Mediterranean Journal of Clinical Psychology

ISSN 2282-1619

MJCP

Volume 11, n 3, 2023

Clinical Psychology

Psychological inflexibility as main factor associated with emotional symptomatology and suicide risk: Two trans-diagnostic models for risk in young adults from Cundinamarca

Marge Alejandra Sierra [1], Eliana Ortiz [1], Bertha Lucia Avendaño-Prieto [1]*

Abstract

Introduction: Psychological inflexibility is the systematic use of ineffective behavioral regulation strategies that in the long-term worsen psychological distress and quality of life. Evidence suggests that psychological inflexibility is a trans-diagnostic process essential to mental-health that predicts "emotional and affective disorders". This study proposes two trans-diagnostic models of risk based on experiential avoidance, cognitive fusion, repetitive negative thinking, and values obstruction and generalized pliance as part of a "psychological inflexibility" super-ordinated factor using available instruments which already have psychometric properties and factor structure analyses, along with evidence of validity and reliability in Colombia. Said super-ordinated factor is expected to be associated to the outcome variables in the current sample and have some relationship with other latent super-ordinated factors deemed "sociodemographic variables", "sexuality", "mental health history" and "suicide risk".

Method: There was a cross-sectional correlational design and a non-randomized convenience sampling. The sample was 541 young adults from Cundinamarca aging from 18 to 39 (M=28.86; SD=5.66), most of them cisgender (98%; n=530), assigned female at birth (81.9%; n=443) and identified as women (81.5%; n=441). They responded to an online survey inquiring sexuality, sociodemographic and mental health history aspects and including emotional symptomatology, experiential avoidance, cognitive fusion, repetitive negative thinking, values obstruction and generalized pliance assessment. Structural Equation Modelling was used to adjust the aforementioned models.

Results: Both models had a good fit. Psychological inflexibility (β= .70) and suicide risk (β= .33) had a moderate relationship (r= .66) and were associated with emotional symptomatology. Emotional symptomatology (β= 1.56) and psychological inflexibility (β=-.77) had a strong relationship (r= .95) and were associated with suicide risk.

Discussion: There is preliminary evidence for the role of psychological inflexibility and sexuality related variables as potential risk factors associated with emotional symptomatology and suicide risk, supporting some of the assumptions from the ACT model.

[1] Psychology Department, Universidad Católica de Colombia, Bogotá, Colombia

E-mail corresponding author: masierra34@ucatolica.edu.co

Keywords:
Clinical Psychology; Psychological Inflexibility; Emotional Symptomatology; Contextual Behavioral Science; Structural Equation Modeling; Risk Factors.

Received: 9 September 2023
Accepted: 1 December 2023
Published: 28 December 2023

Citation: Sierra, A.S., Ortiz, E., Avendaño-Prieto, B.L. (2023). Psychological inflexibility as main factor associated with emotional symptomatology and suicide risk: Two trans-diagnostic models for risk in young adults from Cundinamarca *Mediterranean Journal of Clinical Psychology 11*(3).
https://doi.org/10.13129/2282-1619/mjcp-3924

1. Introduction

Contextual Behavioral Science (Contextual Behavioral Science i.e., CBS; Hayes et al., 2012a; Levin et al., 2016) gives psychological inflexibility a central role in the development, course, and prognosis of "emotional and affective disorders" (e.g., depression and anxiety disorders). Inflexibility consists of the systematic use of ineffective behavioral regulation strategies (e.g., procrastination, social isolation, excessive self-criticism and introspection, sexual promiscuity, consumption of psychoactive substances (PAS) or alcohol, among many others) that in the long-term worsen psychological distress and quality of life (Hayes et al., 2001; Hayes et al., 2011; Törneke et al., 2008; Törneke et al., 2016; Wilson & Luciano, 2002). Current evidence suggests that psychological inflexibility is an essential component of overall mental-health (Kashdan & Rottenberg, 2010) and also a trans-diagnostic functional unit that predict and explain emotional symptomatology (Bardeen & Fergus, 2016; Cookson et al., 2019; Faustino, 2020; Faustino et al., 2021; Hayes et al., 2012b; Levin et al., 2014; Tyndall et al., 2018) and suicide risk (Ducasse et al., 2014; Ellis & Rufino, 2016; Krafft et al., 2019; Walser et al., 2015).

Psychological inflexibility has been traditionally conceptualized using the Hexaflex model which includes six components: experiential avoidance (tendency to systematically escape or avoid aversive private events), cognitive fusion (tendency to systematically behave according to the thoughts content), lack of contact with the present moment (due to repetitive negative thinking i.e., RNT focused on the past or the future), attachment to the self as content (cognitive fusion with verbal rules and other private events about the self), lack of clarity on values (poor establishment of abstract verbal rules of motivational augmenting that generate reinforcement at the verbal level) and omission of valued actions (Hayes et al., 2011; Wilson & Luciano, 2002). However, none of the existing studies have proposed a statistical model that directly and explicitly provides empirical support to the Hexaflex model (McLoughlin & Roche, 2022).

According to McLoughlin & Roche (2022) in order to claim there is evidence for the Hexaflex model the following steps are to be followed in order: First, developing valid and reliable measures of each of the six core processes; Second, conduct an exploratory factor analysis including all instruments and showing each of the components to be distinct; Third, conduct a structural equation modeling analyses that not only show that are the six components are distinct, but also that they belong to a super-ordinated factor we might call psychological inflexibility with acceptable model fit; Last, statistically demonstrate that changes in a given outcome variable in the context of ACT are mediated by changes in this latent psychological inflexibility construct.

Some of the steps have already been taken as there are valid and reliable measures for psychological inflexibility (MPFI; Rolffs et al., 2018; Landi et al., 2021) and some related variables such as experiential avoidance (AAQ-II; Bond et al., 2011), cognitive fusion (CFQ; Gillanders et al., 2014), lack of contact with the present moment manifested as RNT (PTQ; Ehring et al., 2011) and omission of valued actions (VQ; Smout et al., 2014). The second step has already been conducted by Rolffs et al. (2018) finding at least 6 flexibility and 6 inflexibility related but independent processes within the MPFI. The third step has been partially advanced by Landi et al. (2021), confirming that the 6 flexibility processes found on the MPFI do contribute significantly to load a super-ordinated factor. Nonetheless, the MPFI has no validity evidence for Colombian samples, while factor structure analyses for Colombia have already been conducted for all of the other instruments mentioned above finding acceptable psychometric properties (Ruiz et al., 2016; Ruiz et al, 2017a; Ruiz et al, 2017b; Ruiz et al, 2022).

However, psychological inflexibility is not the sole determinant of emotional symptomatology or suicide risk. Previous research has found that genetic predisposition, earlier pubertal timing, executive functioning deficits, some personality traits, stressful life events, environmental factors and mood or eating disruptions, among others are risk factors for emotional symptomatology (Dalgleish et al., 2020; Eaton et al., 2015; Krueger & Eaton, 2015; Lynch, 2021). Likewise, young adults that abuse psychoactive substances (PAS) (Cantão & Botti, 2016; Chiappini et al., 2021; Martinotti et al., 2021; Pawlowska & Szymańska, 2021; Pereira-Morales et al., 2017) or have a history of emotional disorders (Bostwick & Pankratz, 2000; Hawton et al., 2013; Herres et al., 2019; Kanwar et al., 2013) are in a higher risk of committing suicide.

