Exploration of the Relationship Between Schizotypal Traits and Well-Being

James Ciulla

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Exploration of the Relationship Between Schizotypal Traits and Well-Being

(TITLE)

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James Ciulla

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I HEREBY RECOMMEND THAT THIS THESIS BE ACCEPTED AS FULFILLING THIS PART OF THE GRADUATE DEGREE CITED ABOVE
Exploration of the Relationship Between Schizotypal Traits and Well-Being

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Abstract
The purpose of this study was to explore the construct of schizotypy and whether or not it may have benefits within different conceptions of psychological health, or well-being. Schizotypy is a construct that emerged around the turn of the 20th century. It had historically incorporated aspects later reclassified under other areas of dysfunction, or relegated to social value judgment, and is currently the cause of some debate in the field (Acar & Sen, 2013; Carson, 2011; Farias, Underwood & Claridge, 2013; Kendler, 1985; Tsakanikos & Claridge, 2005; Vollema & van den Bosch, 1995). There has been little research done on how the construct might be viewed from different theoretical perspectives of well-being. The present study examined the relationship between global schizotypy and three different paradigms of well-being: Subjective Well-Being, Psychological (or Eudaimonic) Well-Being, and Social Well-Being. One hundred fifty one undergraduate university students responded to scales measuring each participant’s level of schizotypal traits and levels of Subjective-, Psychological-, and Social Well-Being. The study suggests that while there are many individualistic aspects of schizotypy as it exists in healthy populations, overall, a greater accumulation of traits are indicative of precursors of lowered levels of well-being. Across all theoretical perspectives of well-being, schizotypy was not positively associated with any positive well-being element. Additionally, schizotypy was negatively correlated with the Subjective Well-Being elements of Life Satisfaction and positively correlated with Negative Affect; negatively correlated with the Eudaimonic Well-Being element of Positive Relations with Others, and negatively correlated with the Social Well-Being element of Social Actualization. Implications of these findings on client treatment are discussed.
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Exploration of the Relationship Between
Schizotypal Traits and Well-Being

Each of us is familiar with—via literary description, film portrayal, or the dubious privilege of experience—the image of an “eccentric” personality. They run the gamut from highly-visible types like Hunter S. Thompson sporting cigarette _quellazaire_ and the flamboyant Warhol embroiled in controversy, to cloistered recluses like Emily Dickinson and William Blake whose posthumously discovered works would forever change the face of Western literature. Yet, those are only the ones who, through chance or design, have entered public awareness. But, what is the nature of the “eccentric” personality? And, for all the flamboyance or originality, can that individuality and authenticity bring happiness in some form, even if it evades conventional descriptions?

In one of the first works to examine eccentricity in detail, David Weeks (1995), principal clinical neuropsychologist and psychotherapist at the Royal Edinburgh Hospital for twenty years, described in entertaining prose the nature of some of his encounters with the eccentric personality. A range of characters from artists to scientists, from righteous to religiously reviled, and from the upper strata of society to the Shakespearian actor living on the street, Weeks elucidates much of what these characters seem to share in common. Many of them are famous historical characters such as Sir Frances Galton, Arthur Schopenhauer, and Isaac Newton, but most were culled for his study from a modern sample. He states the two main groups that emerged from his study were the artists and the scientists.

Among these characters, one finds: a reclusive philosopher whose relatives identified him as an eccentric for the purposes of the study, and whose ideas on creativity and nonconformity
keep him talking at length—and tenured; two career photographers who insist on only using, dressing, and decorating everything in their lives with authentic Victorian period antiques; an inventor who, though developing and promoting a hugely impractical system of oil-spill cleanup, holds several profitable patents on innovatively-designed aircraft engines; an ostensibly homeless man who, having been educated legally, insists he has seceded from his country—and writes official letters to governmental offices legally, and coherently, arguing his case.

In the preceding sketches, one encounters illustrations of the psychological construct "schizotypy," which has historically been given many labels, one of the most widely-used being "eccentricity." One need not look long to find a multitude of similar, real-life characters, all affectionately grouped under the eccentric epithet, described in literature, newspapers, and obituaries. Schizotypy involves many components, among them social deviance, non-conformity, and unusual thoughts and behaviors (Kendler, 1985). However, such a characterization of schizotypy, developed during the birth of psychology in the 1900s, involve dysfunction, and, as such, carry with it assumed implications of unhappiness. Yet, unusual as many of these characters’ lives may have been, many describe them as happy with their life experiences. Could they be described as psychologically well? The purpose of this study was to examine the state of well-being of individuals who tend to be more ‘eccentric’ or who tend to possess more of schizotypal traits. Individual differences in schizotypy were measured and correlated with levels of well-being.

**What is Schizotypy?**

Aspects of the lifestyles described above are certainly odd—statistically unusual—but given accounts of their ideas, actions, and careers, they may not fall into a category designated as
mentally ill. Indeed, eccentricity is largely a lay-term synonymous to the construct of schizotypy, which is theorized to exist in varying extents in all people among healthy, or “non-clinical,” populations (Claridge & Beech, 1995; Eysenck, 1992). The spectrum theory of schizotypy posits a range of imaginative states upon a continuum that passes from healthy personality, through Schizotypal Personality Disorder, toward the endpoint of schizophrenic psychosis. In other words, these states exist to varying degrees in members of a healthy population. However, they can also exist to such a level or intensity that a person may exhibit significant impairment in personality functioning, such as in Schizotypal Personality Disorder, or exhibit the complete loss of touch to reality involved in clear cases of schizophrenic psychosis. In the latter example, it is theorized individuals mistake their imaginative states for reality itself (Freedman et al, 2002). As such, schizotypy is generally regarded as a measure of psychosis-proneness, and is a more elegant extension developed from the categorical view of psychosis pioneered by Eugen Bleuler in his research on schizophrenia (Kendler, 1985). Originally developed to describe pathology associated with relatives of schizophrenics, the bulk of prior research on schizotypy views the phenomenon as inherently arising from pathological processes (Eysenck, 1992; Kendler, 1985). However, there remain differences of opinion in the field, and many researchers contend that the spectrum alone is an insufficient representation of psychosis-proneness and many multi-factor models of the construct have been developed (Vollema & van den Bosch, 1995). Researchers in this camp argue that high levels of schizotypy itself may represent a personality component found in healthy individuals, in which case a host of other biological, psychological, and sociocultural factors must converge to manifest pathological schizotypy, or psychosis (Claridge & Beech, 1995). Evidence for this view can be found in newer research correlating high
schizotypy scores in healthy populations (usually termed “healthy,” or “benign” schizotypy) with positive religious and spiritual experiences, as well as creative achievement (Acar & Sen, 2013; Carson, 2011; Farias, Underwood & Claridge, 2013; Tsakanikos & Claridge, 2005). Could the generosity, good-naturedness, charity, conscientiousness, music, painting, and other creative endeavors bring personal joy, satisfaction, and meaning despite labels of eccentricity?

In order to answer this question, it helps to delve into a breakdown of the characteristics of schizotypy. The concept was originally developed when it was noted that relatives of schizophrenics—whether healthy or pathological—tended to exhibit many of these characteristics (Kendler, 1985). Research through factor analysis has refined the schizotypal construct as being composed of several factors. Previous models of schizotypal factor constructs have used two, three, four, and five or more components, as well as employed different elements of dimensionality (Vollema & van den Bosch, 1995; Claridge & Beech, 1995).

The three factor model for core schizotypal components is widely-used, easily conveys the elements that are core to the construct in a straightforward way, and underscore key features used in DSM-5 to address elements of the schizophrenia spectrum (American Psychiatric Association, 2013). The three factor model uses three categories to delineate the key features of schizotypy: 1) the Cognitive-Perceptual aspect, which are also termed “positive features” since they address features that are in addition to the realm of normal experience; 2) Introvertive Anhedonia, which is also termed “negative features” since they demonstrate a lack compared to the realm of normal human experience; and finally 2) the Disorganized category.

The first category, Cognitive-Perceptual/Positive, denotes a tendency to have unusual cognitive or perceptual experiences, including hallucinations, superstitious beliefs, idiosyncratic
interpretation of events, and paranoid ideation. These are considered “positive” symptoms since they are “extra” experiences or perceptions that exceed those associated with the normal functioning of individuals (i.e., the average person does not contend with extra, illusory perceptions upon his/her normal perceptual experience of reality).

The second category involves an inability to derive pleasure from physical or social stimuli, and is associated with flat affect, lack of friends and confidants, and asocial behavior. These characteristics are denoted as “negative” symptomatology since they represent a lack compared to what is considered normal experience (i.e., the average person is able to enjoy pleasurable experiences, seek social interaction, and have the ability to feel and express emotions).

The third category denotes a tendency for thoughts to become disorganized, easily disrupted, or errant from an issue at hand. (Raine, Reynolds, Lencz, Scerbo, Triphon, & Kim, 1994). Although these separate elements contribute to the schizotypal construct as a whole, and nuances have been investigated by researchers, global schizotypy scores can provide a good picture of a person’s self-reported wellness (Abbot & Byrne, 2012). As such, global scores have been widely used in research.

As previously stated, many models of schizotypy have been developed, some using up to nine or more subscales denoting difference aspects of the construct. Since the construct was developed as a “catch-all” category for patients not demonstrating overt psychotic behavior, many behaviors were grouped under its rubric. A complete list of the nine aspects employed in one of the most prominently-used scales, the Schizotypal Personality Questionnaire, includes: Ideas of Reference (feeling random events or objects in the environment have significant
personal meaning). Excessive Social Anxiety (which doesn’t diminish with increasing familiarity), Odd Beliefs/Magical Thinking (belief in magical intervention or having powers to affect the physical world), Unusual Perceptual Experiences (hallucinations or perceiving non-existent presences), Odd/Eccentric Behavior (noticeably unusual in manner, dress, or speech), No Close Friends (other than nuclear family members, and little motivation or interest in development of new friends), Odd Speech (odd and unconventional uses of words), Constricted Affect (difficulty or inability to express emotionality), and Suspiciousness (guarded with family members, and a belief the world is exploitative, unpredictable, and cruel) (Raine, 1991).

The characteristics of global schizotypy exist to some extent in members of the healthy population, but are generally considered to exist on a continuum of dysfunction ranging from mild to pathological (Kendler, 1985; Smulevich, 1989; Vollema & van den Bosch, 1995). Although one cannot directly question Weeks’ eccentrics themselves, he states they demonstrate a greater accumulation of global schizotypal traits than the average individual. Would they straddle the border between mental health and mental illness? Would many of their odd preferences be indicative of the components involved in schizotypy? Might their interests in obscure items such as Japanese dolls, recondite philosophy, or pseudoscience point to one of these three realms of dysfunction? Are ventures into art a skill originally borne out of unusual perceptual experiences and visualizations associated with the cognitive component of schizotypy?

Measuring Schizotypy

Numerous measures have been developed over the years to gauge schizotypy levels. Currently, there are around 20 measures in use (Fonseca-Pedrero et al., 2008). By far, the most
widely-used measure is the Schizotypal Personality Factor Questionnaire (SPQ), developed by Adrian Raine (1991). Up until the development of the SPQ, most measures for schizotypal personality characteristics only addressed one to three of the nine subscales used to correspond to each of the nine schizotypal traits required for the DSM-III diagnosis (Raine, 1991). The SPQ consists of a 74-item measure which plots responses over nine subscales, each subscale corresponding to the full list of the nine diagnostic traits: Ideas of Reference (deriving bizarre personal meaning from random environmental stimuli), Odd Beliefs or Magical Thinking (superstitiousness and belief in magical powers), Excessive Social Anxiety, Unusual Perceptual Experiences (including bodily illusions), Odd or Eccentric Behavior, No Close Friends, Odd Speech (loose associations and digression), Constricted Affect (inability to display full range of emotionality), and Suspiciousness. Development of the test used two samples to test replicability of the findings \( n = 302 \) and \( n = 195 \). The SPQ has high sampling validity, high internal reliability \( (0.91) \), test-retest reliability \( (0.82) \), convergent validity \( (0.59 \) to \( 0.81) \), discriminant validity, and criterion validity \( (0.63, 0.68) \). It was also found upon initial research that 55% of subjects that scored in the top 10% met the criteria for Schizotypal Personality Disorder.

