a recurrent attribution of causality, culturally grounded in this country (Alminhana et al. 2016; Machado et al. 2016).

Finally, the present study fulfilled its objectives by qualitatively investigating people with AEs, in terms of character maturity (SD × C × ST), R/S coping strategies, anhedonia, and impulsivity. Thus, the observation by Smith et al. (2009)—when they state that it does not matter so much what a person believes or which anomalous experiences the person has, but how the person deals with it all—is clear. In other words, the absence of anhedonia and impulsiveness, character maturity, and social support make a person deal in an integrated way, re-signifying their AEs to the point of seeing them as part of their own identity. All this seems to configure factors that protect these people from the risk of developing serious mental disorders, even if they have AEs. Positive schizotypy can be understood as a human characteristic, to be maturely integrated into a person's life, beliefs, and social context, becoming a kind of "Benign Schizotypy" or "happy" (happy schizotypy) (Polner et al. 2021).

Final Considerations

The present study was able to achieve its objectives and goals, by investigating the characteristics of people with anomalous experiences, regarding character maturity; religious coping; anhedonia/impulsivity, and AEs. From the thematic axes that emerged it was possible to conclude that positive schizotypy can present healthy aspects when self-directedness is enhanced by self-transcendence; when the use of religiosity and spirituality offers meaning to life experiences and life choices (positive R/S coping); when person feels that they have social and family support, as well as through the integration of AEs and their meaning in the construction of the person's identity.

Therefore, the presence of maturity in the three dimensions of character: self-directedness (SD) + cooperativeness (C) + self-transcendence (ST), is emphasized. It is important to observe the integration of these aspects of the personality, which cannot disconnect from one another. In an interconnected way, goals, autonomy, choices are associated with life in society, and all this is permeated by the search for a deeper meaning that, in this case, is offered by the R/S beliefs and the AEs of the participants. As they appear integrated, part of the identity and give a new meaning to life events, we suggest using the description proposed by Cloninger (2004): $SD \times C \times ST$.

As far as we know, this study is the first to address personality characteristics with a qualitative approach to investigate the relationship between anomalous experiences and mental health. However, it had some limitations, such as the mixed methodology and the theoretical oriented questions. Future studies could use a full phenomenological approach, trying and understanding the field with an open perspective and dismissing any preconceived ideas of "mental health" and "psychopathology."

Finally, the impasse between considering AEs as non-pathological experiences a priori, but at the same time a risk for the development of psychopathologies can be resolved when qualitatively investigating the context of these experiences in each person's life. Positive schizotypy associated with character maturity, positive R/S coping, and social support shows a healthy personality profile and does not characterize risk for mental disorder, configuring a form of "Benign Schizotypy" (happy schizotypy).

Declarations

Ethics Approval The project was approved by the Research Ethics Committee of the Pontifical Catholic University of Rio Grande do Sul, under CAAE nº 14086419.5.0000.5336.

Conflict of Interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

Alminhana LO, Sanseverino MA, Farias M, Santos OV, Machado WL, Claridge G (2020) A dimensional measure of schizotypy: cross-cultural adaptation and validation of the Oxford-Liverpool Inventory of Feelings and Experiences short version for Brazilian Portuguese (O-LIFE-S). Trends Psychiatry Psychother 42(4):348–357. https://doi.org/10.1590/2237-6089-2019-0013

Alminhana LO, Farias M, Claridge G, Cloninger CR, Moreira-Almeida A (2016) How to tell a happy from an unhappy schizotype: personality factors and mental health outcomes in individuals with psychotic experiences. Rev Bras Psiquiatr 39:1–7. https://doi.org/10.1590/1516-4446-2016-1944

American Psychiatric Association: APA (2014) Manual diagnóstico e estatístico de transtornos mentais: DSM-5, 5ª. Artmed, Porto Alegre