On the other hand, Minority Stress Theory (Hendricks & Testa, 2012; Meyer, 1995; Nodin et al., 2015; Reisner et al., 2015; Skinta, 2021; Stitt, 2020) states that LGBTIQ+ and other marginalized communities might experience higher levels of overall emotional symptomatology due to the generalized prejudice and wide array of forms of violence they face on a daily basis. The convergence of intersectional risk factors that LGBTIQ+ youth experience (Aranmolate et al., 2017; Avendaño-Prieto et al., 2019, Haas et al., 2010; Pellicane & Ciesla, 2022; Plöderl et al., 2013) often lead trans (Bauer et al., 2015; Guz et al., 2021; Tebbe & Moradi et al., 2016; Testa & Hendricks, 2015; Wolford-Clevenger et al., 2017) and non-binary (Aparicio-García et al., 2018; Rimes et al., 2019) people in particular to develop an increased risk of suicide in contrast to cis-heteronormative populations. Additionally, LGBTIQ+ people are often rendered invisible and reduced to "other" categories in scientific literature, which obstructs science and obscures understanding of their mental health (Mizock & Hopwood, 2016; Skinta, 2021; Stitt, 2020). Therefore, the present study includes and codes the most basic sexuality related variables

such as sex (AFAB, AMAB or Intersex), gender identity (Cisgender - Transgender), gender expression (Man, Woman or Non-binary) and sexual orientation (Heterosexual, Homosexual, Bisexual, Pansexual and Asexual).

According to the WHO (2022a), in 2019 one in eight people in the world had been diagnosed with a mental health condition (i.e., approximately 970 million people). Anxiety and depression (often included under the umbrella terms "emotional and affective disorders" (WHO, 2017; Bullis et al., 2019) are the most prevalent mental health conditions in the world, estimating around 301 million people received an "anxiety disorder" diagnosis and 280 million received a "depressive disorder" diagnosis. Additionally, during the first year of the COVID-19 pandemic, the prevalence of anxiety and depression increased significantly by 25% worldwide (WHO, 2022b). The worldwide prevalence of emotional disorders is 4.4% and 3.6% for depressive and anxiety "disorders" respectively; However, in the case of Colombia, WHO reports a slightly higher prevalence of 4.7% and 5.8% respectively (WHO, 2017). Cundinamarca is located in the Central Andean region of Colombia and Bogotá D.C is both the country and the department's capital city. The last mental health survey conducted by the Colombian Ministry of Health reported that the prevalence of mental health disorders for Colombians aging from 18 to 44 is 10.1% over the course of a lifetime, 5.1% during the last year and 2.1% for the last month (Ministry of Health & Colciencias, 2015). Specific data for the Central Andean region show a prevalence over the lifetime of 9.6% for any mental health disorder and 4.6% for any depressive or anxiety disorder, among which 19.9% presents comorbidity with some other disorder (Ministry of Health & Colciencias, 2015).

More than 700,000 people commit suicide each year and it ranks as the fourth cause of death in the age group ranging from 15 to 29 years (WHO, 2023a). 77% of documented suicides worldwide occur in low- and middle-income countries (WHO, 2023b). Suicide is estimated to account for 10% of injuries occurred in Latin America, it's also estimated that there has been a significant increase between 1990 and 2019 and there is a higher proportion of suicides in men and youngsters of any gender (Dávila-Cervantes, 2022; Gómez-Tabares et al., 2022). About 45800 people take their own lives each year in Latin America (Mascayano et al., 2015; Gómez-Tabares et al., 2022) and in 2019 the mortality rate due to suicide in Latin America and the Caribbean reported by WHO (2022) was 6.2 per 100 000 inhabitants. In Colombia, in 2022 there were 2835 suicides, among which 881 of the deceased were young adults between the ages of 18 and 28. The total number of suicides in the country corresponds to 10.1% of any violent deaths occurred (National Institute of Legal Medicine and Forensic Sciences i.e., NILMFS, 2022). In 2023, 2.313 cases of suicide have been reported between January and September, still

corresponding to 10.7% of violent deaths and with 681 of the reported cases being youngsters between 18 and 28 years of age (NILMFS, 2023). Hence, the importance of proposing and interpreting models towards identifying potential mental health prevention opportunities in the region.

The present study does not mean to take McLoughlin & Roche's (2022) third step, nor does it intend by any means to defend nor establish the empirical validity of the Hexaflex model or anything similar. The present study aims to use the available instruments which already have psychometric properties and factor structure analyses, along with evidence of validity and reliability for Colombia to assess experiential avoidance, cognitive fusion, repetitive negative thinking, values obstruction and generalized pliance in a Cundinamarcan sample and propose two trans-diagnostic models of risk for emotional symptomatology and suicide risk based on the collected data. Under a functional analytical view that is coherent with CBS, the proposed models will also consider sexuality (Aranmolate et al., 2017; Haas et al., 2010; O'Beaglaoich et al., 2020; Pellicane & Ciesla, 2022; Plöderl et al., 2013), sociodemographic (Gómez, 2020; Gómez et al., 2002; Park & Jang, 2018; Santos et al., 2017; Siabato & Salamanca, 2015; Wilcox et al., 2010), and mental health history aspects (Rojas-Bernal et al., 2018; Oquendo et al., 2004; Santos et al., 2017; Wilcox et al., 2010), as well as levels of current emotional symptomatology (Gómez-Romero et al., 2018; Oquendo et al., 2004; Orri et al., 2018; Siabato et al., 2017) and suicide risk (Borges et al., 2018; Mortier et al., 2018) as they are known to be among the main factors associated with the development of "emotional and affective disorders", which untreated course might evolve into suicide risk with a mixed prognosis considering the convergence of intersectional risk factors (Baca & Aroca, 2014; Gómez, 2020; Gómez et al., 2019, 2020; Gómez- Romero et al., 2018; Gómez-Tabares et al., 2022; dos Santos et al., 2017; Siabato & Salamanca, 2015 Wilkinson et al., 2011).

For each model the present study holds a slightly different hypothesis, but both are based on the literature review presented as introduction for the present study and particularly the results from Sierra & Ortiz (2022), that suggest psychological inflexibility is a trans-diagnostic risk factor for both emotional symptomatology and suicide risk. Specifically finding, experiential avoidance, cognitive fusion and repetitive negative thinking as predictive of emotional symptomatology, but only experiential avoidance and generalized pliance as predictive of higher levels of suicide risk. However, none of the included sociodemographic or mental health history variables included were confirmed as significant predictors for clinical levels of emotional symptomatology (Sierra & Ortiz, 2022). Besides the inflexibility variables the only one that showed evidence as a trans-diagnostic psychological risk factor for emotional symptomatology

was suicide risk. On the other hand, beyond the inflexibility variables sexuality aspects (i.e., being trans, non-binary or LGBTQ+ in general), mental health history (i.e., history of substance use, substances used and history of depression) and current symptomatology (i.e., depression and anxiety scores from DASS-21) were predictive of higher levels of suicide risk. The main limitation of Sierra & Ortiz (2022) is that the proposed data analysis does not allow to explore the existing relationship between psychological inflexibility as a wide construct and other potential risk factors in the context of emotional symptomatology or suicide risk.

Considering all of the above, the present study intends to expand on Sierra & Ortiz (2022) by testing the following hypotheses:

a) **Emotional Symptomatology Model:** Experiential avoidance, cognitive fusion, repetitive negative thinking, values obstruction and generalized pliance contribute to load a super-ordinated factor deemed "Psychological Inflexibility". Said super-ordinated factor is associated to the emotional symptomatology levels in the current sample and has a relationship with other latent super-ordinated factors deemed "Sociodemographic Variables", "Sexuality", "Mental health history" and "Suicide Risk". The resulting model has acceptable fit to the observed data and is coherent with the presented literature.

b) **Suicide Risk Model:** Experiential avoidance, cognitive fusion, repetitive negative thinking, values obstruction and generalized pliance contribute to load a super-ordinated factor deemed "Psychological Inflexibility". Said super-ordinated factor is associated to the suicide risk levels in the current sample and has a relationship with other latent super-ordinated factors deemed "Sociodemographic Variables", "Sexuality", "Mental health history" and "Emotional Symptomatology". The resulting model has acceptable fit to the observed data and is coherent with the presented literature.

2. Method

The present study follows a quantitative non-experimental, cross-sectional correlational design, with a single measurement of the variables of interest in a group of participants without experimental manipulation (Hernández-Sampieri et al., 2014). An associative strategy with latent variables is used to analyze the existing relationships between the super-ordinated factors: psychological inflexibility, sociodemographic variables, sexuality, mental health history, emotional symptomatology and suicide risk while assessing their association with each of the two model's outcome variables, i.e., the levels of emotional symptomatology and suicide risk found for this particular sample respectively (Ato et al., 2013). The study was not pre-registered

as it entails no intervention or experimental manipulation whatsoever, and the participants' only role was responding to a survey.