There is also a shorter counterpart to the SPQ, the Schizotypal Personality Questionnaire-Brief Form (SPQ-B) (Raine & Benishay, 1995). It consists of a brief 22-item self-report questionnaire which plots responses over the three main components of schizotypy; Cognitive-Perceptual, Interpersonal Deficits, and Disorganization. The internal reliability of the SPQ-B shows a mean Cronbach’s coefficient alpha of 0.76 (ranging from .72 to .80) and an intercorrelation with the longer, original SPQ scale at a mean Cronbach’s alpha of 0.91. As such,
it is considered to adequately reflect the same factors measured in the longer instrument. These figures were also verified on an independent sample, and the test shows a test-retest reliability of 0.90. The SPQ-B is the only brief instrument that has been designed to measure schizotypy and reflects the depth of the larger, most widely-used measure, the SPQ (Raine & Benishay, 1995). Due to the accuracy of both the SPQ and the SPQ-B, they have both been translated into numerous languages, and used across cultures with great success (Fonseca-Pedrero et al., 2008). The current study will employ this measure.

What is Well-Being?

The concept of well-being is intended to represent optimum individual experience and functioning—two features which are considered representative of, or conducive to, mental health. There have been several different perspectives on what, exactly, constitutes optimal experience and functioning, and several different measures have been developed in accordance with those perspectives (Ryan & Deci, 2001). Original measures of well-being, which are primarily associated with pleasurable experiences, were negatively correlated with schizotypal personality traits. That is, the more schizotypal features one reported, the lower one’s level of well-being tended to be (Abbot & Byrne, 2012; Abbot, Do, & Byrne, 2012). On the other hand, newer theories of well-being that incorporate concepts such as life-purpose, meaning, originality, and authenticity, seem to correlate positively with certain schizotypal components, indicating that higher levels of schizotypy are associated with higher or lower levels of certain types of well-being (Tabak & de Mamani, 2013; Unterrainer, Huber, Sorgo, Collicut, & Fink, 2011). Is it possible Weeks’ eccentrics might be considered “unwell” from one theoretical perspective, yet “well” from a different one? Currently, there are three prominent perspectives on the subject of
wellness, or well being; that of Subjective Well-Being, that of Psychological Well-Being, and that of Social Well-Being.

The first construct, Subjective Well-Being, is also described as “Hedonic,” and founded upon the idea that well-being consists of the immediate subjective experience of happiness, satisfaction, and the absence of negative feelings or judgments. The second construct, Psychological Well-Being, is based upon the idea of Aristotle’s *eudaimon*, or “true self,” and also described as “Eudaimonic” Well-Being. It is founded upon many concepts found within self-actualization theories of psychology, and includes components such as the subjective experience of meaning in life, the sense of having purpose, and drives toward individuality, authenticity, or self-expression. The third type of well being, Social Well-Being, explores aspects of the interaction between an individual and society. It includes such ideas as how one perceives the self as fitting into society, one’s perception of society as a process towards a potential, and the degree of perceived similarity between an individual’s goals and values with those of the larger social framework.

**Subjective Well-Being**

The first conception of well-being developed in modern psychological literature is that of Subjective Well-Being (SWB). SWB was proposed in a landmark paper by Ed Diener (1984) after a complete review of philosophical and psychological theories of happiness. Over the decades, the concept has only gone through minor modifications. Diener’s construct is labeled as a *hedonic* form of well-being, in that it involves personal assessment of the immediate pursuit of pleasurable experiences and avoidance of pain. The construct consists of three domains.
SCHIZOTYPY AND WELL-BEING

Diener’s construct involves the subjective assessment of three main areas; *global life satisfaction, presence of positive affect, and absence of negative affect*. The first measure of SWB involves a person’s global assessment of overall satisfaction with life, appropriately labeled Global Life Satisfaction. Research has been shown that this assessment can be affected by immediate mood. The next two factors, presence of positive affect and absence of negative affect, measures self-reported experiences of both those states. A typical measure for these components can be found in scales such as the Positive Affect Negative Affect Schedule (PANAS) and the Satisfaction with Life Survey (SWLS). The current study will employ these measures.

**Eudaimonic Well-Being**

Shortly after Diener fleshed out the first conceptualization of well-being within mainstream psychology, Carol Ryff (1989) developed a second perspective that was based more upon Humanistic psychological theories of self-actualization. Ryff argued that previous accounts of well-being had not included such concepts as autonomy, life purpose, and personal growth, which seemed essential components of a fuller theory of well-being. Basing her ideas on foundations within Aristotle’s concept of *eudaimonia*, or the actualization of one’s true self, she dubbed her construct Psychological Well-Being (PWB). Ryff’s construct of psychological well-being consists of six components; *self-acceptance, positive relation with others, personal growth, purpose in life, environmental mastery, and autonomy*.

The first component used in Ryff’s theory is that of Self-Acceptance. This is a concept Ryff draws not only from Aristotle, but from more recent psychological literature. She describes this construct as involving intimate and honest knowledge of the self, including both positive and
negative characteristics. It incorporates ideas of positive self-regard, which she characterizes as intimately tied to ideas of mental health, optimal functioning, and maturity.

The second component Ryff uses as a foundation in her theory is that of Positive Relation with Others. Ryff employs this concept to represent the quality of person’s personal relationships. In developing this aspect of PWB, she draws from philosophical and psychological literature in order to emphasize the importance of strong bonds of friendship, empathy, love, affection, and caring for others.

The third component, Personal Growth, is central to the idea upon which Ryff has based her theoretical framework for psychological well-being. Ryff claims this construct to be the closest parallel to Aristotle’s idea of eudaimonia, or, of fulfilling one’s true potential. The importance of this component of mental health is strongly echoed in a large body of psychological literature espousing the importance of self-actualization.

The fourth component in Ryff’s theory of well-being is that of Purpose in Life. Ryff draws upon many areas, including existentialism, to emphasize the importance of meaning, purpose, and vitality in interacting with and understanding the world. The need for a sense of directedness and intentionality is claimed to be a key component in psychological well-being.

Rounding out the last elements of Ryff’s theory, is the fifth; Environmental Mastery. Drawing upon lifespan developmental theory and personality theory, Ryff uses this construct to denote the drive of an individual to choose, create, and alter an environment tailored to his/her own needs and goals. Although it may include such concepts as self-efficacy or sense of control, Ryff’s idea places much more emphasis on the drive towards individual self-expression as it relates to the immediate outer world.
Autonomy is the final component Ryff employs in her theory of well-being. This concept is used to denote areas of personal growth such as self-determination, independence, and self-regulation. This component draws upon self-actualization literature and revolves around such theories as internal locus of evaluation, resistance to enculturation and questioning of convention, as well as the development of personal value systems.

Social Well-Being

The final conceptualization of well-being to be examined, in relation to the construct of schizotypy, will be that of Social Well-Being. Whereas subjective and psychological well-being both focus on one’s private experience, social well-being incorporates the interactive dimension of well-being as an interplay between private and social experience. Developed by Corey Keyes (1998), Social Well-Being looks at an individual’s appraisal of one’s circumstance and functioning within a society.

In Keyes’ model, social well-being is composed of five dimensions: social integration, social contribution, social coherence, social actualization, and social acceptance. Each of these components incorporate judgments about the self, judgments about the surrounding society, the convergence of both private and public values and goals, and the amount of integration between the two realms.

Social integration is the personal evaluation of the qualitative relationship between an individual and society. It is this dimension that gauges one’s sense of belonging in the larger society. How well does an individual share the goals, values, and norms of the larger society? This dimension draws upon the three concepts of social cohesion, cultural estrangement, and social isolation. The first concept represents the amount to which an individual has been
enculturated, the second represents one’s rejection of society as not reflecting personal values or lifestyle, and the third represents the total breakdown of personal relationships that provide meaning and support.

Social Acceptance represents a generalized view of others by the individual. It encompasses ideas such how trustworthy, kind, or industrious one perceives others to be as a general rule, and how comfortable one may be around others. It is theorized to represent the social analogue of personal acceptance.

Social Contribution represents the assessment of one’s social value, the belief that one is an integral member of society, and that one is capable of contributing meaningfully to the larger society as a whole. This concept is supported by analogous constructs in developmental psychology, social psychology, and sociology.

Social Actualization represents an individual’s assessment of the potential and direction of society as a whole. In it, one finds the strength of an individual’s beliefs about the trend of a society towards actualization of a higher goal, as well as the idea that the striving of a society towards its potential is beneficial for the individual and his peers.

Social Coherence represents an individual’s assessment of the quality, the organization, and the operation of the surrounding society. It inherently includes accruing knowledge about these aspects society, and reflects a concern with the quality of the world in which one lives, as well as the importance of understanding that which occurs in the society around them.

**Relationship of Schizotypy to Well-Being**

How do scores of schizotypy in a healthy population correlate with different types of well-being? There are only a handful of studies looking at schizotypy in relation to well-being.
Two directly address the concepts discussed here, and one obliquely explores our subject by using a different well-being construct for the dependent variable. The results of research look to be quite promising and informative for the field of mental health. A literature review by Bennett, Shepherd, and Janca (2013) explains that there is virtually no literature on the relationship between Schizotypal Personality Disorder and well-being measures. However, they cite a handful of studies that explore the relationship between schizotypal traits in healthy populations and well-being. Although there are conflicting data, generally it is found that schizotypal traits are negatively correlated to measures of subjective well-being (SWB) and positively correlated with elements of psychological well-being (PWB), which encompass some aspects of spirituality/religiosity. However, many different measures are used to gauge the spirituality/religiosity construct. The first three studies directly measure schizotypy and either SWB or PWB. Additionally, a study will be examined that do not directly address PWB, but employs religious/spiritual measures that contain correlates to the key concepts of PWB, as well as sheds more light on the nature of the schizotypal construct as it relates to well-being.

One study (Abbot & Byrne, 2012) looked solely at how schizotypy correlates with well-being, with a predicted inverse relationship. The study involved an online questionnaire given to one hundred forty three students enrolled in introductory psychology at Deakin University. It used the 74-item Schizotypal Personality Questionnaire which assesses schizotypy on nine subscales (Raine, 1991). The measure used for Subjective Well-Being (SWB) was the Personal Well-Being Index (PWI). The PWI gauges Life-Satisfaction using eight items representing eight life domains: standard of living, personal health, personal relationships, personal safety, community-connectedness, future security, satisfaction with spirituality-religion, and current
level of life achievement. Significant associations were found between SPQ totals and each of the domains on the PWI except “Satisfaction with spirituality or religion.” The authors did not offer reasons for this lack of correlation in the spirituality-religion domain. Additionally, all correlations were found to be inverse relationships so that the higher the SPQ score, the lower the PWI domain score (Abbot & Byrne, 2012).

The results of this study (Abbot & Byrne, 2012) clearly indicate that higher scores of schizotypy correspond to lower rating of SWB, at least within the one domain of SWB gauging Life-Satisfaction. (One must recall that SWB consists of three domains, Life-Satisfaction, in addition to presence of positive affect and the absence of negative affect.) However, also of note in this study is the one domain, of the eight total domains of Life-Satisfaction, in which a significant relationship was not found; the domain assessing satisfaction with religious or spiritual beliefs. It is worth pointing out that this is the domain in which one finds underlying concepts similar to those found in the construct of Psychological Well-Being, such as life purpose, existential meaning, self-improvement, value-fulfillment, and the relation of self to a larger metaphysical or societal whole.