Barrantes-Vidal N, Grant P, Kwapil TR (2015) The role of Schizotypy in the study of the etiology of schizophrenia spectrum disorders. Schizophr Bull 41(2):408–416. https://doi.org/10.1093/schbul/sbu191

Bora E, Veznedaroglu B (2007) Temperament and character dimensions of the relatives of schizophrenia patients and controls: the relationship between schizotypal features and personality. Eur Psychiatry: J Assoc Eur Psychiatrists 22(1):27–31. https://doi.org/10.1016/j.eurpsy.2006.07.002

Braun V, Clarke V (2006) Using thematic analysis in psychology. Qual Res Psychol 3(2):77–101. https://doi.org/10.1191/1478088706qp063oa

Cardeña E, Lynn SJ, Krippner S (eds) (2000) Varieties of anomalous experience: examining the scientific evidence. American Psychological Association, Washington, DC

Cavalcanti MLVDC, and Romera EJ (2006) Life and death in Kardecist spiritism. Relig Soc 1 Retrieved from http://socialsciences.scielo.org/scielo.php?script=sci_arttext&pid=S010085872006000100003&lng=en&tlng=en. Accessed 22 Oct 2020

Cicero DC, Jonas KG, Li K, Perlman G, Kotov R (2019) Common taxonomy of traits and symptoms: linking schizophrenia symptoms, schizotypy, and normal personality. Schizophr Bull 45(6):1336–1348. https://doi.org/10.1093/schbul/sbz005

Claridge G (2010) Spiritual experience: healthy psychoticism? Psychosis Spiritual: Consolidating New Paradigm 75-87. https://doi.org/10.1002/9780470970300.ch7

Cloninger CR, Keady B, Nigel L, Kedia S, and Cloninger KM (2017) Empirical measurement of Plato's model of the human psyche validation by the neuroscience of personality. In Person Centered Psychiatry, ed. Drozdstoj Stoyanov 128. Springer

Cloninger CR (2011) Religious and spiritual issues in personality disorders. In: Arlington VA (ed) Religious and spiritual issues in psychiatric diagnosis: a research agenda for DSM-V (1 edition). American Psychiatric Publishing, pp 151–164

Cloninger CR, Cloninger KM (2011) Person-centered therapeutics. Int J Person Centered Med 1(1):43–52. https://doi.org/10.5750/2Fijpcm.v1i1.21

Cloninger (2004) Feeling good: the science of well-being (1 edition). Oxford; New York: Oxford University Press

Cloninger CR, Svrakic DM, Przybeck TR (1993) A psychobiological model of temperament and character. Arch Gen Psychiatry 50(12):975–990. https://doi.org/10.1001/archpsyc.1993.01820240059008

Day S, Peters E (1999) The incidence of schizotypy in new religious movements. Personality Individ Differ 27(1):55–67. https://doi.org/10.1016/S0191-8869(98)00218-9

Deshmukh VD (2022) The transparent mind and the peaceful self: neuroscience and vedanta perspectives. J Appl Conscious Studies 10:2–7. https://doi.org/10.4103/ijoyppp.ijoyppp_54_21

Doyle AC (1926) The history of spiritualism. Cassell and company ltd, London

Farias M, Underwood R, Claridge G (2012) Unusual but sound minds: mental health indicators in spiritual individuals. Br J Psychol 104(3):364–381. https://doi.org/10.1111/j.2044-8295.2012.02128.x

Fisher JE, Mohanty A, Herrington JD, Koven NS, Miller GA, Heller W (2004) Neuropsychological evidence for dimensional schizotypy: implications for creativity and psychopathology. J Res Personality 38:24–31. https://doi.org/10.1016/j.jrp.2003.09.014

Fumero A, Marrero RJ, Fonseca-Pedrero E (2018) Well-being in schizotypy: the effect of subclinical psychotic experiences. Psicothema 30(2):177–182. https://doi.org/10.7334/psicothema2017.100