2.1 Participants

A non-randomized convenience sampling was carried out through the same open call in digital and social media used to recruit the sample from Sierra & Ortiz (2022). Said call was shared with public and private entities in the area of health and education that were open to collaborating. There were no exclusion criteria based on emotional symptomatology or suicide risk, as to build adequate models it is necessary to have data from people experiencing both clinical and non-clinical levels of both. However, the following general inclusion and exclusion criteria were in place:

2.1.1 Inclusion Criteria

The participants had to be literate (i.e., able to read and write in Spanish) young adults between 18 and 39 years of age, who were residents (i.e., those who were currently living) or natives (i.e., those who were born) of Cundinamarca or its capital, Bogotá D.C.

2.1.2 Exclusion Criteria

People out of the mentioned age range (i.e., underage or older than 40 years old); people that were not born in Cundinamarca or lived out of the department; and/or people that were not able to read the questions and/or write the answers could not participate on this study.

The sample consisted of 541 young adults between 18 and 39 years old (M=28.86; SD=5.66) who consented to complete an online survey. The majority of them were cisgender (98%; n=530), assigned female at birth (81.9%; n=443) and identified as women (81.5%; n=441). Most participants were also heterosexual (80.8%; n=437), single (79.3%; n=429) and had an undergraduate degree (48.1%; n=260). An important part of them were unemployed (44.5%; n=241), had no dependents under their care (70.1%; n=379) and were registered on the medium-low tier (49.2%; n=266) of the socioeconomic classification used in Colombia (DANE, 2022).

Almost none of them belonged to any vulnerable group (96.1%; n=520). Nonetheless, some of them self-identified as neurodivergent (3.7%; n=20), had a history of depressive (29.9%; n=162), anxiety (34.8%; n=188), psychotic (3.9%; n=21), or eating disorders (5.7%; n=31). A small proportion consumed psychoactive substances (PAS) (8.1%; n=44) and the most commonly consumed substance was cannabis (4.9%; n=27). An important proportion of them reported engaging on self-harm (39%; n=211), recent (5.4%; n=29) and previous (32.7%; n=177) suicide attempts.

Table 1. Descriptive Statistics for Categorical Variables

Sociodemographic				Individual Vulnerability			
Variable	Category	Freq	%	Variable	Category	Freq	%
Sex	AFAB	443	81.9	Vulnerable Group	None	520	96.1
	AMAB	98	18.1		Armed Conflict Victim	6	1.1
Gender Identity	Cisgender	530	98		Ethnic / Racial Origin	4	.7
	Transgender	11	2		Functional Diversity	4	.7
Gender Expression	Men	93	17.2		Household Head	7	1.3
	Women	441	81.5	Neurodivergence	Yes	20	3.7
	Non-Binary	7	1.3		No	521	96.3
Sexual Orientation	Heterosexual	437	80.8	History of Depression	Yes	162	29.9
	Homosexual	26	4.8		No	379	70.1
	Bisexual	55	10.2	History of Anxiety	Yes	188	34.8
	´Pansexual	20	3.7		No	353	65.2
	Asexual	3	.6	History of Psychosis	Yes	21	3.9
Marital Status	Single	429	79.3		No	520	96.1
	Married	25	4.6	History of Eating Disorders	None	510	94.3
	Free/ Civil Union	74	13.7		Anorexia	3	.6
	Divorced	13	2.4		Bulimia	4	.7
Last Grade of Schooling	High School	96	17.7		Both	2	.4
	Technical / Technological	103	19		Other	22	4.1
	Undergraduate	260	48.1	PAS Consumption	Yes	44	8.1
	Postgraduate	82	15.2		No	497	91.9
Economic				PAS Used	None	497	91.9
Dependents	Yes	162	29.9		Cannabis	27	4.9
	No	379	70.1		Alcohol	4	.7
Socioeconomic Classification	Very low	30	5.5		Tobacco	4	.7
	Low	192	35.5		Multiple	9	1.8
	Medium Low	266	49.2	Self-harm	Yes	211	39
	Medium High	47	8.7		No	330	61
	High	6	1.1	Recent attempt	Yes	29	5.4
Employment Status	Unemployed	241	44.5		No	512	94.6
	Formal	213	39.4	Previous attempt	Yes	177	32.7
	Informal	87	16.1		No	364	67.3
Weekly Working Hours	Unemployed	241	44.5	Current Treatment	None	438	81
	< Part-time	38	7		Psychological	55	10.2
	Part-time	45	8.3		Pharmacological	17	3.1
	Full-time	53	9.8		Both	31	5.7
	> Full-time	164	30.4				

2.2 Procedure

The moment the participants opened the advertisement for the study, they were redirected to a virtual form that started by presenting a digital transcription of the informed consent document and all information necessary to participate. Once the participant had read the information and provided their consent, the form proceeded to the emotional distress survey that inquired: sexuality (i.e., sex, gender identity, gender expression, sexual orientation,) sociodemographic (i.e., marital status, place of birth and/or residence, type of area of residence, last grade of schooling), economic (i.e., dependents, socioeconomic classification, employment status, hours worked per week) and individual vulnerability aspects (i.e., being part of a vulnerable group, neurodivergent condition, history of depression, anxiety, psychotic or eating disorders, history of psychoactive substances (PAS) consumption, actual substance consumed, current mental health treatment). The survey also included a single-time psychometric assessment of emotional symptomatology, suicide risk and psychological inflexibility related variables (see instruments and variables section). This was the end of their participation and there was no further instruction, measurement or follow up.

2.2.1 Ethical Considerations

The procedures followed in this study were approved by the Bioethics Committee of the sponsoring institution under Act N.13 signed on October 19th 2020. The informed consent included on the virtual form explained in detail the strict confidentiality under which the data was handled, in coherence and in full compliance with the Declaration of Helsinki (WMA, 2013) and Colombian Laws 1090 (regulates the practice of psychology and sets out its bioethical and deontological code), 1266 (Habeas Data) and 1581 (regulates the protection of personal data). Additionally, there was total transparency regarding the purpose and scope of their participation in study and the participants were reassured that they were free to stop answering the survey at any time without any retaliation.

2.4 Instruments and variables

2.4.1 Latent Variables

Acceptance and Action Questionnaire (AAQ-II; Original: Bond et al., 2011; Colombian Validation: Ruiz et al., 2016): AAQ-II is a psychometric instrument to assess experiential avoidance, a behavioral pattern in which the individual systematically attempts to escape or postpone the experiences of discomfort triggered by certain verbal and contextual events (Chawla & Ostafin, 2007; Cookson et al., 2019; Hayes et al., 1996; Hayes et al., 2011). It consists of 7 items that score on

a seven-point Likert-type scale (1= Never true; 7= Always true). Ruiz et al., (2016) found evidence for the instrument's measurement invariance, sensitivity to treatment, criterion, discriminant and construct convergent and divergent validity, while also confirming a good fit to the uni-factorial structure of the original instrument (Bond et al., 2011) and previous Spanish versions in clinical and non-clinical samples. *Cronbach's a*= .88 for the original study (Bond et al., 2011), *a*= .91 for the Ruiz et al., (2016) validation and *a = .93* for the present study.

Cognitive Fusion Questionnaire (CFQ; Gillanders et al., 2014; Colombian Validation: Ruiz et al, 2017b): CFQ is a psychometric instrument to assess cognitive fusion, an inflexible behavioral regulation pattern that is under control of the emotional and discriminative functions that certain verbal events possess (Bardeen & Fergus, 2016; Cookson et al., 2019; Dionne et al., 2013, Hayes et al., 2011; Hayes et al., 2001; Wilson & Luciano; 2002). In other words, the tendency to take literally, over analyze and act according to thoughts and verbal rules that foster inflexible behavioral repertoires. It consists of 7 items that score on a seven-point Likert-type scale (1= Never true; 7= Always true). Ruiz et al., (2017b) found evidence for the instrument's measurement invariance, sensitivity to treatment, criterion, and construct convergent validity, while also confirming a good fit to the uni-factorial structure of the original instrument (Gillanders et al., 2014) and previous Spanish versions in clinical and non-clinical samples. *Cronbach's a*= .88 for the original study (Gillanders et al., 2014), *Cronbach's a = .93* for the Ruiz et al., (2017b) validation and *a = .95* for the present study.