Another study conducted by some of the same researchers in 2012 looked not only at how schizotypy correlates with the Life Satisfaction construct of well-being, but also explored the underlying mechanisms of that relationship (Abbot, Do, & Byrne, 2012). Two hundred thirty five healthy students were issued the aforementioned Schizotypal Personality Questionnaire, the Personal Well-Being Index, and the Depression Anxiety Stress Scales-21 (DASS-21). Schizotypy scores were associated with low overall Life Satisfaction, low scores in each domain of Life Satisfaction, as well as higher scores on negative affect as measured by the DASS-21. In
order to further investigate the relationship, the researchers controlled for negative affect and found that global schizotopy, Introvertive/Anhedonia (negative), and Disorganized schizotypal factors were all associated with lower overall life satisfaction. They concluded that since higher schizotypal traits corresponded to low life satisfaction above what was explained by negative affective states, this implicates other factors to be operating on that relationship (e.g., neurocognition or social cognition).

Results similar to Abbott and Byrne’s were found in a 2013 study conducted in Miami (Tabak & de Mamani, 2013). Based upon the idea that schizotypy exists on a continuum within a healthy population, researchers examined a non-clinical, or “healthy,” sample in order to gauge the level of schizotypal traits (further separated into latent profiles) and determine how schizotypy levels related to both subjective and psychological well-being.

In the study (Tabak & de Mamani, 2013), four hundred twenty healthy undergraduate participants of a non-clinical sample were given the Oxford-Liverpool Inventory of Feelings and Experiences (O-LIFE). The O-LIFE is a tool which uses a four-dimensional model of schizotypy to measure schizotypy profiles based upon four scales: Unusual Experiences (UE), which measures perceptual aberrations, magical thinking, and hallucination; Cognitive Disorganization (CD), which measures thinking, attention, concentration, and decision-making deficits; Introvertive Anhedonia (IA), which measures negative schizotypal symptomatology such as lack of social or physical enjoyment; and Impulsive Nonconformity (IN), which is intended to measure impulsive, antisocial, and eccentric behaviors. Subjects were then rated on both subjective (SWB) and psychological (PWB) well-being using the Quality of Life Inventory (QOLI) and the Psychological Well-Being scale (PWB) respectively. The QOLI consists of a
22-item survey which asks respondents to rate the importance of, and their satisfaction with, different life domains (e.g., health, self-esteem, love). The scale defines each domain, and asks respondents to rate the importance of each domain in their lives and then to rate their satisfaction with each domain. The responses for Importance and Satisfaction were multiplied, plotted over eleven sub-scales, and used to generate a total score for each subject. A latent profile analysis (LPA) was then conducted to classify the participants into discrete schizotypy profiles. This analysis of the data resulted in the emergence of six Latent Schizotypy profile groupings: 1) Low Schizotypy; 2) Average Schizotypy; 3) High Schizotypy; 4) High Unusual Experiences (UE); 5) High Introvertive Anhedonia; and 6) High Introvertive Anhedonia/Cognitive Disorganization.

The Low-, Average-, and High-Schizotypy profiles were assigned in comparison to the means of the total group. The High Unusual Experiences category endorsed more perceptual anomalies, the High Introvertive Anhedonia group experienced lack of pleasure or anxiety associated with social or physical stimuli, and the High Introvertive Anhedonia/Cognitive Disorganization experienced all the symptoms associated with schizotypy, including perceptual anomalies and disruptions in the thought process.

A series of statistical tests were then conducted relating each schizotypy profile to the dependent variables of well-being. The study found that individuals in the High Unusual Experiences category alone (without negative, disorganized, or impulsive features), overall exhibited the same healthy levels of well-being as the Average and Low Schizotypy profiles—and these three groups combined reported significantly higher subjective and psychological well-being scores than the combined category of both Introvertive/Anhedonia and Disorganization (the "negative" profiles). In other words, their results demonstrated that in general, lower schizotypy
scores are associated with higher levels of both SWB and PWB, but that certain aspects of high schizotypy involving positive schizotypal traits (unusual experiences and imagination) are associated with those same “healthy” levels of well-being. Results also showed certain factors of schizotypy such as negative traits to be linked with lower well-being, but that in general, progressively higher global schizotypy were good indicators of lowered SWB in all areas, and some areas of Eudaimonic Well-Being. In the six areas of Eudaimonic Well-Being, Low Schizotypy scored higher than the Average and High Schizotypy groups in purpose in life, environmental mastery, autonomy, and self-acceptance. Low and Average Schizotypy groups both scored higher than the High Schizotypy group on quality of life, positive relations with others, and personal growth. Tabak and de Mamani indicate their results add to research demonstrating schizotypy is not in and of itself pathological, but that, depending upon the characteristics, “benign schizotypy” exists within populations. They also cite design limitations, including false positives due to self-report, and cross-sectionality: “It remains unknown whether these profiles are relatively stable over time or whether individuals may switch profiles based on substance use, stressful life experiences, or other factors that increase risk for psychosis” (Tabak & de Mamani, 2013, p. 1012).

Another study conducted in Austria (Unterrainer, Huber, Sorgo, Collicut, & Fink, 2011) looked at the relationship between aspects of schizotypy and a type of well-being called Religious/Spiritual Well-Being. Building on research that has linked Religious/Spiritual Well-Being with many aspects of mental health, the researchers wanted to look at any relation of the former with aspects of mental illness. The study consisted of 102 undergraduate university students being given three statistically-validated measures each testing for well-being,
personality, and superstitiousness respectively: the Multidimensional Inventory for Religious/Spiritual Well-Being (MI-RSWB 48); the Eysenck Personality Questionnaire in short version (EPQ-RK); and the Magical Ideation Scale (MI). The MI-RSWB 48 is a newly-developed measure of 48 items that has six subscales intended to measure such concepts as: feeling connected; feeling of being absorbed into “something greater”; sense of security that come from one’s beliefs; experiencing true (authentic) feelings; the ability to forgive; a sense of hope for the future; and a sense of hope when “leaving behind loved ones.” The EPQ-RK has 38 items to measure the personality factors of Psychoticism, Extraversion, and Neuroticism. The Psychoticism element was treated in this study as a measure of schizotypy. The Magical Ideation scale (MI) was also intended to measure one aspect of the schizotypyal construct, and consists of 30 items which “might receive some subcultural support,” such as thought transmission and reincarnation, and some items considered to receive little-to-no subcultural support, (e.g., reading a secret message into the behavior of others). The team found Psychoticism was not predictive of well-being, and that it was not associated with any other variable, including the other measure of schizotypy (Magical ideation). The team found, however, that Magical ideation was predictive of one aspect of well-being, “Connectedness,” which represents feeling connected to others and to the universe at large, but no other aspects of well-being (Unterrainer, Huber, Sorgo, Collicutt, & Fink, 2011).

Goals of the Present Study

Schizotypy is a construct that involves many factors ranging from imaginative states, misapprehension of reality, and disruption of coherent thought to lack of ability to derive pleasure from social or physical experiences. Although it is currently composed of three main
factors, research generally shows high global schizotypy scores to be predictive of significantly lower total well-being scores. High schizotypy itself, as a global score, has been shown to be negatively correlated with Subjective Well-Being, as well as generally predictive of lower Eudaimonic Well-Being. However, although high global schizotypy is predictive of lower Eudaimonic Well-Being, there is a wider range (both Low and Average global schizotypy) associated with healthy levels of certain Eudaimonic aspects; positive relations with others, personal growth, and quality of life (Abbot & Byrne, 2012; Abbot, Do, & Byrne, 2012; Tabak & de Mamani, 2013). However, there is a paucity of research into the relationship between schizotypy and well being, and the little that has been done stands alone, unconfirmed by scientific replication. As such, the goal of the present study was threefold. First, this study intended to reproduce the negative correlations between global schizotypy and all components of Subjective Well-Being (SWB). Second, the study intended to reproduce a variable relationship of global schizotypy scores to all areas of Eudaimonic Well-Being (PWB). Third, this study intended to extend knowledge in the field by investigating the relationship of global schizotypy scores to the elements of a third, unexplored, type of well-being; Social Well-Being. This research has implications for therapy and clinical practice as it is geared toward understanding which areas of psychological health might be most affected in healthy, but sub-threshold, populations. It also provides clinicians with theoretical perspective in focusing on positive client characteristics while allowing for therapeutic betterment in realms that would enhance psychological functioning.

The research questions and hypotheses of the current study were as follows:
Study Question 1: Will global schizotypy be predictive of Subjective Well-Being (SWB) in all areas? It was hypothesized that higher global schizotypy would indeed be predictive of lower SWB in all three domains of Global Life Satisfaction, experience of positive affect, and absence of negative affect.

The first prediction was that global schizotypy would be negatively correlated with Global Life Satisfaction. Empirically-supported studies have shown that elevated schizotypy levels are associated with lower levels of SWB (Abbot & Byrne, 2012; Abbot, Do, & Byrne, 2012). Schizotypy is a construct that directly involves deficits in many areas, including the ability to enjoy pleasurable experiences. As such, it is logical to assume higher global schizotypy scores will hold a strong inverse relationship with Global Life Satisfaction. Abbot and Byrne (2012) found global schizotypy and lower life satisfaction to be very highly correlated. Within all eight areas of Global Life Satisfaction, global schizotypy scores were significantly associated with every single area except Satisfaction with Spirituality/Religion.

The second prediction was that higher global schizotypy would be negatively correlated with positive affect. Since schizotypy involves dysfunction and lowered life satisfaction, it is reasonable to assume there would be a significant inverse correlation with feelings of positive affect.

The third prediction was that higher global schizotypy was expected to show a significant inverse correlation with the experience of negative affect. Using the Depression Anxiety Stress Scales-21 (DASS-21), Tabak, Do, and Byrne (2012) demonstrated global schizotypy scores to be significantly correlated with the experience of negative affect.
Study Question 2: Will global schizotypy be predictive of Eudaimonic Well-Being (PWB) in all areas? It was hypothesized that higher global schizotypy would be predictive of lower scores for some elements of PWB, but hold no correlation or a positive correlation with other elements.

The first prediction was that higher global schizotypy would be inversely correlated with the PWB domain of self-acceptance. Self Acceptance represents intimate and honest knowledge of the self, including both positive and negative characteristics. Tabak and de Mamani (2013) demonstrated that a Low global schizotypy group scored higher than the higher groups of Average and High schizotypy in this domain.

The second prediction was that higher global schizotypy would be inversely correlated with positive relation with others. This element represents the quality of person’s personal relationships. Tabak and de Mamani (2013) demonstrated that Low and Average Schizotypy groups registered higher scores in this domain than the High Schizotypy. Additionally, there are two correlates with this area of PWB within the Global Life Satisfaction component of SWB; satisfaction with personal relationships and satisfaction with feeling part of the community. The scores for these areas of PWB showed significant inverse correlations with higher global schizotypy scores (Abbot, Do, & Byrne, 2012).

The third prediction was that higher global schizotypy would show a significant positive correlation with the Eudaimonic area of personal growth. This element represents fulfilling one’s true potential, or the self-actualization aspect of well-being. As with many of Weeks’ eccentrics, there is a highly creative component associated with schizotypy, and many subjects scoring high on global schizotypy look for personal growth through enhancing artistic ability and
expression (Carson, 2011; Eysenck, 1993). Although Tabak and de Mamani (2013) demonstrated an inverse correlation of global schizotypy to this domain, conceptual thinking from other researchers suggests the opposite; a positive relationship may exist (Kendler, 1985; Vollema & van den Bosch, 1995).