Goulding A (2004) Schizotypy models in relation to subjective health and paranormal beliefs and experiences. Personality Individ Differ 37(1):157–167. https://doi.org/10.1016/j.paid.2003.08.008

Goulding A, Ödéhn N (2009) Schizotypy and mental health in the general population: a pilot study. Personal Ment Health 3:193–202. https://doi.org/10.1002/pmh.86

Holt NJ (2018) The expression of schizotypy in the daily lives of artists. Psychol Aesthet, Creat, Arts Adv Online Publication 13:1–14. https://doi.org/10.1037/aca0000176

Holt N, Simmonds-Moore C, and Moore S (2008) Benign schizotypy: investigating differences between clusters of schizotype on paranormal belief, creativity, intelligence and mental health. In S. Sherwood & S. Sherwood (Eds.), Proceed Presented Papers: ParapsycholAssoc 51st Annual Convent 82–96. Parapsychological Association. Retrieved from http://eprints.uwe.ac.uk/15726/

Hori H, Teraishi T, Sasayama D, Matsuo J, Kawamoto Y, Kinoshita Y, Kunugi H (2012) Relationships between season of birth, schizotypy, temperament, character and neurocognition in a non-clinical population. Psychiatry Res 195:69–75. https://doi.org/10.1016/j.psychres.2011.07.028

Hori H, Teraishi T, Sasayama D, Matsuo J, Kinoshita Y, Ota M, Kunugi H (2014) A latent profile analysis of schizotypy, temperament and character in a nonclinical population: association with neurocognition. J Psychiatr Res 48(1):56–64. https://doi.org/10.1016/j.jpsychires.2013.10.006

Instituto Brasileiro de Geografia e Estatística (2010) Censo Brasileiro de 2010. Rio de Janeiro: IBGE, 2012. Recuperado em 2020 de https://biblioteca.ibge.gov.br/visualizacao/periodicos/94/cd_2010_religiao_deficiencia.pdf

Machado FR, Zangari W, Maraldi EO, Martins LB, Shimabucuro AH (2016) Contribuições da psicologia para a compreensão das relações entre a espiritualidade, a religiosidade e as experiências anômalas. Rev Clareira 3:2

Machado FR (2009) Experiênciasanômalas na vida cotidiana: experiências extra-sensório-motoras e sua associação com crenças, atitudes e bem-estar subjetivo [Tese de doutorado, Universidade de São Paulo]. https://doi.org/10.11606/T.47.2009.tde-16122009-100608

Maraldi EO, Costa AS, Cunha A, Rizzi A, Flores D, Hamazaki ES, Zangari W (2020) Experiências anômalas e dissociativas em contexto religioso: uma abordagem autoetnográfica. Phenomenol Studies - Revda Abord Gestál 24(2):147–161. https://doi.org/10.18065/2020v26n2.3

Margetić BA, Jakovljević M, Ivanec D, Margetić B (2011) Temperament, character, and quality of life in patients with schizophrenia and their first-degree relatives. Compr Psychiatry 52:425–430. https://doi.org/10.1016/j.comppsych.2010.08.007

Martins LB, Zangari W, and Medeiros GT (2017) Contemporaneidade e experiências anômalas: dimensões psicossociais de vivências culturalmente limítrofes. Phenomenol Studies - Rev da Abord Gestál 23(2):137–149. Recuperado em 2022 de: https://www.redalyc.org/articulo.oa?id=357752154002

Mason O, Claridge G (2006) The Oxford-Liverpool Inventory of Feelings and Experiences (O-LIFE): further description and extended norms. Schizophr Res 82(2–3):203–211. https://doi.org/10.1016/j.schres.2005.12.845

Mason O, Claridge G, Jackson M (1995) New scales for the assessment of schizotypy. Personality Individ Differ 18(1):7–13. https://doi.org/10.1016/0191-8869(94)00132-C