Perseverative Thinking Questionnaire (PTQ; Ehring et al., 2011): PTQ is a psychometric instrument to evaluate RNT, a behavioral pattern characterized by the repetitive occurrence of verbal events which contents are considered negative, aversive, intrusive, and difficult to control or avoid (Ehring & Watkins, 2008; McLaughlin & Nolen-Hoeksema, 2011; Segerstrom et al., 2000; Watkins, 2008; Watkins et al, 2005). It consists of 15 items that score on a four-point Likert-type scale (0= Never; 4= Almost always). *Cronbach's a*= .88 for the original study (Ehring et al., 2011) and according to preliminary data from an adaptation of the PTQ for clinical psychology trainees a Spanish version of the original PTQ had *a = .95* for Colombia (Dereix-calonge et al., 2019). There is no published evidence yet for the instrument's measurement invariance, sensitivity to treatment, validity or factor structure in Colombia. However, for the present study *Cronbach's a = .97* and strong correlations (>.80) were found with the instruments AAQ-II, CFQ and VQ obstruction subscale suggesting preliminary convergent construct validity.

Valuing Questionnaire (VQ; Original: Smout et al., 2014; Colombian Validation: Ruiz et al, 2022): VQ is a psychometric instrument consisting of two subscales that assess progress and obstruction

in values, understanding the latter as abstract formative augmenting-type rules that establish important directions that a person can follow in order give meaning to their life. Obstruction refers specifically to cognitive fusion with motivational augmenting-type rules which content is valued as aversive, generally establishing consequential and discriminative functions of avoidance or escape through which the person moves away from that which is valuable at a personal level (Gil-Luciano et al., 2019; Hayes et al., 2001; Hayes et al., 2011; Luciano, 2017; Mallot, 1989, Zettle & Hayes, 1982). It consists of 10 items that score on a seven-point Likert-type scale (0= Not at all true; 6= completely true). Ruiz et al., (2022) found evidence for the instrument's measurement invariance, sensitivity to treatment, discriminant and construct convergent validity, while also confirming a good fit to the bi-factorial structure of the original instrument in clinical and non-clinical samples. *Cronbach's a = .81* for the progress subscale and *a*= .79 for the obstruction subscale in the original version (Smout et al., 2014); α = *.85* for progress and *a = .84* for obstruction on the Ruiz et al. (2022) study; and finally *a = .86* for progress and *a = .86* for obstruction in the present study.

Generalized Pliance Questionnaire (GPQ; Original Colombian Version: Ruiz et al., 2018b): GPQ is a psychometric instrument for the evaluation of generalized pliance, which is an inflexible behavioral regulation pattern characterized by insensitivity to reinforcement contingencies available in the environment, given a verbal rule specifying a particular ineffective contingency (Hayes et al, 1986; Monestès et al., 2018; O'Connor et al., 2018). It consists of 9 items that score on a seven-point Likert-type scale (1= Never true; 7= Always true). Ruiz et al., (2018b) is the original version of the instrument developed in Spanish for Colombia and found evidence for the instrument's criterion and construct convergent validity in clinical and non-clinical samples. Ruiz et al., (2018b) also conducted an initial exploratory factor analysis that suggested a uni-factorial structure, which was confirmed to have a good fit to the data from an independent and unrelated sample. *Cronbach's a* = .95 for the Ruiz et al., (2018b) original study and *a = .94* for the present study.

2.4.2 Outcome Variables

Depression Anxiety and Stress Scale (DASS-21; Original: Antony et al., 1998; Colombian Validation: Ruiz et al, 2017a): DASS-21 is a psychometric instrument that includes three subscales assessing the presence and severity of depression, anxiety and stress related symptoms during the last week. It consists of 21 items that score on a four-point Likert-type scale (0= It has not happened to me; 3= It has happened to me a lot, or most of the time). Cut-off points are established to indicate the severity of symptoms in each subscale. Depression: 5-6 mild depression, 7-10

moderate depression, 11-13 severe depression, 14 or more, extremely severe depression; Anxiety: 4 mild anxiety, 5-7 moderate anxiety, 8-9 severe anxiety, 10 or more, extremely severe anxiety; Stress: 8-9 mild stress, 10-12 moderate stress, 13-16 severe stress, 17 or more, extremely severe stress. On the other hand, due to its hierarchical factor structure (Lovibond & Lovibond, 1995) the total summative score of the DASS-21 can be used as a trans-diagnostic emotional symptomatology outcome with a clinical cut-off score of 25 (Ruiz et al., 2018a; Ruiz et al., 2020). Ruiz et al., (2017a) found evidence for the instrument's measurement invariance, discriminant and construct convergent validity, while also confirming a good fit to a hierarchical structure including 3 sub-factors in clinical and non-clinical samples. Reliability analyses from the original study (Antony et al., 1998) found *Cronbach's a*= .97 for depression, *a*= .92 for anxiety and *a*= .95 for stress. The Ruiz et al., (2017a) study found *Cronbach's a*= .93 for the total DASS-21 score and *a*= .87 for depression, *a*= .80 for anxiety and *a*= .83 for stress. For the present study and *a = .94* for the total DASS-21 score and *a*= .92 for depression, *a*= .85 for anxiety and *a*= .86 for stress.

Mini-International Neuropsychiatric Interview – Suicide Risk Subsection (MINI-C; Original: Sheehan et al., 1998; Last Spanish Version: Ferrando et al., 2000): MINI-C is a subsection of the Mini-International Neuropsychiatric Interview that assesses suicidal risk during the last month. This subsection consists of six yes or no questions that score differentially, representing different levels of severity on suicidal risk. Thinking that you'd like to die or be better off dead scores 1, actually wanting to hurt yourself scores 2 and thinking about suicide scores 6. Having a previous suicide attempt during the lifetime always score as 4. On the other hand, recent planning or attempting to commit suicide will score 10. Cut-off points are established to indicate the severity of the risk 1-5 is considered mild, 6-9 moderate and more than 10 high. This is technically not a psychometric instrument and therefore, there is no published evidence yet for its measurement invariance, sensitivity to treatment, validity or factor structure in Colombia. However, reliability analysis of the scale reported by Sierra & Ortiz (2022) showed that the instrument acceptably assesses suicide risk (*McDonald ω* = .81; *Cronbach a* =.70). For the present study *a = .70* and some degree of correlation (>.50) was found with the DASS-21 total score and depression subscale, as well as with AAQ-II and CFQ suggesting the potential for future convergent construct validity analyses.

2.5 Data analysis

In order to characterize the sample, descriptive statistics and normality tests were calculated for all the variables. Subsequently, structural equation models that analyze the relationship between the observed variables are proposed and adjusted for emotional symptomatology and suicide risk (Byrne, 2016; Field, 2009). Model fit related statistics such as: discrepancy divided by degrees of freedom (*CMIN/DF*: Kline, 1998; Marsh & Hocevar, 1985), Tucker-Lewis coefficient (*TLI*: Bentler & Bonett, 1980; Tucker & Lewis, 1973; Hu & Bentler, 1998; West et al., 2012), goodness of fit index (*GFI*: Jöreskog & Sörbom, 1996; Hu & Bentler, 1998; Kline, 2005; Tanaka & Huba, 1985), comparative fit index (*CFI*: Fan et al., 1999; Hu & Bentler, 1998; West et al., 2012) and root mean square error of approximation (*RMSEA*: Chen, 2007; MacCallum et al., 1996) were calculated to assess how much the proposed and adjusted models fit the observed data according to the existing guidelines.