The fourth prediction was that higher global schizotypy would exhibit a significant correlation with \textit{purpose in life}. Tabak and de Mamani (2013) showed that Low Schizotypy groups scored higher in this area than the Average and High Schizotypy groups. However, one key feature of schizotypes is the sensation of having “special meaning” or a “purpose in life” (Kendler, 1985; Vollema & van den Bosch, 1995). Even if such feeling arises from pathology, it is reasonable to posit global schizotypy will show a positive correlation to this aspect of well-being.

The fifth prediction was that higher global schizotypy would be inversely correlated with \textit{environmental mastery}. This element represents the drive of an individual to choose, create, and alter an environment tailored to his/her own needs and goals. Research had shown that all Low Schizotypy profiles were associated with higher scores in this area than groups of Average and High Schizotypy (Tabak and de Mamani, 2013).

The sixth prediction was that higher global schizotypy would be positively correlated with the Eudaimonic realm of \textit{autonomy}. Although Tabak and de Mamani (2013) demonstrated an inverse correlation of global schizotypy to this domain, conceptual thinking from other researchers suggests the opposite; a positive relationship may exist (Kendler, 1985; Vollema & van den Bosch, 1995). The PWB elements of locus of evaluation, resistance to enculturation,
questioning of convention, and the development of personal value systems find parallels in the statistically unusual ideation and nonconformist behavior of schizotypy.

Study Question 3: Will global schizotypy be predictive of Social Well-Being in all areas? It was hypothesized that higher global schizotypy would be predictive of lower scores for some elements of Social Well-Being, but hold no correlation with other elements.

The first prediction was that higher global schizotypy would be negatively correlated with the social integration component of Social Well-Being. Social Integration represents a personal evaluation of the qualitative relationship between the self and society. In it one finds how well an individual shares the goals, values, and norms of the larger society. This dimension draws upon the three concepts of social cohesion, cultural estrangement, and social isolation. As many of these ideas are expressed oppositely in the concept of schizotypy, it was predicted that there would be a significant negative correlation between this predictor and our criterion variable.

The second prediction was that higher global schizotypy would be negatively correlated with the social acceptance component of Social Well-Being. Social Acceptance represents a generalized view of others by the individual. There is a clear, though not precise, connection between this element of Social Well-Being and that of Positive Relations with others in Eudaimonic (PWB) Well-Being. Tabak and de Maman (2013) demonstrated that progressively higher schizotypy scores were associated with lower scores in this area of PWB. Additionally, there are two correlates with this area of PWB within the Global Life Satisfaction component of SWB; satisfaction with personal relationships and satisfaction with feeling part of the community. The scores for these areas of PWB showed significant inverse correlations with
higher global schizotypy scores (Abbot, Do, & Byrne, 2012). In light of this evidence, there was reason to believe a strong inverse relationship would hold with higher global schizotypy and this element of Social Well-Being.

The third prediction was that there would be no significant correlation between global schizotypy and the social contribution component of Social Well-Being. Social Contribution represents the assessment of one’s social value, the belief that one is an integral member of society, and that one is capable of contributing meaningfully to the larger society as a whole. The relation of schizotypy to this construct has not been previously explored, nor is there any existing correlate between this construct and elements of any other type of well-being. Since this element would seem to be dependent on other personal variables unrelated to schizotypy, one might suspect there should be no correlation between the two.

The fourth prediction was that there would be no significant correlation between global schizotypy and the social actualization component of Social Well-Being. Social Actualization represents an individual’s assessment of the potential and direction of society as a whole, and the belief that society is in the midst of actualizing a higher goal. Although this element has no clear counterpart in other theories of well-being, it could be related, albeit obliquely, to the religious/spiritual element of Eudaimonic Well-Being. The idea that there is “plan” of some sort on which society is progressing, towards some higher goal, is an essential element of religious belief as well as an inherent assumption of many non-religious groups that take active part in the betterment of society. A study investigating the relationship of global schizotypy scores to satisfaction with spirituality/religion found no significant relationship between these two areas (Abbot, Do, & Byrne, 2012).
The fifth prediction was that there would be a significant negative correlation between global schizotypy scores and the social coherence element of Social Well-Being. Social Coherence represents an individual’s assessment of the quality, the organization, and the operation of the surrounding society. This idea is similar in content to the Subjective Well-Being concept of satisfaction with feeling part of the community. This element of Subjective Well-Being was explored and found to have a highly significant negative correlation to global schizotypy scores (Abbot, Do, & Byrne, 2012). There was reason to believe the same relationship might hold in the relationship of global schizotypy with social coherence.

Method

Participants

Two hundred twelve college students enrolled at Eastern Illinois University participated in this research. Students in Introductory Psychology, Theories of Personality, and Adolescent Psychology were recruited and given course credit for their participation. Of the 212 participants, 194 answered all the relevant scale items included in the survey. From this sample, 13% \((n = 24)\) were excluded due to unusually short or long duration (less than eight minutes, or more than one hour) taken to complete the survey. None of the participants answered with problematic responses (i.e., answering all items with “number 1”). Additionally, another 19 participants were removed as outliers, using box plot and stem-and-leaf diagrams for identification and removal. None were identified as outliers using standardized residuals, Mahalanobis distances, and Cook’s distances as criteria for removal. The final sample of 151 participants exceeded the minimum
required of 146 students needed to achieve a desired power of .95 with an anticipated moderate effect size at an alpha level of .05.

Composition of the final sample consisted of 24 males (16%), 127 females (84%), ranging in age from 18 to 24 (\( M = 20.18, Mdn = 20.00 \)). Year in school of the sample participants were 25% freshmen, 20% sophomore, 30% juniors, and 25% seniors. Examination of the ethnicity of the sample yielded 76% Caucasian (\( n = 114 \)), 17% African-American (\( n = 26 \)), 2% Hispanic (\( n = 2 \)), 1% Native American (\( n = 1 \)), 3% Asian (\( n = 5 \)), and 2% Multi-Ethnic (\( n = 3 \)).

Materials

Schizotypal Personality Questionnaire – Brief (SPQ-B; Raine & Benishay, 1995).

The SPQ-B consists of a brief 22-item self-report questionnaire which generates a global score and plots responses over three scales; Cognitive-Perceptual, Interpersonal Deficits, and Disorganization. Participants are expected to respond “yes” or “no” to test items. Examples of items include: I feel I have to be on my guard even with friends”; “Have you ever had the sense that some person or force is around you even though you cannot see anyone?”; “Have you had experiences with astrology, seeing the future, UFOs, ESP, or a sixth sense?”; and “Some people think that I am a very bizarre person.” The internal reliability of the SPQ-B shows a mean Cronbach’s coefficient alpha of 0.76 (ranging from .72 to .80) and an inter-correlation with the longer, original SPQ scale at a mean Cronbach’s alpha of 0.91. As such, it is considered to adequately reflect the same factors measured in the original longer instrument, the 74-item Schizotypal Personality Questionnaire. These figures were also verified on an independent sample, and the test shows a test-retest reliability of 0.90. The SPQ-B is the only brief
instrument that has been designed to measure schizotypy and reflects the depth of the larger, most widely-used measure, the SPQ (Raine & Benishay, 1995). Due to the accuracy of the SPQ and the SPQ-B, they have both been translated into numerous languages, and used across cultures with great success (Fonseca-Pedrero et al., 2008). The current study employed this measure. The item scores were simply totaled, and higher scores are representative of higher global schizotypy.

**Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985).** The first measure of Subjective Well-Being used is the Satisfaction with Life Scale. It is a five item survey in which responses are placed on a 7-point Likert scale from 1 (Strongly Disagree) to 7 (Strongly Agree). The scale is intended to measure how satisfied a person is with their overall life at the present moment. Examples of items are “The conditions of my life are excellent,” and “In most ways my life is close to my ideal.” Tests of the measure showed a test-retest correlation for this measure is .82 and a Cronbach’s coefficient alpha of .87. Each item loaded at .61 or higher, and total correlations were in a range between .57 and .75. In the current study, the scores were averaged across items, and higher averages are representative of more life satisfaction.

**Positive Affect Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988).** The PANAS is a tool that asks respondents to rate their experience of ten positive and ten negative emotions. The positive emotions encompass; interested, excited, strong, enthusiastic, proud, alert, inspired, determined, attentive, and active. The negative emotions listed in the measure consist of; distressed, upset, guilty, scared, hostile, irritable, ashamed, nervous, jittery, afraid. The measure uses a 5-point Likert scale from 1 (Very Slightly/Not At All) to 5
(Extremely) and asks respondents to rate how often they feel the intensity of each of the 20 emotions. The scales were shown to be highly internally consistent, largely uncorrelated, and stable at appropriate levels over a 2-month retest time period. All adjectives for both positive and negative affect loaded highly for their respective subscales. Internal consistencies were demonstrated at acceptable levels for both the positive and negative scales: positive affect Cronbach’s coefficient alpha range of .86-.90; negative affect Cronbach’s alpha between .84-.87. In the current study, scores were averaged across items for each of the two subscales of positive and negative emotionality, and higher scores on either subscale show higher emotionality in that area.

Scale of Psychological Well-being (Ryff, 1989). The PWB scale is a 54-item measure with six subscales: Self-Acceptance, Environmental Mastery, Purpose in Life, Positive Relations with Others, Personal Growth, and Autonomy. The measure employs nine items per subscale. Responses are placed on a 7-point Likert scale of 1 (Strongly Disagree) to 7 (Strongly Agree). Sample items include: “I tend to worry what people think of me,” “Being happy with myself is more important to me than having others approve of me,” and “My daily activities often seem trivial and unimportant to me.” The Cronbach’s alpha coefficients for the initial scales were as follows: self-acceptance, .93; positive relations with others, .91; autonomy, .86; environmental mastery, .90; purpose in life, .90; and personal growth, .87. Test-retest reliability coefficients for the scales over a six week period were as follows: self-acceptance, .85; positive relations with others, .83; autonomy,.88; environmental mastery, .81; purpose in life, .82; and personal growth, .81. Negatively worded items are reverse-coded prior to analysis. In the current study, scores on each subscale were averaged (Ryff, 1989; Ryff & Keyes, 1995).
Social Well-Being Scale (Keyes, 1988). This study employed a 34-item measure of Keyes’ theory of Social Well-Being. Responses are plotted on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Examples of items included such statements as, “You believe that people are kind,” “Society is improving for people like you,” and “You think that people are unreliable.” Negatively worded items are reverse-coded prior to analysis. Confirmatory factor analysis was used to assess the utility of the five-factor model. Using a series of seven progressively better-fit models, Keyes reported a chi-square goodness of fit of the final model over its precursor with a chi-square contrast of 32.5, $p < .001$. Cronbach’s alpha for the scales ranged from .69 to .81 (Keyes, 1998). For the current study, averages across items of each subscale were obtained.

Procedure

Study participants were administered all measures online via Qualtrics. Participants were initially given an informed consent form, a brief (voluntary) demographic questionnaire, and then the five measures necessary for the study. Administration order of the various measures was counterbalanced to control for presentation order effects. Most participants were able to complete the study within 45 minutes.

Results

Internal Consistency Analyses of the Measures

All scores on negatively worded items were reverse-coded prior to analysis. Cronbach’s alpha coefficients were then determined to assess the internal consistency of each scale or subscale for the sample. The values showed acceptable to excellent internal consistency in some areas (schizotypy, all the subjective well-being components, and the two eudaimonic well-being
elements of self-acceptance and purpose in life), but questionable to unacceptable consistency in others, especially among the social well-being elements. These are summarized in Table 1. Many of the Cronbach’s alpha values were comparable to previous studies for some scales and subscales. However, some were not.