Mason O, Claridge G, Williams L (1997) Questionnaire measurement. In: Claridge G (ed) Schizotypy: implications for illness and health. Oxford University Press, pp 19–37. https://doi.org/10.1093/med:psych/9780198523536.003.0002

McCreery C, Claridge G (2002) Healthy schizotypy: the case of out-of-the-body experiences. Personality Individ Differ 32(1):141–154. https://doi.org/10.1016/S0191-8869(01)00013-7

Mededovic J, Dordevic B (2017) Schizotypal traits and in painters: relations with intelligence, creativity and creative productivity. Psihologija 50(3):341–355. https://doi.org/10.2298/PSI1703341M

Menezes A Jr, Moreira-Almeida A (2009) O diagnóstico diferencial entre experiências espirituais e transtornos mentais de conteúdo religioso. Arch Clin Psychiatry 36(2):75. https://doi.org/10.1590/S0101-60832009000200006

Mohr C, Claridge G (2015) Schizotypy–do not worry, it is not all worrisome. Schizophr Bull 41(2):436–443. https://doi.org/10.1093/schbul/sbu185

Moreira-Almeida A, Cardeña E (2011) Diagnóstico diferencial entre experiências espirituais e psicóticas não patológicas e transtornos mentais: uma contribuição de estudos latino-americanos para o CID-11. Braz J Psychiatry 33(1):21–28. https://doi.org/10.1590/S1516-44462011000500004

Nettle D, and Clegg H (2006) Schizotypy, creativity and mating success in humans. Proceed Royal Soc B: Biol Sci, 273(1586):611–615. https://doi.org/10.1098/rspb.2005.3349

Nuevo R, Chatterji S, Verdes E, Naidoo N, Arango C, Ayuso-Mateos JL (2012) The continuum of psychotic symptoms in the general population: a cross-national study. Schizophr Bull 38(3):475–485. https://doi.org/10.1093/schbul/sbq099

Ödéhn N, and Goulding A (2018) Schizotypy and mental health in women and men from the general population. Nordic Psychol 1-12. https://doi.org/10.1080/19012276.2017.1410072

Panzini RG, Bandeira DR (2005) Escala de Coping religioso-espiritual (Escala CRE): elaboração e validação de construto. Psicologia Em Estudo 10(3):507–516. https://doi.org/10.1590/S1413-73722005000300019

Parra A, Argibay JC (2018) El Constructo de "límite" y experiencias anómalas em psíquicos. Persona 21(2):1560–6139. https://doi.org/10.26439/persona2018.n021.3019

Pargament KI, Koenig HG, Perez LM (2000) The many methods of religious coping: development and initial validation of the RCOPE. J Clin Psychol 56:519–543. https://doi.org/10.1002/(SICI)1097-4679(200004)56:4/3C519::AID-JCLP6/3E3.0.CO;2-1

Polner B, Hupuczi E, Kéri S, and Kállai J (2021) Adaptive and maladaptive features of schizotypy clusters in a community sample. Sci Rep 11. https://doi.org/10.1038/s41598-021-95945-0

Polner B, Simor P, Kéri S (2018) Insomnia and intellect mask the positive link between schizotypal traits and creativity. PeerJ 6:1–27. https://doi.org/10.7717/peerj.5615

Powers A III, Kelley MS, Corlett PR (2017) Varieties of voice-hearing: psychics and the psychosis continuum. Schiz Bull 43(1):84–98. https://doi.org/10.1093/schbul/sbw133

Rawlings D, Williams B, Haslam N, Claridge G (2008) Taxometric analysis supports a dimensional latent structure for schizotypy. Personality Ind Diff 44(8):1640–1651. https://doi.org/10.1016/j.paid.2007.06.005

Reichow JRC (2017) Estudo de experiências anômalas em médiuns e não médiuns: prevalência, relevância, diagnóstico diferencial de transtornos mentais e relação com qualidade de vida [Tese de doutorado, Universidade de São Paulo]. https://doi.org/10.11606/T.47.2018.tde-18012018-163219