3. Results

The raw data and original datasets are available here:

https://data.mendeley.com/datasets/vfdk3xzg65/draft?a=7e687589-74a7-4cba-81a7-eed46bebaa7c

Descriptive: The participant's general emotional symptomatology (DASS-T) scores (*M*=30.85; *SD*=14.62) were beyond the established clinical cut-off point (25; Ruiz et al., 2018a). Depression (*M*=11.08; *SD*=6.06), anxiety (*M*=8.22; *SD*=5.19) and stress (*M*=11.55; *SD*=5.07) sub-scales were also within moderate and extremely severe levels. Experiential avoidance (*M*=30.33; *SD*=11-13), cognitive fusion (*M*=32.91; *SD*=11.59), RNT (*M*=36.10; *SD*=15.91), generalized pliance (*M*=30.17; *SD*=13.11), values progress (*M*=17.04; *SD*=7.02) and obstruction (*M*=18.08; *SD*=7.49) were also beyond their respective normative scores for people without clinical symptomatology (Ruiz et al., 2016; Ruiz et al, 2017a; Ruiz et al, 2017b; Ruiz et al, 2022). Suicide risk scores (M=9.74; SD= 9.79) were borderline between moderate and high levels. On the other hand, none of the variables had a normal distribution.

Table 2. Descriptive Statistics for Quantitative Variables

Variable	Mean	SD	K-S	Sig
Age	28.86	5.66	.09	.00
AAQ-II	30.33	11.13	.06	.00
CFQ	32.91	11.59	.08	.00
PTQ	36.10	15.91	.06	.00
GPQ	30.17	13.11	.06	.00
VQ-Prog	17.04	7.02	.06	.00
VQ-Obs	18.08	7.49	.10	.00
DASS-D	11.08	6.06	.09	.00
DASS-A	8.22	5.19	.09	.00
DASS-S	11.55	5.07	.08	.00
DASS-T	30.85	14.62	.05	.00
MINI-C	9.74	9.79	.16	.00

Note: SD= Standard Deviation; K-S= Kolmogorov-Smirnov Test; AAQ-II= Acceptance and Action Questionnaire; CFQ= Cognitive Fusion Questionnaire; PTQ= Perseverative Thinking Questionnaire; GPQ= Generalized Pliance Questionnaire; VQ-Prog= Valuing Questionnaire Progress Subscale; VQ-Obs= Valuing Questionnaire Obstruction Subscale; DASS-D = DASS-21 Depression Subscale; DASS-A = DASS-21Anxiety Subscale; DASS-S = DASS-21 Scale Stress Subscale; DASS-T = DASS-21 Total General Distress Score; MINI-C= Mini-International Neuropsychiatric Interview – Suicide Risk Subsection

Table 3. Fit indexes for the structural equations model tested

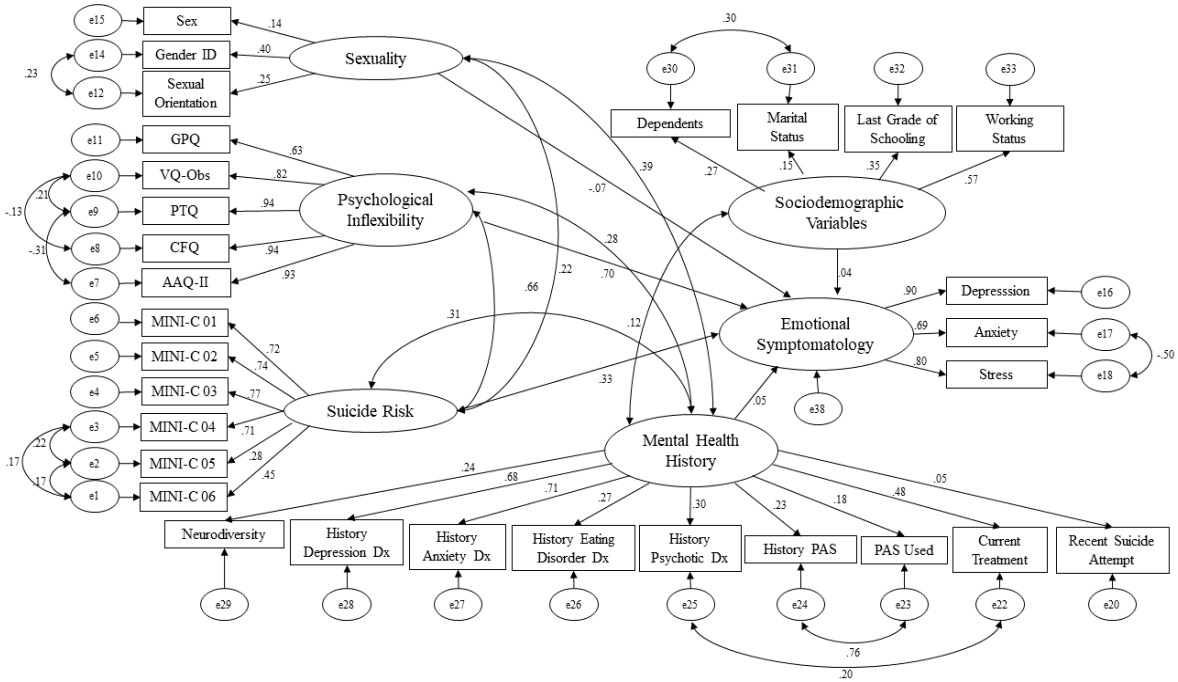
Tested Model	CMIN/DF	TLI	GFI	CFI	RMSEA
Emotional Symptomatology	2.032	.935	.915	.943	.044
Suicide Risk	2.088	.948	.924	.955	.045

Note: *CMIN/DF*= Discrepancy divided by degrees of freedom; *TLI*= Tucker-Lewis Index; *GFI*= Goodness of Fit Index; *CFI*= Comparative Fit Index; *RMSEA*= Root Mean Square Error of Approximation.

a.Emotional Symptomatology: A five factor model was proposed and adjusted for emotional symptomatology including the following super-ordinated factors and variables within them: Psychological Inflexibility (experiential avoidance, cognitive fusion, RNT, generalized pliance and values obstruction), Sexuality (Sex assigned at birth, gender identity and sexual orientation), Sociodemographic (Marital status, dependents, last grade of schooling and working status), Mental health history (Neurodivergence, history of depression, anxiety, psychotic or eating disorders, PAS consumption, substance used, current treatment and recent suicide attempt) and Suicide risk (MINI-C items) (see figure 1). This model significantly fits the observed data according to the calculated indexes featured on table 3.

Psychological inflexibility (β= .70) and suicide risk (β= .33) have a moderate relationship (r= .66) and are the factors that associate the most with the levels of emotional symptomatology assessed in the sample with medium and small effect sizes respectively. On the other hand,

factors such as sexuality, mental health history and sociodemographic aspects have mild relationships between them (*r* ranging from .12 to .39) and are not associated with emotional symptomatology (*β* ranging from -.07 to .05) on themselves. Specifically, there is a weak relationship between the sexuality factor and suicide risk (*r*= .22). In addition, mental health history was related to a greater or lesser extent (*r* ranging from .28 to .39) to all other factors.