Most of the Cronbach’s alpha values for the scales represented in the sample were within acceptable range. However, several of the scores in the sample were unacceptable. In the area of Eudaimonia, the sample measured low on Positive Relations with Others and Environmental Mastery. Within the realm of Social Well-Being, four of the subscales were within an unacceptable range; Social Integration, Social Contribution, Social Actualization, and Social Coherence. Due to the low internal consistency of these scales, caution should be taken when interpreting the validity of the findings and results.

Characteristics of the Study Sample

Mean scores and standard deviations for the SPQ-B and each well-being subscale can be found in Table 1. Overall, the participants expressed a moderate level of schizotypy, as well as well-being in most areas measured, with a slightly lower level demonstrated on the Negative Affect scale of the PANAS.

For the criterion value of global schizotypy, this sample had a mean value and standard deviation of $M = 9.48$, $Mdn. = 9.50$, and $SD = 4.90$ (scale of 22). These values are comparable to research samples on university students, which yielded total values of $M = 9.60$, $SD = 5.30$ (Raine & Benishay, 1995), indicating a moderate level of schizotypy in an average distribution. There are only a few prior studies investigating the relationship between schizotypy and well-being, none of them using the SPQ-B. The lowest score was 0 (5 participants) and the highest
score was 21 (2 participants), with most participants’ scores clustered around the mean and median.

Table 1

Means and Standard Deviations (N = 151)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Scale Range</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schizotypy</td>
<td>9.53</td>
<td>4.93</td>
<td>1 – 22</td>
<td>.83</td>
</tr>
<tr>
<td>Subjective Well-Being</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Affect</td>
<td>3.23</td>
<td>.63</td>
<td>1 – 5</td>
<td>.74</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>2.44</td>
<td>.70</td>
<td>1 – 5</td>
<td>.78</td>
</tr>
<tr>
<td>Satisfaction with</td>
<td>4.86</td>
<td>1.04</td>
<td>1 – 7</td>
<td>.77</td>
</tr>
<tr>
<td>Life</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eudaimonic Well-Being</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self Acceptance</td>
<td>3.80</td>
<td>1.09</td>
<td>1 – 6</td>
<td>.84</td>
</tr>
<tr>
<td>Positive Relations w/Others</td>
<td>4.26</td>
<td>.76</td>
<td>1 – 6</td>
<td>.69</td>
</tr>
<tr>
<td>Autonomy</td>
<td>3.98</td>
<td>.68</td>
<td>1 – 6</td>
<td>.51</td>
</tr>
<tr>
<td>Environmental</td>
<td>4.10</td>
<td>.56</td>
<td>1 – 6</td>
<td>.21</td>
</tr>
<tr>
<td>Mastery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose in Life</td>
<td>4.08</td>
<td>.90</td>
<td>1 – 6</td>
<td>.77</td>
</tr>
<tr>
<td>Personal Growth</td>
<td>4.14</td>
<td>.80</td>
<td>1 – 6</td>
<td>.63</td>
</tr>
<tr>
<td>Social Well-Being</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Integration</td>
<td>4.29</td>
<td>.83</td>
<td>1 – 7</td>
<td>.51</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>4.08</td>
<td>.79</td>
<td>1 – 7</td>
<td>.60</td>
</tr>
</tbody>
</table>
Within each area of well-being, participants showed varying results. For Satisfaction with Life, the sample showed a mean of 4.86 on a scale of 1 to 7, indicating slightly above neutral in satisfaction with this area. Also the group were around a slightly above neutral position in Positive Affect (\(M = 3.23, SD = .63\)) and slightly below neutral on Negative Affect (\(M = 2.44, SD = .70\)). The PANAS, which measures positive and negative affect, is constructed with a scale of 1 to 5. This means that the group, although experiencing slightly lowered scores of negative affect compared to the neutral score of 3, also did not experience positive affect much beyond that same neutral level. A comparable sample group of undergraduate students at the same university registered similar values: SWLS at \(M = 4.69\) and \(SD = 1.28\); Positive Affect at \(M = 3.69\) and \(SD = .74\); and Negative Affect at \(M = 2.19\) and \(SD = .72\) (Deku, 2012).

Within the realm of Eudaimonic Well-Being, the subscales range from 1 to 6. On this scale, 3.5 is dead center, representing an entirely neutral score. The sample’s values for each of the subscales were as follows: Self-Acceptance (\(M = 3.80, SD = 1.09\)), Positive Relations with Others (\(M = 4.26, SD = .76\)), Autonomy (\(M = 3.98, SD = .68\)), Environmental Mastery (\(M = 4.10, SD = .56\)), Purpose in Life (\(M = 4.08, SD = .90\)), and Personal Growth (\(M = 4.14, SD = .80\)).

Within this framework, it can be seen that the lowest scores for the sample were on Self-Acceptance and Autonomy, while the highest area—just slightly above dead center—was in Positive Relations with Others. All mean values for the samples’ subscale scores were above 3.5.
and, hence, in the positive direction. A comparable sample group of undergraduate students at the same university registered the similar values on most elements: Self-Acceptance at $M = 3.57$ and $SD = .46$; Positive Relations with Others at $M = 3.34$ and $SD = .44$; Autonomy at $M = 3.93$ and $SD = .35$; Environmental Mastery at $M = 4.20$ and $SD = .61$; Purpose in Life at $M = 3.64$ and $SD = .48$; and Personal Growth at $M = 3.99$ and $SD = .54$ (Deku, 2012).

Within the realm of Social Well-Being, which is measured on a scale of 1 to 7 with 4 representing perfect neutrality, the group fared comparably to Eudaimonic. On each of the subscales, values were as follows: Social Integration ($M = 4.29$, $SD = .83$); Social Acceptance ($M = 4.08$, $SD = .79$); Social Contribution ($M = 4.56$, $SD = .84$); Social Actualization ($M = 4.36$, $SD = .66$); and Social Coherence ($M = 4.75$, $SD = .95$). As can be seen from the preceding values, all scores were above neutral in the positive direction, with the lowest, Social Acceptance, being nearly at neutral. In no area did the sample score as high as 5, and the highest score was in the area of Social Coherence. These values are comparable to those obtained in another recent study: Social Integration ($M = 4.13$, $SD = .88$); Social Acceptance ($M = 3.81$, $SD = .82$); Social Contribution ($M = 4.73$, $SD = .67$); Social Actualization ($M = 4.25$, $SD = .84$); and Social Coherence ($M = 5.04$, $SD = .89$; Hisanaga, 2012).

**Schizotypy and Subjective Well-Being**

The first study question inquired about the nature of the relationships between Subjective Well-Being and schizotypy. Before examining that relationship, however, correlations between the three Subjective Well-Being elements were examined. All correlations between these elements were statistically significant.

**Table 2**
Zero-Order Correlations between the Subjective Well-Being Elements and Schizotypy (N = 151)

<table>
<thead>
<tr>
<th>Elements</th>
<th>Satisfaction with Life</th>
<th>Positive Affect</th>
<th>Negative Affect</th>
<th>Schizotypy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with Life</td>
<td>--</td>
<td>.25*</td>
<td>-.37**</td>
<td>-.44**</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>--</td>
<td>-.21*</td>
<td>-.19*</td>
<td></td>
</tr>
<tr>
<td>Negative Affect</td>
<td>--</td>
<td></td>
<td>.45**</td>
<td></td>
</tr>
<tr>
<td>Schizotypy</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .01 ** p < .001

Satisfaction with Life was positively correlated with Positive Affect and negatively correlated with Negative Affect. This implies that people who felt more positive about their current station in life and their past experiences were more likely to experience positive affect and less likely to have express negative emotionality. Additionally, Positive Affect was negatively correlated with Negative Affect.

To answer the first study question, zero-order correlations were taken between global schizotypy and each element of Subjective Well-Being. All the elements were significantly correlated with schizotypy (displayed in Table 2).

Satisfaction with Life was highly negatively correlated with schizotypy. This suggests that as people exhibit more of the traits associated with schizotypy they are less likely to express satisfaction with their current or past experiences. Also, Positive Affect was significantly correlated with global schizotypy. As participants exhibited more of the characteristics associated with schizotypy the more likely they would endorse feelings of positive affect. Both
the above correlations fit the three-factor model of schizotypy in which one of the three facets is anhedonia, or the inability to experience pleasure (Raine, Reynolds, Lencz, Scerbo, Triphon, & Kim, 1994). Additionally, there was a highly significant correlation between Negative Affect and global schizotypy. Again, this result shows participants rating high on this predictor were much more likely to endorse high schizotypy. Indeed, previous research in this area shows high schizotypy associated with less pleasure and life satisfaction (Abbot & Byrne, 2012).

Because all the facets of Subjective Well-Being showed significant correlations, a multiple regression analysis was conducted in order to examine the relationship between each element of Subjective Well-Being while controlling for the other two elements. All predictors were entered simultaneously for the analysis. Results showed that only Satisfaction with Life and Negative Affect retained their correlation with schizotypy (see Table 3).

Table 3

Summary of Multiple Regression Between Schizotypy and Subjective Well-Being (N = 151)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with Life</td>
<td>-1.42</td>
<td>.36</td>
<td>-.30**</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>-.39</td>
<td>.57</td>
<td>-.05</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>2.29</td>
<td>.53</td>
<td>.33**</td>
</tr>
</tbody>
</table>

Note: \( R^2 = .29 \); adjusted \( R^2 = .27 \)

** \( p < .001 \)

Satisfaction with Life and Negative Affect accounted for 29% of the overall variance of schizotypy, \( F(3, 146) = 19.78, p < .001 \). The significance of these results confirm prior research (Abbot & Byrne 2012; Abbot, Do, & Byrne 2012) and point to a key idea that clinical focus on
improving subjective Life Satisfaction and Negative Affect could have an impact on expression and experience of schizotypal characteristics associated with reduced quality of life. In fact, it appears that poor Satisfaction with Life and increased Negative Affect are better correlates of schizotypy than Positive Affect. One possible reason for this is that lower levels in life satisfaction and higher levels of negative affect than lower levels in positive affect may contribute more directly to the dysfunction associated with schizotypy.

_Schizotypy and Eudaimonic Well-Being_

The second study question asked whether all elements of Eudaimonic Well-Being would be predictive of schizotypy, and whether some of these facets could demonstrate positive, as well as negative correlations. Specifically, the study question hypothesized: 1) significant inverse correlations with the constructs of Self-Acceptance, Positive Relation with Others, and Environmental Mastery; and 2) positive correlations with the constructs of Personal Growth, Purpose in Life, and Autonomy.

Before investigating relationships between Eudaimonia and schizotypy, however, associations between the Eudaimonic elements were first examined. These elements were found to be highly positively correlated with each other, as shown on Table 4. In fact, every single eudaimonic subscale held significant, or highly significant, correlations with at least one other subscale.