Schofield K, Claridge G (2007) Paranormal experiences and mental health: schizotypy as an underlying factor. Personality Individ Differ 43(7):1908–1916. https://doi.org/10.1016/j.paid.2007.06.014

Simmonds-Moore C, Holt NJ (2007) Trait, state, and psi: a comparison of psi performance between clusters of scorers on schizotypy in a ganzfeld and waking control condition. J Soc Psychical Res 71(889 [4]):197–215

Smith L, Riley S, Peters ER (2009) Schizotypy, delusional ideation and well-being in an American new religious movement population. Clin Psychol Psychother 16(6):479–484. https://doi.org/10.1002/cpp.645

Suhr JA, Spitznagel MB (2001) Factor versus cluster models of schizotypal traits. I: a comparison of unselected and highly schizotypal samples. Schiz Res 52(3):231–239. https://doi.org/10.1016/S0920-9964(00)00170-5

Tabak NT, Weisman de Mamani AG (2013) Latent profile analysis of healthy schizotypy within the extended psychosis phenotype. Psychiatry Res 210(3):1008–1013. https://doi.org/10.1016/j.psychres.2013.08.006

Tan EJ, Toh WL, and Rossel SL (2022) Examining relationships between state and trait psychotic symptoms and quality of life in schizophrenia spectrum disorders. Psychiatry Research 310. https://doi.org/10.1016/j.psychres.2022.114450

Torres CM (2016) Religiosidade e experiênciasanômalas no protestantismo brasileiro [Tese de doutorado, Universidade de São Paulo]. https://doi.org/10.11606/T.47.2016.tde-17082016-160937

Van Os J, Linscott RJ (2012) Introduction: the extended psychosis phenotype – relationship with schizophrenia and with ultrahigh risk status for psychosis. Schizophr Bull 38(2):227–230. https://doi.org/10.1093/schbul/sbr188

Vencio S, Caiado-Vencio R, Caixeta L (2018) Differential diagnosis between anomalous experiences and dissociation disorder using the dissociative disorders interview schedule (DDIS). J Trauma Diss 20(2):165–178. https://doi.org/10.1080/15299732.2018.1502715

Waite AE (2019) The brotherhood of the Rosy cross – a history of the Rosicrucians. White Press, Washington

Wang L, Long H, Plucker JA, Wang Q, Xu X, Pang W (2018) High schizotypal individuals are more creative? The mediation roles of overinclusive thinking and cognitive inhibition. Front Psychol 9(1766):1–14. https://doi.org/10.3389/fpsyg.2018.01766

Williams LM (1994) The multidimensional nature of schizotypal traits: a cluster analytic study. Personality Individ Differ 16(1):103–112. https://doi.org/10.1016/0191-8869(94)90114-7

Williams LM, Irwin HJ (1991) A study of paranormal belief, magical ideation as an index of schizotypy and cognitive style. Personality Individ Differ 12(12):1339–1348. https://doi.org/10.1016/0191-8869(91)90210-3

Authors and Affiliations

Andréa dos Santos-Silva[1,2] · **Tainá Lopes da Silva[1]** ·
Jovana Giacobo Serra[3] · **Letícia Oliveira Alminhana[4]** ·
Irani Iracema de Lima Argimon[1]

Tainá Lopes da Silva
tainalopesdasilva@hotmail.com

Letícia Oliveira Alminhana
leticia.alminhana@pucrs.br

Irani Iracema de Lima Argimon
argimoni@pucrs.br

[1]   Programa de Pós- Graduação Em Psicologia, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, RS, Brazil

[2]   Instituto de Psicologia e Pesquisa no Desenvolvimento Humano (IPPDH), Av. João Correa, 191, São Leopoldo, RS 93020-690, Brazil

[3]   Porto Alegre, Rio Grande do Sul, Brazil

[4]   Visiting Research Fellow in Brain, Believe and Behavior Lab of Coventry University, Coventry, UK