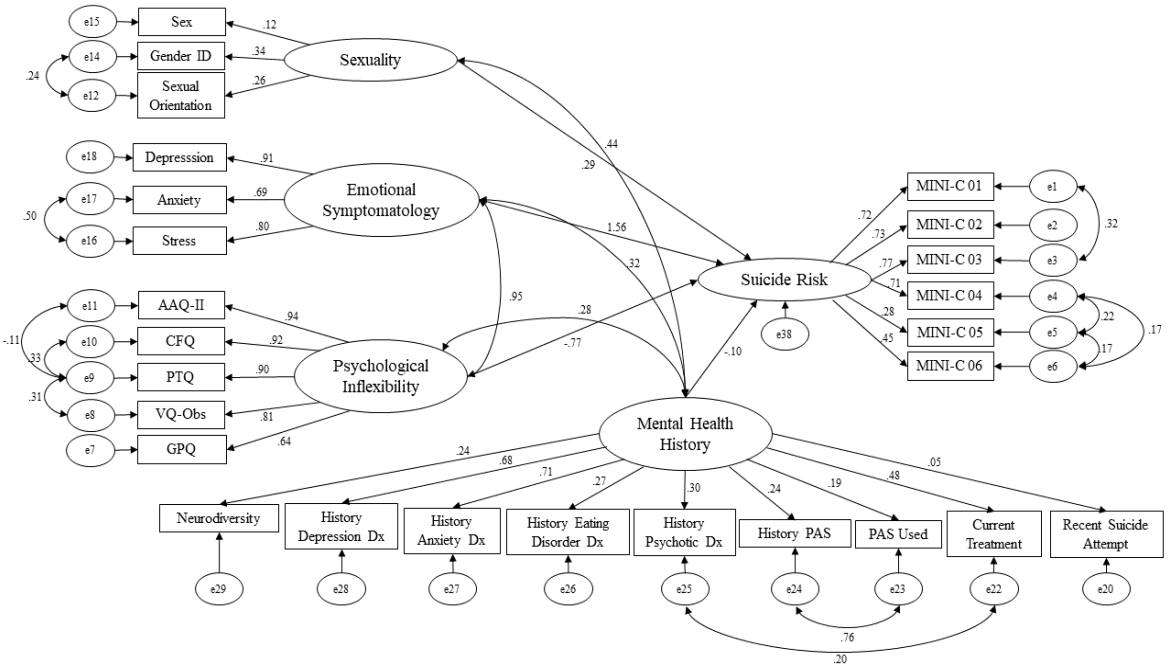


Note: Gender ID= Gender Identity; AAQ-II= Acceptance and Action Questionnaire; CFQ= Cognitive Fusion Questionnaire; PTQ= Perseverative Thinking Questionnaire; GPQ= Generalized Pliance Questionnaire; VQ-Obs= Valuing Questionnaire Obstruction Subscale; MINI-C= Mini-International Neuropsychiatric Interview – Suicide Risk Subsection; History PAS= History of Psychoactive Substances Use; PAS Used= Psychoactive Substance Used.

Figure 1. Trans-diagnostic model of risk for emotional symptomatology

b.Suicide Risk: A four factor model was proposed and adjusted for suicide risk including the following super-ordinated factors and variables within them: Psychological Inflexibility (experiential avoidance, cognitive fusion, RNT, generalized pliance and values obstruction), Sexuality (Sex assigned at birth, gender identity and sexual orientation), Mental health history (Neurodivergence, history of depression, anxiety, psychotic or eating disorders, PAS consumption, substance used, current treatment and recent suicide attempt) and Emotional symptomatology (Depression, anxiety and stress given by DASS-21 sub-scales total score)(see figure 2). This model also significantly fits the observed data according to the calculated indexes featured on table 3.

Emotional symptomatology (β= 1.56) and psychological inflexibility (β=-.77) have a strong relationship (r= .95) and are the factors that associate the most with the levels of suicide risk assessed within the sample with large and medium effect sizes respectively. Sexuality (β= .29) and mental health history (β= .10) have a mild relationship (r= .44) and each have some degree of association with the sample's levels of suicide risk. In this case, mental health history was also related to a greater or lesser extent (r ranging from .28 to .44) to all other factors included in the model.



Note: GenderID= Gender Identity; AAQ-II= Acceptance and Action Questionnaire; CFQ= Cognitive Fusion Questionnaire; PTQ= Perseverative Thinking Questionnaire; GPQ= Generalized Pliance Questionnaire; VQ-Obs= Valuing Questionnaire Obstruction Subscale; MINI-C= Mini-International Neuropsychiatric Interview – Suicide Risk Subsection; History PAS= History of Psychoactive Substances Use; PAS Used= Psychoactive Substance Used.

Figure 2. Trans-diagnostic model for suicide risk

4. Discussion

Both of the proposed models had a good fit to the observed data suggesting that the analysis provided for the levels of emotional symptomatology and suicide risk among this sample of young Cundinamarcan's is acceptable from a statistic standpoint. This study expands on Sierra & Ortiz's (2022) significantly, as their previous findings allowed the current study to strategically drop irrelevant variables (e.g., being from other cities besides the capital and living in an urban or rural area that rendered no significant differences) from the start and rearrange the most

relevant ones into coherent super-ordinated factors which proposed relationships are contextualized here. The implications of the analyses and proposed models are discussed below.

4.1 a.Emotional Symptomatology Model Findings

The proposed model for emotional symptomatology suggests that the factor that contributes the most is psychological inflexibility with a medium effect size (β= .70) and a moderate relationship (r= .66) with suicide risk (small effect size; β= .33) in coherence with previous studies that support the predicting role of its components (Bardeen & Fergus, 2016; Chawla & Ostafin, 2007; Cookson et al., 2019; Hayes et al., 1996; Law & Tucker, 2018; McEvoy et al., 2013; Monestès et al., 2018; Nolen-Hoeksema et al., 2008; Segerstrom et al., 2000; Sorg et al., 2012).

Sexuality (β= -.07) does not have an association with emotional symptomatology; However, it does have some degree of relationship with suicide risk (r= .22) and mental health history (r= .12) that is not to be disregarded completely considering how much evidence there is for the detrimental effects of minority stress on LGBTQI+ individuals (Aranmolate et al., 2017; Haas et al., 2010; Pellicane & Ciesla, 2022; Plöderl et al., 2013) and how it makes them more vulnerable towards developing emotional symptomatology (Guz et al., 2021; Haas et al., 2010). Observing the latter relationships (even if weak) on this sample of young adults from Cundinamarca, opens some relevant questions regarding the region's overall acceptance, respect and understanding of LGBTQI+ people, while also inviting to explore if this finding is replicated or expanded upon across Colombia.

The remaining factor (i.e., mental health history) did not have much association with the observed levels of emotional symptomatology either, suggesting that they might not be the best predictors on themselves but could converge and feedback to worsen symptomatology as previously proposed (Bostwick & Pankratz, 2000; Hawton et al., 2013; Herres et al., 2019; Kanwar et al., 2013). Sociodemographic aspects only had a weak relationship with mental health history (r= .12) and both had the lowest contribution to the model (β= .04 and β= .05 respectively), implying that despite their importance and the known consensus about their role as risk factors (Dalgleish et al., 2020; Eaton et al., 2015; Krueger & Eaton, 2015; Lynch, 2021) psychological inflexibility seems to be associated with the presence of emotional symptomatology more than sociodemographic and mental health history variables on themselves.

4.2 b.Suicide Risk Model Findings:

Suicide is a multi-causal phenomenon that cannot be attributed to a single triggering event and occurs in the context of several factors that converge to worsen risk (Gómez, 2020; Gómez et al., 2019; WHO, 2014; 2019). Considering the latter, the proposed model for suicide risk found that emotional symptomatology was the factor that contributed the most with a large effect size (β= 1.56), having a strong relationship (r=.95) with psychological inflexibility (Faustino, 2020; Faustino et al., 2021; Hayes et al., 2012b; Levin et al., 2014; Tyndall et al., 2018).

Psychological inflexibility (β=-.77) was the next factor to associate the most with suicide risk but the negative coefficient would indicate an inverse relationship suggesting lower levels of psychological inflexibility are associated with higher levels of suicide risk. This contradicts the logical theoretical assumption and existing empirical support that proposes higher levels of inflexibility would lead to higher levels of suicide risk and that suicide itself is the ultimate experiential avoidance act (Ducasse et al., 2014; Ellis & Rufino, 2016; Krafft et al., 2019; Walser et al., 2015). However, the absolute value (.77) indicates there is moderate evidence of its predicting role in suicide risk regardless.

These findings might be contextualized considering other variables within the sample. Values progress (VQ-Prog: *M*=17.04; *SD=7.02*) had a mean score above the subscale middle score (15 out of 30) and a mild inverse relationship (r=-.29) with suicide risk on the present study. Implying that higher levels of values progress are associated with lower levels of suicide risk, most of the participants had medium scores on values progress which suggests some degree of psychological flexibility that might explain the inverse relationship between psychological inflexibility and suicide risk. In other words, it would make theoretical sense that lower levels of psychological inflexibility have an inverse relationship with suicide risk only if values progress levels are medium to high and thus act as a protective factor towards suicide risk (Bahraini et al., 2013; Barnes et al., 2017; Monteith et al., 2015; Tighe et al., 2018).