Global schizotypy proved to be correlated with each eudaimonic well-being element (see Table 4). However, unlike several of the hypothesized predictions, all correlations were in the negative direction. These results imply that high global schizotypy was associated with lower levels in each single area of eudaimonic well-being.
### Table 4

*Zero-Order Correlations between the Eudaimonic Well-Being Elements and Schizotypy (N = 151)*

<table>
<thead>
<tr>
<th>Elements</th>
<th>SA</th>
<th>PR</th>
<th>A</th>
<th>EM</th>
<th>PL</th>
<th>PG</th>
<th>Schiz</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>--</td>
<td>.56**</td>
<td>.35**</td>
<td>.44**</td>
<td>.71**</td>
<td>.66**</td>
<td>-.28**</td>
</tr>
<tr>
<td>PR</td>
<td>--</td>
<td>.38**</td>
<td>.59**</td>
<td>.54**</td>
<td>.53**</td>
<td>-.50**</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>--</td>
<td>.42**</td>
<td>.36**</td>
<td>.37**</td>
<td>.21*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EM</td>
<td>--</td>
<td>.47**</td>
<td>.39**</td>
<td>-.42**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PL</td>
<td>--</td>
<td>.72**</td>
<td>-.31**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PG</td>
<td>--</td>
<td>.30**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schiz</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** *p < .01

** ** *p < .001

Note: SA = Self-Acceptance, PR = Positive Relations with Others, A = Autonomy, EM = Environmental Mastery, PL = Purpose in Life, PG = Personal Growth, Schiz = Schizotypy

Due to the fact that the eudaimonic well-being elements were highly correlated with each other, a multiple regression analysis was carried out with all predictor entered simultaneously. Only Positive Relations with Others and Environmental Mastery retained significant correlations with schizotypy. These two predictors accounted for 28% of the total variance of schizotypy, $F(6, 143) = 9.29, p < .001$. 
Table 5

Summary of Multiple Regression between Schizotypy and Eudaimonic Well-Being (N = 151)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Acceptance</td>
<td>.32</td>
<td>.49</td>
<td>.07</td>
</tr>
<tr>
<td>Positive Relations</td>
<td>-2.53</td>
<td>.64</td>
<td>-.39**</td>
</tr>
<tr>
<td>Autonomy</td>
<td>.23</td>
<td>.59</td>
<td>.03</td>
</tr>
<tr>
<td>Environmental Mastery</td>
<td>-1.76</td>
<td>.81</td>
<td>-.20*</td>
</tr>
<tr>
<td>Purpose in Life</td>
<td>-.13</td>
<td>.65</td>
<td>-.02</td>
</tr>
<tr>
<td>Personal Growth</td>
<td>-.34</td>
<td>.67</td>
<td>-.06</td>
</tr>
</tbody>
</table>

Note: $R^2 = .28$; adjusted $R^2 = .25$

*p < .05

**p < .001

These results point toward the role that a lack of positive personal relationships and sense of control over the environment can play in the expression and maintenance of schizotypal characteristics. This finding points to the possibility that positive relations contributes most to the subjective quality of life, and hence, affects all areas of well-being regardless of the paradigm. Additionally, it is possible that the concepts of Self-Acceptance and Autonomy play an important role in Positive Relations with others, and might be responsible for this finding after the multiple regression. Also, it is likely that a concept like control over one's environment and feelings of efficacy as represented by Environmental Mastery, play a key role in well-being regardless of the paradigm. Likewise, it is possible that Purpose in Life and Personal Growth play a key role in the development of Environmental Mastery, and, as such, is the reason behind this finding of the
multiple regression. At a more fundamental level, positive relations and mastery of the environment both represent, in a larger way, interaction with the world outside of the self. Many of the other well-being elements do not reflect this aspect. Regardless of the reason, the findings bear important clinical implications for client treatment, improvement of overall well-being, and prevention of mental health problems. It also echoes much research into the effectiveness of good social support, pleasant-event scheduling, and development of an internal locus of control. Indeed, the most significant predictor, Positive Relations with Others, also addresses a facet of one of the cornerstones of dysfunction associated with schizotypy, that of the Introvertive/Anhedonia component.

Further analysis was conducted in the form of a hierarchical multiple regression. Previous studies (Abbot & Byrne 2012; Abbot, Do, & Byrne 2012; Tabak & de Mamani, 2013) had already shown that schizotypy is associated with Subjective Well-Being (i.e., Satisfaction with Life, Positive Affect, and Negative Affect). The intent of the succeeding analysis was to answer the following: Is schizotypy associated with Eudaimonic Well-Being over and beyond its known association with Subjective Well-Being? Controlling for the elements of Subjective Well-Being by entering them in the first step of the hierarchical regression, the analysis tested whether schizotypy would still be associated with the elements of Eudaimonic Well-Being.

Results of the hierarchical multiple regression analysis are summarized in Table 6. In the first step, the three components of Subjective Well-Being (Satisfaction with Life, Positive Affect, and Negative Affect) were used as the predictors. The relationship between the set of predictors and schizotypy was found to be statistically significant; \( R^2 = .29, F(3, 146) = 19.78, p < .001 \). Lower Satisfaction with Life and higher Negative Affect scores were associated with higher
levels of schizotypy. This accounted for 29% of the variance in schizotypy, $p < .001$, with Satisfaction with Life and Negative Affect each contributing to 9% and 11% of the variance ($p < .001$ for each predictor) respectively.

Table 6

Hierarchical Regression Analysis for Well-Being Predicting Schizotypy ($N = 151$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction w/ Life</td>
<td>-1.42</td>
<td>.36</td>
<td>-.30**</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>-.39</td>
<td>.57</td>
<td>-.05</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>2.29</td>
<td>.53</td>
<td>.33**</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction w/ Life</td>
<td>-.91</td>
<td>.39</td>
<td>-.19*</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>-.10</td>
<td>.79</td>
<td>-.01</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>2.02</td>
<td>.73</td>
<td>.29**</td>
</tr>
<tr>
<td>Self-Acceptance</td>
<td>.83</td>
<td>.55</td>
<td>.18</td>
</tr>
<tr>
<td>Positive Relations</td>
<td>-1.83</td>
<td>.66</td>
<td>-.29**</td>
</tr>
<tr>
<td>Autonomy</td>
<td>.60</td>
<td>.57</td>
<td>.08</td>
</tr>
<tr>
<td>Environmental Mastery</td>
<td>-.97</td>
<td>.81</td>
<td>-.11</td>
</tr>
<tr>
<td>Purpose in Life</td>
<td>-.09</td>
<td>.62</td>
<td>-.02</td>
</tr>
<tr>
<td>Personal Growth</td>
<td>-.29</td>
<td>.66</td>
<td>-.05</td>
</tr>
</tbody>
</table>

Note: $R^2 = .29$ for Step 1 ($p < .001$); $\Delta R^2 = .07$ for Step 2 ($p = .02$)

*p < .05
**p < .01

In the second step, the various Eudaimonic Well-Being elements were added to determine if they can predict schizotypy over and above Subjective Well-Being. The results indicate that the eudaimonic measures do provide added predictive value, \( \Delta R^2 = .07, F(6, 140) = 2.51, p = .02 \). Among the eudaimonic elements, Positive Relations was found to be the sole predictor of schizotypy, accounting for 8% of the variance in schizotypy \( (p = .006) \). The more positive relations were in one’s life, the less likely one was to exhibit schizotypal characteristics.

Schizotypy and Social Well-Being

The third study question asked whether all elements of Social Well-Being would be predictive of schizotypy, and whether the elements would demonstrate both positive and negative correlations. Specifically, the study question hypothesized: 1) significant inverse correlations with the constructs of Social Integration, Social Contribution, and Social Coherence; and 2) no positive correlations with the constructs of Social Acceptance and Social Actualization.

As with the other areas of well-being, zero-order correlations between the social well-being elements were obtained to examine the relationships between them. Many of the subscales, shown on Table 1, proved to be correlated with several others.

Additionally, eudaimonic well-being elements were all significantly correlated with schizotypy. The implications of this finding are that poor well-being as measured by all the Social Well-Being elements are highly associated with schizotypal characteristics. However, due to the high correlations between the five social well-being elements, a multiple regression was conducted with all predictors entered simultaneously to further delineate the relationship between schizotypy and these elements. Results of the multiple regression show that the only
Table 7

Zero-Order Correlations between the Social Well-Being Elements and Schizotypy

(N = 151)

<table>
<thead>
<tr>
<th>Elements</th>
<th>SI</th>
<th>SocA</th>
<th>SC</th>
<th>SAx</th>
<th>SCo</th>
<th>Schiz</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI</td>
<td></td>
<td>.13</td>
<td>.46**</td>
<td>.52**</td>
<td>.46**</td>
<td>-.21*</td>
</tr>
<tr>
<td>SocA</td>
<td>.13</td>
<td></td>
<td>.05</td>
<td>.43**</td>
<td>.05</td>
<td>-.24**</td>
</tr>
<tr>
<td>SC</td>
<td></td>
<td></td>
<td>.47**</td>
<td>.51**</td>
<td>-.29**</td>
<td></td>
</tr>
<tr>
<td>SAx</td>
<td></td>
<td></td>
<td></td>
<td>.43**</td>
<td></td>
<td>-.41**</td>
</tr>
<tr>
<td>SCo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.24*</td>
<td></td>
</tr>
<tr>
<td>Schiz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: SI = Social Integration, SocA = Social Acceptance, SC = Social Contribution, SAx = Social Actualization, SCo = Social Coherence, Schiz = Schizotypy

*p < .01

**p < .001

element to retain a correlation with schizotypy was Social Actualization; an inverse relationship. Social Actualization accounted for 19% of the overall variance, F(5, 144) = 20.23, p < .001. This result indicates that participants rating high on schizotypal traits were more likely to rate low in the Social Actualization area of well-being—which represents a belief in the positive direction of society and its values. In light of this fact, it can be posited that, of all the social values, a belief in the utility and beneficence of society provides a foundation upon which all the
other aspects of social well-being might rest. That is to say, if one believes in the goodness of society, it seems likely one would rate high on well-being aspects such as acceptance of society (Social Acceptance), would feel part of society and a need to contribute (Social Integration and Social Contribution), as well as have positive ideas regarding the quality and organization of society (Social Coherence).

Table 8

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Integration</td>
<td>.28</td>
<td>.57</td>
<td>.05</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>-.66</td>
<td>.55</td>
<td>-.10</td>
</tr>
<tr>
<td>Social Contribution</td>
<td>-.77</td>
<td>.56</td>
<td>-.13</td>
</tr>
<tr>
<td>Social Actualization</td>
<td>-.25</td>
<td>.78</td>
<td>-.30*</td>
</tr>
<tr>
<td>Social Coherence</td>
<td>-.30</td>
<td>.49</td>
<td>-.06</td>
</tr>
</tbody>
</table>

Note: $R^2 = .19$; adjusted $R^2 = .16$

*p < .01

Further analysis was conducted in the form of a hierarchical multiple regression to determine if schizotypy was associated with Social Well-Being beyond its established association with Subjective Well-Being (Abbot & Byrne 2012; Abbot, Do, & Byrne 2012; Tabak & de Mamani, 2013). Controlling for the Subjective Well-Being elements in the first step of the hierarchical regression, the analysis tested whether schizotypy would still be associated with the elements of Social Well-Being.
The results of the hierarchical multiple regression analysis are shown in Table 9. In the first step, the three components of Subjective Well-Being were entered as predictors. The relationship between the three elements and schizotypy was found to be statistically significant; \( R^2 = .29, F(3, 146) = 19.78, p < .001 \). Participants who had lower Satisfaction with Life and

**Table 9**

*Hierarchical Regression Analysis for Variable Predicting Schizotypy (N = 151)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>( \beta )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction w/ Life</td>
<td>-1.42</td>
<td>.36</td>
<td>-.30**</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>-.39</td>
<td>.57</td>
<td>-.05</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>2.29</td>
<td>.53</td>
<td>.33**</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction w/ Life</td>
<td>-1.28</td>
<td>.37</td>
<td>-.27**</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>.03</td>
<td>.68</td>
<td>.00</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>2.06</td>
<td>.59</td>
<td>.30**</td>
</tr>
<tr>
<td>Social Integration</td>
<td>.40</td>
<td>.54</td>
<td>.07</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>.14</td>
<td>.54</td>
<td>.02</td>
</tr>
<tr>
<td>Social Contribution</td>
<td>-.69</td>
<td>.52</td>
<td>-.12</td>
</tr>
<tr>
<td>Social Actualization</td>
<td>-1.76</td>
<td>.72</td>
<td>-.23*</td>
</tr>
<tr>
<td>Social Coherence</td>
<td>.49</td>
<td>.49</td>
<td>.09</td>
</tr>
</tbody>
</table>

\*p < .05  

\**p < .01
higher Negative Affect scores were more likely to exhibit schizotypal characteristics. This accounted for 29% of the variance in schizotypy, \( p < .001 \), with Satisfaction with Life and Negative Affect each contributing to 9% and 11% of the variance \( (p < .001 \) for each predictor) respectively.