On the other hand, for this model sexuality (β= .29) was also mildly associated to suicide risk suggesting that LGBTQI+ people in Cundinamarca might be at higher risk of committing suicide as minority stress theory proposes and empirical evidence supports (Aranmolate et al., 2017; Aparicio-García et al., 2018; Bauer et al., 2015; Guz et al., 2021; Haas et al., 2010; Pellicane & Ciesla, 2022; Plöderl et al., 2013; Rimes et al., 2019; Tebbe & Moradi et al., 2016; Testa & Hendricks, 2015; Wolford-Clevenger et al., 2017).

Lastly, the sociodemographic variables (β=.00) factor was eliminated from the analysis for this model as it did not show any kind of association with suicide risk and its exclusion did not

significantly affected the model fit. Mental health history (β=-.10) was kept in the model but turned out not to be associated with suicide risk, despite having some mild degree of relationship to all of the other factors (i.e., sexuality, r=.44; emotional symptomatology r=.32; and psychological inflexibility r=.28). This implies that having a mental health condition or experiencing current symptomatology are not necessarily the best predictors of suicide risk on their own but might still intersect with other factors and affect a person's probability of committing suicide (Bostwick & Pankratz, 2000; Hawton et al., 2013; Herres et al., 2019; Kanwar et al., 2013).

5. Strengths and Limitations

Some strengths of the present study are to be highlighted. First, both models had a good fit to the observed data, implying that the proposed hypotheses had some degree of validity even if some of the findings are not in explicit correspondence with the literature. Second, it does expand on Sierra & Ortiz (2022)'s findings by clarifying the actual levels of association that all super-ordinated factors had with each outcome variable and the strength of the existing relationships between those super-ordinated factors, which was possible through Structural Equation Modelling (SEM). Third, it does suggest that a further exploration of sexuality's role on emotional symptomatology and suicide risk might be pertinent and relevant towards understanding both phenomena. Fourth, it does rise important questions regarding the utility and quality of sociodemographic variables and mental health history as predictors of clinical risk in the context of the outcome variables. Finally, even if there are better models including other variables that explain further the variance in emotional symptomatology and suicide risk scores, those probably do not include psychological inflexibility or assess it as thoroughly as the present study. Also, the models are proposed from a local perspective and are not meant to be generalized at any scope as one of the main goals was to test the hypotheses for this sample from Cundinamarca.

The present study has clear limitations that need to be addressed. It takes a great leap from the steps proposed by Mcloughlin & Roche (2022). However, it's important to remember that it is not trying by any means to defend or provide evidence for the Hexaflex model, but rather departing from it in favor of a CBS coherent local trans-diagnostic risk model in which the main factor associated with emotional symptomatology and suicide risk among young people in Cundinamarca is psychological inflexibility, with sexuality playing a modest role as well. The models proposed provide preliminary empirical evidence at a local scope, for some theoretical assumptions made by the ACT model and previously explored around the world (Bardeen &

Fergus, 2016; Cookson et al., 2019; Ducasse et al., 2014; Ellis & Rufino, 2016; Faustino, 2020; Faustino et al., 2021; Hayes et al., 2012b; Krafft et al., 2019; Levin et al., 2014; Tyndall et al., 2018; Walser et al., 2015), but not for all of them reminding us of one of the main limitation of the suicide risk model. That is, the fact that the negative effect size implies an inverse relationship that is contrary to the theorized and documented hypotheses of a positive relationship (Ducasse et al., 2014; Ellis & Rufino, 2016; Krafft et al., 2019; Walser et al., 2015).

It is also important to remember that cross-sectional studies cannot establish causality on their own and further longitudinal studies which show coherence with the proposed models' findings are necessary to further provide evidence and validity for them. On the other hand, unaddressed variables and factors like a history of traumatic events, discrimination or marginalization, family history of death by suicide, coping strategies, university enrollment, age groups outside the sample inclusion criteria, employment and money related variables, among many others (Baca & Aroca, 2014; Gómez, 2020; Gómez et al., 2019, 2020; Gómez-Romero et al., 2018; Gómez-Tabares et al., 2022; dos Santos et al., 2017; Siabato & Salamanca, 2015 Wilkinson et al., 2011) could have a key role on other studies that expand on this findings by proposing other models for emotional symptomatology or suicide risk within a wider clinical psychology framework.

6. Conclusions

In conclusion, the models proposed by the present study provide preliminary evidence for the role of psychological inflexibility and sexuality related variables as potential risk factors associated with emotional symptomatology and suicide risk, supporting some of the assumptions from the ACT model. However, caution is required in interpreting the data as some of the effects and correlations found are non-significant or small and no generalization whatsoever should arise from this study, considering its local and only pretends to explore the validity of the hypotheses in Cundinamarca. Research teams from other regions of Colombia and the world are encouraged to explore their own local models including or dropping as many variables as they deem necessary for an appropriate account of risk for emotional symptomatology or suicide within a wide clinical psychology framework. The models featured on the present study are proposed under a CBS and ACT perspective that considers psychological inflexibility is the most important factor that predicts both emotional symptomatology (Bardeen & Fergus, 2016; Cookson et al., 2019; Faustino, 2020; Faustino et al., 2021; Hayes et al., 2012b; Levin et al., 2014; Tyndall et al., 2018) and suicide risk (Ducasse et al., 2014; Ellis & Rufino, 2016; Krafft et al., 2018; Walser et al., 2015), which to a certain degree is confirmed for this Cundinamarcan sample. However, future research is also encouraged to try

to comply with McLoughlin & Roche's (2022) recommendations (mentioned in the introduction) which are valid and important to provide further empirical support to the Hexaflex model and the ACT model's hypotheses.

Ethical approval

The procedures followed in this study were approved by the Bioethics Committee of the sponsoring institution under Act N.13 signed on October 19th 2020.

Conflict of interest statement

The authors declare that the research was conducted in the absence of any potential conflict of interest.

Funding

This study was funded through the Bicentennial Doctoral Scholarship for Excellence Program No. BB 2019 01 sponsored by the Science, Technology and Innovation Fund of the Colombian Government's Royalties.

Data availability statement

The raw data and original datasets that support the findings of this study are available here:

https://data.mendeley.com/datasets/vfdk3xzg65/draft?a=7e687589-74a7-4cba-81a7-eed46bebaa7c

Authors' contribution

As main author Sierra was involved in every aspect of the manuscript. However, her contribution was heavily focused on the introduction, method and discussion sections, considering her expertise on ACT and RFT. As second author Ortiz was involved in several aspects of the manuscript as well, focusing on the introduction and discussion sections. Specifically, contributing to a deeper understanding of the clinical implications of the findings. As third author Avendaño was mostly involved in the methods, data analysis and results reporting. Specifically, contributing to improve the way the results are reported and discussed under the light of the reviewers' comments.