In the second step, the Social Well-Being measures were added to determine if they could predict schizotypy beyond Subjective Well-Being. The results indicated that social elements do provide added predictive value, \( \Delta R^2 = .05 \), \( F(5, 141) = 2.10, p = .02 \). Among the Social Well-Being elements, Social Actualization was found to be the only significant predictor of schizotypy. This element accounted for 5% of the variance in schizotypy \( (p = .02 \). The less one believed in the beneficence and positive direction of society, the more likely one was to exhibit schizotypal characteristics.

**Discussion**

"Eccentricity," as expressed in the construct of schizotypy, has been a topic of some debate. Historically, it had grown out of nascent mental health notions of the early 1900s, and conflated with ideas and values about social conformity (Kendler, 1985). Currently, there is controversy over the nature of the "unusual beliefs" associated with schizotypy. Some contend that these beliefs and experiences are hallmarks of mental illness, while others assert that these notions serve the same personal and mental health functions that organized religion has catered to in the past (Unterrainer, Huber, Sorgo, Collicut, & Fink, 2011). Historically, features associated with schizotypy have been a center of focus in the arts due to the seemingly high crossover between mental illness and artistic expression (Carson, 2011; Eysenck, 1993). Indeed,
this mythos has been noted since human prehistory, commented up from societies such as the Ancient Greeks, to the Chinese Middle Kingdom, to modern psychological research. There are ubiquitous historical references, a cultural mythos built into the fabric of our modern culture, and a growing body of new literature on the subject. However, the subtle implication of these associations is that: 1) their existence is representative of mental dysfunction, and therefore an expression of mental illness; and 2) as such, the experience of mental illness always causes one to suffer and serves as something to be corrected or treated. Recent developments in psychological theory describe new ways of conceiving of psychological health, as well as measuring ideas such as “How much nonconformity might be a measure of healthy independence or autonomy?” (Ryff, 1989). Indeed, it is in this light the main questions of this thesis have been posed: “Can highly eccentric individuals who might score low in one paradigm of well-being express traits that are valued in other paradigms?”; i.e., can their existence, as odd as it may seem to the larger society, afford them an unusual brand of happiness?

The purpose of this study was to examine the nature of the relationship described above. The construct of schizotypy exists not just in the realm of mental illness, but is considered a measurable variable within the healthy population (Acar & Sen, 2013; Carson, 2011; Eysenck, 1993; Farias, Underwood & Claridge, 2013; Tsakanikos & Claridge, 2005). By examining the range of schizotypal traits in a non-clinical sample in relation to different constructs of well-being, it was possible to determine if schizotypal characteristics might carry with it some benefit in some theoretical constructs of well-being. The results of this study, however, clarified that global schizotypy, as whole, shows to be detrimental to well-being from all the perspectives of well-being examined.
Schizotypy and Subjective Well-Being

Schizotypy has been shown, in previous studies (Abbot & Byrne, 2012; Abbot, Do, & Byrne, 2012; Tabak & de Mamani, 2013), to hold inverse relationships with forms of hedonic well-being. The current study hypothesized that schizotypy would prove to be negatively correlated with Satisfaction with Life and Positive Affect. It was also hypothesized that schizotypy would hold a positive correlation to the experience of Negative Affect.

This study confirmed the hypothesis that global schizotypy would hold an inverse relationship to Satisfaction with Life. Schizotypy is a construct that involves many features, among them key features such as nonconformity and unusual hobbies. It is reasonable to think that people who are dissatisfied enough, or unwitting enough, regarding ideas of conventionality, might feel unfulfilled by conventional prescriptions for happiness or experiences.

This study also confirmed the second hypothesis, namely, that global schizotypy would be negatively correlated with Positive Affect. Schizotypy is a broad construct that involves many characteristics. Among them are negative emotionality or moodiness, inability to experience pleasure, and others. Ideas involved in the construct, as well as past studies (Abbot & Byrne, 2012; Abbot, Do, & Byrne, 2012; Tabak & de Mamani, 2013), indicate many reasons for a high correlation between this element of Subjective Well-Being and global schizotypy, and it is likely there are a multitude of contributing factors (Abbot & Byrne, 2012; Abbot, Do, & Byrne, 2012). Additionally, this study hypothesized and reproduced a positive correlation between schizotypy and the experience of Negative Affect. Results of the multiple regression analysis, however, showed that only Life Satisfaction and Negative Affect remained significantly correlated with schizotypy after controlling for all variables. The implications of this result
might prove informative to clinical practice in such that it seems treating Negative Affect has more practical utility than enhancing Positive Affect, and indeed may play a larger role in the relationship. The negativity involved with Negative Affect might also play a role in a lowered subjective assessment of Life Satisfaction, which is also predictive of global schizotypy.

Schizotypy and Eudaimonic Well-Being

Due to the nature of the construct of schizotypy, which involves unusual ideas, behaviors, nonconformity, and its association with creative endeavors (Acar & Sen, 2013; Carson, 2011; Eysenck, 1993; Farias, Underwood & Claridge, 2013; Tsakanikos & Claridge, 2005), it was hypothesized that schizotypy might show a variable relationship to elements of Eudaimonic Well-Being. Eudaimonic Well-Being is a perspective that emphasizes individuality, autonomy, and, among many other ideas, the development of personal values in conjunction with a resistance to enculturation by the surrounding culture. As such, it was posited that the individuality, nonconformity, and creative expression often associated with schizotypy would show high correlations with some aspects of eudaimonia. Specifically, it was hypothesized that schizotypy would hold positive correlations with the constructs of Personal Growth, Purpose in Life, and Autonomy, but that it would hold significant inverse correlations with the constructs of Self-Acceptance, Positive Relation with Others, and Environmental Mastery.

Although previous studies on Eudaimonic Well-Being had shown mostly negative correlations between schizotypy and the Eudaimonic Well-Being elements, there was good reason, both theoretical and from research, to believe the opposite may hold true on some subscales (Abbott & Byrne, 2012; Abbot, Do, & Byrne, 2012). Zero-order correlations indicated highly significant inverse correlations between global schizotypy and each element of
Eudaimonic Well-Being. Further investigation using multiple regression analysis showed only Positive Relations with Others and Environmental Mastery to hold significant correlation. Both the relationships were inverse such that increasing global schizotypy drove down these levels of well-being. Although the reasons for this relationship may be manifold, it seems likely that, on the one hand, failures in these areas may contribute to schizotypal behaviors such as social isolation, withdrawal, and unusual solitary interests. On the other hand, development of these behaviors may subsequently draw time and energy away from investment in social and mastery realms. Either way, the negative correlation with well-being is noted, and has important clinical implications for treatment and alleviation of dysfunction.

Analysis of Eudaimonic Well-Being while controlling for the elements of SWB found the Eudaimonic element of Positive Relations with Others to have added predictive value beyond those accounted for by SWB in prior studies. These results point toward the role that a lack of positive personal relationships and sense of control over the environment can play in the expression and maintenance of schizotypal characteristics. This finding points to the possibility that positive relations contributes most to the subjective quality of life, and hence, affects all areas of well-being regardless of the paradigm.

*Schizotypy and Social Well-Being*

No previous studies had been conducted investigating any possible relationship with schizotypy and Social Well-Being. There were no previous empirical data to draw upon when formulating hypotheses, other than the fact that there are conceptual similarities between elements of Social Well-Being and Eudaimonic Well-Being, and prior studies have examined the connection between Eudimonic Well-Being and schizotypy (Tabak & de Mamani, 2103). The
study question hypothesized: 1) significant inverse correlations with the constructs of Social Integration, Social Contribution, and Social Coherence; and 2) no positive correlations with the constructs of Social Acceptance and Social Actualization.

Contrary to what was predicted, zero-order correlation analysis showed schizotypy to hold significant negative correlations with each area of Social Well Being. Additionally, a multiple regression analysis showed only Social Actualization to hold the significant inverse correlation. This finding implies that the more one exhibits schizotypal characteristics, the less likely one will be found to have a positive attitude towards society and its beneficial direction. As with eudaimonia, the reasons for this finding may be manifold. However, it seems likely that negative beliefs about society in general could contribute to schizotypal behaviors related to society, such as social isolation, withdrawal, and unusual solitary interests. Also, as with the finding among Eudaimonic Well-Being that Positive Relations with Others was the most predictive of schizotypal traits, this finding may bolster the importance of social support in dealing with behavioral dysfunction.

Clinical Implications

The findings of this study have important implications for clinical psychology. Because the construct of schizotypy was developed near the birth of the discipline of psychology, it was bound up with concepts that were heavily value-laden during the time period and social milieu in which they occurred. Additionally, some of the dysfunctional characteristics were subsequently separated out into other categories such as autism and the like (Kendler, 1985). However, there still remain aspects of the construct which cause controversy among theoreticians in the field, such as whether the entire construct itself is representative of dysfunction, and whether it exists
in a spectrum within all healthy populations. Indeed, numerous studies have examined aspects of the construct as they apply to religious or spiritual beliefs, creativity, and other constructs that are also considered aspects of healthy mental function (Acar & Sen, 2013; Carson, 2011; Eysenck, 1993; Farias, Underwood & Claridge, 2013; Tsakanikos & Claridge, 2005). As such, measurements taken from healthy samples have much to offer when examining areas of mental health and wellness, such as those represented by the various theoretical perspectives on well-being.

Gaining a deeper understanding of which specific areas of well-being schizotypy is most correlated with gives clinicians a better understanding on how to proceed with treatment plans. This is especially so if clients demonstrating such characteristics may have sub-clinical complaints, and do not fall specifically within the black-and-white realm of any specific DSM category. Findings of this study implicate three major areas of well-being which might serve as foci for treatment when applied to clients of this profile; Positive Relations with Others, and Social Actualization. Granted, it is a fact that many treatment approaches zone in on such areas as social support, negative cognitions affecting feelings about the self or significant others, development of self-efficacy and an internal locus of control, emotional balance and mindfulness, as well as the development of a more positive outlook of the world and society in order to improve one’s own quality of life. These areas have long been considered cornerstones of effective treatment, and developed out of research such as Beck’s work on depression, Cognitive Behavioral research, Dialectical Behavior Therapy, and other seminal treatment paradigms. These perspectives might prove useful in tailoring treatment to subclinical schizotypal clients, while maintaining a healthy balance with other activities associated with the construct that offer
potential therapeutic value, such as creative endeavors. For example, a student demonstrating raised global schizotypy might have subclinical depressive complaints, tend towards social isolation while studying or creating art, and feel a lack in her social life. Using a therapy such as Cognitive Behavioral Therapy to target treatment to particular areas found within this study might prove an efficient, effective method in successfully aiding the client.

Limitations of this Study

This study has several limitations. While conceptualizing this study, several approaches to measuring and investigating schizotypy currently exist, more than twenty measures in all, including such titles as: Psychoticism Subscale (P), the Schizoidia Scale (GM), Schizotypal Personality Scale(STA), Schizophrenism (NP), Hallucination Scale (LSHS), Schizotypy Scale (SS), Rust Inventory of Schizotypal Cognitions (RISC), and the Schizotypal Personality Questionnaire or SPQ (Vollema & van den Bosch, 1995). Schizotypy is such a historical, oft-debated, and controversial construct, that there is considerable disagreement both in how to conceptualize it, as well as how to measure it. There are multiple models that suggest two-, three-, four-, five-, six-, and even more factor models of the construct of schizotypy. In development of this study, several of these models were considered. Only one was a real possibility, and, in the end, in order to keep the timeframe of this study within a realistically achievable project, it was decided to use a simple global measure to broadly investigate the nature of the relationship. Additionally, even schizotypy measures identifying the same factors differ in their construction, method, and scoring. As such, even much of the prior research cited within this study is not easily comparable without additional analysis. Obtaining low internal consistency indices on some of the well-being instruments also proved problematic for reliability
or credibility of the results. An additional limitation is the correlational nature of the relationship. Although the study design was intended to make inferences about how schizotypy might impact well-being based on correlations, the observed relationships could reflect different paths of influence.

In future studies, it would be important to delve more deeply into which schizotypal components contribute to each of the lowered areas of well-being. For example, the three dimensional model using Introvertive Anhedonia, Cognitive Perceptual, and Disorganized categories (Raine & Benishay, 1995) could add much depth to the results, as well as using a measure with a better breakdown of the components such as the O-LIFE scale (Mason & Claridge, 2006; Tabak & de Mamani, 2013). It would also behoove us to use more in-depth measures, the values of which might be easily translated in comparison to other similar studies. Additionally, this brings us to a final limitation of the study design which need addressed; the reliance on self-report measures. Students were recruited for course credit, and there was no incentive to answer honestly, or even complete the survey. Over 200 participants were credited, but only around 150 students provided data in a way which met criteria for inclusion in the final analysis.

**Conclusion**

This study has served to increase our knowledge of some areas of dysfunction associated with schizotypy. Given that the construct can be measured within even healthy populations, the information gleaned from this study can be important when formulating treatment approaches. The results suggest there are key areas of focus that would specifically help this population, even in healthy samples, such as focus on social support and exercises geared towards increasing
feelings of mastery. Prior research has documented less Subjective and, to a large extent, Eudaimonic well-being in increasingly high schizotypy groups (Abbot & Byrne, 2012; Abbot, Do, & Byrne, 2012; Tabak & de Mamani, 2013). Newer research is currently teasing apart aspects of schizotypy into dysfunctional as well as “benign” characteristics (Acar & Sen, 2013; Carson, 2011; Eysenck, 1993; Farias, Underwood & Claridge, 2013; Tsakanikos & Claridge, 2005). Understanding which characteristics are detrimental to well-being, which might serve as treatment foci, and which might serve as protective factors, is key in a clinical setting. Therapeutic techniques designed to encourage development of balance between personal proclivities and focus areas in which clients could improve their overall level of well-being would be invaluable in a treatment setting. Such focus could serve to help clients engage more in their daily lives, focus on tasks that improve self-esteem and feelings of efficacy, as well as strengthen interpersonal relationships that would serve as protective factors against dysfunction, as well as increase overall well-being.
Appendix A:

Demographic Information

Age: ______

Gender: Male / Female

Year in School: Freshman / Sophomore / Junior / Senior / Graduate

Ethnicity:  
__ White/Caucasian
__ Black/African-American
__ Hispanic
__ Native-American
__ Asian-American
__ Hawaiian or Pacific Islander
__ Multi-Ethnic
__ Other

Academic Major: ______________________
Appendix B: Schizotypal Personality Questionnaire – Brief Form

Directions: For each question, please indicate “yes” or “no.”

Yes / No 1. People sometimes find me aloof and distant.

Yes / No 2. Have you ever had the sense that some person or force is around you, even though you cannot see anyone?

Yes / No 3. People sometimes comment on my unusual mannerisms and habits.

Yes / No 4. Are you sometimes sure that other people can tell what you are thinking?

Yes / No 5. Have you ever noticed a common event or object that seemed to be a special sign for you?

Yes / No 6. Some people think that I am a very bizarre person.

Yes / No 7. I feel I have to be on my guard even with friends.

Yes / No 8. Some people find me a bit vague and elusive during a conversation.

Yes / No 9. Do you often pick up hidden threats or put-downs from what people say or do?

Yes / No 10. When shopping do you get the feeling that other people are taking notice of you?

Yes / No 11. I feel very uncomfortable in social situations involving unfamiliar people.

Yes / No 12. Have you had experiences with astrology seeing the future. UFOs. ESP. or a sixth sense?

Yes / No 13. I sometimes use words in unusual ways.

Yes / No 14. Have you found that it is best not to let other people know too much about you?

Yes / No 15. I tend to keep in the background on social occasions.
Yes / No 16. Do you ever suddenly feel distracted by distant sounds that you are not normally aware of?

Yes / No 17. Do you often have to keep an eye out to stop people from taking advantage of you?

Yes / No 18. Do you feel that you are unable to get "close" to people?

Yes / No 19. I am an odd, unusual person.

Yes / No 20. I find it hard to communicate clearly what I want to say to people.

Yes / No 21. I feel very uneasy talking to people I do not know well.

Yes / No 22. I tend to keep my feelings to myself.
Appendix C: Satisfaction with Life Scale

DIRECTIONS: Below are five statements with which you may agree or disagree. Using the 1 – 7 scale below, indicate your agreement with each item by placing the appropriate number in the line preceding that item. Please be open and honest in your responding.

1 = Strongly Disagree
2 = Disagree
3 = Slightly Disagree
4 = Neither Agree Nor Disagree
5 = Slightly Agree
6 = Agree
7 = Strongly Agree

____ 1) In most ways my life is close to my ideal.
____ 2) The conditions of my life are excellent.
____ 3) I am satisfied with life.
____ 4) So far I have gotten the important things I want in life.
____ 5) If I could live my life over, I would change almost nothing.
Appendix D: Positive and Negative Affect Schedule

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way, that is, how you feel on average. Use the following scale to record your answers:

1 2 3 4 5
Very Slightly/Not at All A Little Moderately Quite a Bit Extremely

___ Interested ___ Irritable

___ Distressed ___ Alert

___ Excited ___ Ashamed

___ Upset ___ Inspired

___ Strong ___ Nervous

___ Guilty ___ Determined

___ Scared ___ Attentive

___ Hostile ___ Jittery

___ Enthusiastic ___ Active

___ Proud ___ Afraid
Appendix E: Scale of Psychological Well-Being

The following set of questions deals with how you feel about yourself and your life. Please remember that there are no right or wrong answers.

DIRECTIONS: Circle the number that best describes your present agreement or disagreement with each statement.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Most people see me as loving and affectionate</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>2) In general, I feel I am in charge of the situation in which I live.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>3) I am not interested in activities that will expand my horizons.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>4) When I look at the story of my life, I am please with how things have turned out.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>5) Maintaining close relationships has been difficult and frustrating for me.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>6) I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>7) The demand of everyday life often get me down.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>8) I live life one day at a time and don’t really think about the future.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>9) In general, I feel confident and positive about myself.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>10) I often feel lonely because I have few close friends with whom to share my concerns.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>11) My decisions are not usually influenced by what everyone else is doing.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Scale</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>12</td>
<td>I do not fit very well with the people and community around me.</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>I tend to focus on the present, because the future nearly always brings me problems.</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>I feel like many of the people I know have gotten more out of life than I have.</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>I enjoy personal and mutual conversations with family members or friends.</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>I tend to worry about what other people think of me.</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>I am quite good at managing the many responsibilities of my daily life.</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>I don't want to try new ways of doing things—my life is fine the way it is.</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>Being happy with myself is more important to me than having others approve of me.</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>I often feel overwhelmed by my responsibilities.</td>
<td>1</td>
</tr>
<tr>
<td>21</td>
<td>I think it is important to have new experiences that challenge how you think about yourself and the world.</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>My daily activities often seem trivial and unimportant to me.</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>I like most aspects of my personality.</td>
<td>1</td>
</tr>
<tr>
<td>24</td>
<td>I don't have many people who want to listen when I need to talk.</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>I tend to be influenced by people with strong opinions.</td>
<td>1</td>
</tr>
<tr>
<td>26</td>
<td>When I think about it, I haven't really improved much as a person over the years.</td>
<td>1</td>
</tr>
<tr>
<td>27</td>
<td>I don't have a good sense of what it is I'm trying to accomplish in life.</td>
<td>1</td>
</tr>
<tr>
<td>28</td>
<td>I made some mistakes in the past, but I feel all in all everything has worked out for the best.</td>
<td>1</td>
</tr>
<tr>
<td>29</td>
<td>I generally do a good job of taking care of my personal finances and affairs.</td>
<td>1</td>
</tr>
<tr>
<td>30</td>
<td>I used to set goals for myself, but that now feels like a waste of time.</td>
<td>1</td>
</tr>
<tr>
<td>31</td>
<td>In many ways, I feel disappointed about my achievements in life.</td>
<td>1</td>
</tr>
<tr>
<td>32</td>
<td>It seems to me that most other people have more friends than I do.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
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</tr>
<tr>
<td><strong>33)</strong> I enjoy making plans for the future and working to make them a reality.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>34)</strong> People would describe me as a giving person, willing to share my time with others.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>35)</strong> I have confidence in my opinions, even if they are contrary to the general consensus.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>36)</strong> I am good at juggling my time so I can fit everything in that needs to be done.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>37)</strong> I have a sense that I have developed a lot as a person over time.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>38)</strong> I am an active person in carrying out the plans I set for myself.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>39)</strong> I have not experienced many warm and trusting relationships with others.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>40)</strong> It is difficult for me to voice my own opinions on controversial matters.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>41)</strong> I do not enjoy being in new situations that require me to change my old familiar ways of doing things.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>42)</strong> Some people wander aimlessly through life, but I am not one of them.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>43)</strong> My attitude about myself is probably not as positive as most people feel about themselves.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>44)</strong> I often change my mind about decisions if my friends or family disagree.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>45)</strong> For me, life has been a continuous process of learning, changing, and growth.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>46)</strong> I sometimes feel as if I’ve done all there is to do in my life.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>47)</strong> I know that I can trust my friends, and they know they can trust me.</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Appendix F: Social Well-Being Scale

Below are statements of your feelings about yourself and your life. Select that number that best matches your agreement or disagreement with each statement. Use the following scale, which ranges from 1 (strongly disagree) to 7 (strongly agree). There are no right or wrong answers.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Neither Agree Nor Disagree</td>
<td>Strongly Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) You don’t feel you belong to anything you’d call community.
2) The world is too complex for you.
3) Your behavior has some impact on other people in your community.
4) You think you have something valuable to give to the world.
5) You believe that society has stopped making progress.
6) You think that other people are unreliable.
7) Society isn’t improving for people like you.
8) You believe that people are kind.
9) Scientists are the only people who can understand how the world works.
10) You cannot make sense of what is going on in the world.
11) You feel like you are an important part of your community.
12) Most cultures are so strange that you cannot understand them.
13) If you had something to say, you believe people in your community would listen to you.
14) You believe that people are self-centered.
15) You don’t think social institutions like law or government make your life better.
16) You think it’s worthwhile to understand the world you live in.
17) You see society as continually evolving.
18) You think our society is a productive place for people to live in.
19) You feel that people are not trustworthy.
20) You feel close to other people in your community.
21) You see your community as a source of comfort.
22) You think that people live only for themselves.
23) Your daily activities do not produce anything worthwhile for your community.
24) For you, there’s no such thing as social progress.
25) You don’t have the time or energy to give anything to your community.
26) You believe that people are more and more dishonest these days.
27) You think that your work provides an important product for society.
28) If you had something to say, you don’t think your community would take you seriously.
29) You think the world is becoming a better place for everyone.
30) You think that people care about other people’s problems.
31) You feel you have nothing important to contribute to society.
32) You believe other people in society value you as a person.
References