References

1. Antony, M.M., Bieling, P.J., Cox, B.J., Enns, M.W., & Swinson, R.P. (1998). Psychometric properties of the 42-item and 21-item versions of the Depression Anxiety Stress Scales (DASS) in clinical groups and a community sample. *Psychological Assessment, 10*, 176-181. https://doi.org/10.1037/1040-3590.10.2.176
2. Aparicio-García, M., Díaz-Ramiro, E., Rubio-Valdehita, S., López-Núñez, M., & García-Nieto, I. (2018). Health and Well-Being of Cisgender, Transgender and Non-Binary Young People. *International Journal of Environmental Research and Public Health*, 15(10), 2133. https://doi.org/10.3390/ijerph15102133
3. Aranmolate, R., Bogan, D.R., Hoard, T., Mawson, A.R. (2017) Suicide Risk Factors among LGBTQ Youth: Review. *JSM Schizophr 2(2):* 1011.
4. Ato, M., López-García, J. J., & Benavente, A. (2013). Un sistema de clasificación de los diseños de investigación en psicología. *Anales de Psicología, 29(3).* https://doi.org/10.6018/analesps.29.3.178511
5. Avendaño-Prieto, B. L., Betancort Montesinos, M., Bernal-Aguirre, A., González-Martínez, L. A., Gómez-Sánchez, S. M., & Villalobos-Sánchez, C. F. (2019). Celos, desesperanza e ideación suicida en población con orientación sexual diversa. *Universitas Psychologica, 18*(4), 1-12. https://doi.org/10.11144/Javeriana.upsy18-4.cdis
6. Baca, G, E., & Aroca, F. (2014). Factores de riesgo de la conducta suicida asociados a trastornos depresivos y ansiedad. *Salud Mental, 37(5),* 373-380. https://www.redalyc.org/pdf/582/58232671003.pdf
7. Bahraini, N. H., Devore, M. D., Monteith, L. L., Forster, J. E., Bensen, S., & Brenner, L. A. (2013). The role of value importance and success in understanding suicidal ideation among Veterans. *Journal of Contextual Behavioral Science, 2(1),* 31–38. https://doi.org/10.1016/j.jcbs.2013.03.001
8. Bardeen, J. R., & Fergus, T. A. (2016). The interactive effect of cognitive fusion and experiential avoidance on anxiety, depression, stress and posttraumatic stress symptoms. *Journal of Contextual Behavioral Science, 5*, 1–6. https://doi.org/10.1016/j.jcbs.2016.02.002
9. Barnes, S. M., Smith, G. P., Monteith, L. L., Gerber, H. R., & Bahraini, N. H. (2017). *ACT for Life: Using Acceptance and Commitment Therapy to Understand and Prevent Suicide.* In U. Kumar (Ed) Handbook of Suicidal Behaviour (pp. 485–504). Springer https://doi.org/10.1007/978-981-10-4816-6_26
10. Bauer, G. R., Scheim, A. I., Pyne, J., Travers, R., & Hammond, R. (2015). Intervenable factors associated with suicide risk in transgender persons: a respondent driven sampling study in Ontario, Canada. *BMC Public Health, 15(1).* https://doi.org/10.1186/s12889-015-1867-2
11. Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88(3),* 588–606. https://doi.org/10.1037/0033-2909.88.3.588
12. Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., … Zettle, R. D. (2011). Preliminary Psychometric Properties of the Acceptance and Action Questionnaire–II: A Revised Measure of Psychological Inflexibility and Experiential Avoidance. *Behavior Therapy, 42(4),* 676–688. https://doi.org/10.1016/j.beth.2011.03.007
13. Borges, G., Benjet, C., Medina-Mora, M. E., Orozco, R., & Nock, M. (2018). Suicide ideation, plan, and attempt in the Mexican adolescent mental health survey. *Journal of the American Academy of Child and Adolescent Psychiatry, 47(1),* 41-52. https://doi.org/10.1097/chi.0b013e31815896ad

14. Bostwick, J. M., & Pankratz, V. S. (2000). Affective Disorders and Suicide Risk: A Reexamination. *American Journal of Psychiatry, 157(12),* 1925–1932. https://doi.org/10.1176/appi.ajp.157.12.1925
15. Bullis, J. R., Boettcher, H., Sauer-Zavala, S., Farchione, T. J., & Barlow, D. H. (2019). What is an emotional disorder? A transdiagnostic mechanistic definition with implications for assessment, treatment, and prevention. *Clinical Psychology: Science and Practice, 26(2)*, e12278. https://doi.org/10.1111/cpsp.12278
16. Byrne, B. M. (2016). *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming (3rd edn)*. Routledge. https://doi.org/10.4324/9781315757421
17. Cantão, L., & Botti, N. C. L. (2016). Comportamento suicida entre dependentes químicos. *Revista Brasileira de Enfermagem, 69(2),* 389–396. https://doi.org/10.1590/0034-7167.2016690224i
18. Chawla, N., & Ostafin, B. (2007). Experiential avoidance as a functional dimensional approach to psychopathology: An empirical review. *Journal of Clinical Psychology, 63(9)*, 871–890. https://doi.org/10.1002/jclp.20400
19. Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling, 14(3),* 464–504. https://doi.org/10.1080/10705510701301834
20. Chiappini, S., Mosca, A., Miuli, A., Santovito, M. C., Orsolini, L., Corkery, J. M., … Schifano, F. (2021). New Psychoactive Substances and Suicidality: A Systematic Review of the Current Literature. *Medicina, 57(6)*, 580. https://doi.org/10.3390/medicina57060580
21. Cookson, C., Luzon, O., Newland, J., & Kingston, J. (2019). Examining the role of cognitive fusion and experiential avoidance in predicting anxiety and depression. *Psychology and Psychotherapy: Theory, Research and Practice.* https://doi.org/10.1111/papt.12233
22. Dalgleish, T., Black, M., Johnston, D., & Bevan, A. (2020). Transdiagnostic approaches to mental health problems: Current status and future directions. *Journal of Consulting and Clinical Psychology, 88(3),* 179–195. https://doi.org/10.1037/ccp0000482
23. Dávila-Cervantes, C. A. (2022). Suicide burden in Latin America, 1990-2019: findings from the Global Burden of Disease Study 2019. *Public Health, 205*, 28–36. https://doi.org/10.1016/j.puhe.2022.01.014
24. Departamento Administrativo Nacional de Estadística (DANE) (2022) *Preguntas frecuentes estratificación.* https://www.dane.gov.co/files/geoestadistica/Preguntas_frecuentes_estratificacion.pdf
25. Dereix-Calonge, I., Ruiz, F. J., Suárez-Falcón, J. C., & Flórez, C. L. (2019). Adapting the Perseverative Thinking Questionnaire for measuring repetitive negative thinking in clinical psychology trainees. *Training and Education in Professional Psychology, 13*(2), 145–152. https://doi.org/10.1037/tep0000229
26. Dionne, F., Ngô, T.-L., & Blais, M.-C. (2013). Le modèle de la flexibilité psychologique : une approche nouvelle de la santé mentale. *Numéro Thématique, 38*(2), 111–130. https://doi.org/10.7202/1023992ar
27. dos Santos, H. G. B. D., Marcon, S. R., Espinosa, M. M., Baptista, M. N., & Paulo, P. M. C. D. (2017). Factores asociados a la presencia de ideación suicida entre universitarios1. *Revista Latino-Americana de Enfermagem, 25*. https://doi.org/10.1590/1518-8345.1592.2878
28. Ducasse, D., René, E., Béziat, S., Guillaume, S., Courtet, P., & Olié, E. (2014). Acceptance and Commitment Therapy for management of suicidal patients: A pilot study. *Psychotherapy and Psychosomatics, 83*, 374-376. https://doi.org/10.1159/000365974

29. Eaton, N. R., Rodriguez-Seijas, C., Carragher, N., & Krueger, R. F. (2015). Transdiagnostic factors of psychopathology and substance use disorders: a review. *Social Psychiatry and Psychiatric Epidemiology, 50(2),* 171–182. https://doi.org/10.1007/s00127-014-1001-2
30. Ehring, T., Zetsche, U., Weidacker, K., Wahl, K., Schönfeld, S., & Ehlers, A. (2011). The Perseverative Thinking Questionnaire (PTQ): Validation of a content-independent measure of repetitive negative thinking. *Journal of Behavior Therapy and Experimental Psychiatry, 42(2)*, 225–232. https://doi.org/10.1016/j.jbtep.2010.12.003
31. Ehring, T., & Watkins, E. R. (2008). Repetitive Negative Thinking as a Transdiagnostic Process. *International Journal of Cognitive Therapy, 1(3)*, 192–205. https://doi.org/10.1521/ijct.2008.1.3.192
32. Ellis, T. E., & Rufino, K. A. (2016). Change in experiential avoidance is associated with reduced suicidal ideation over the course of psychiatric hospitalization. *Archives of Suicide Research, 20*, 426-437. https://doi.org/10.1080/13811118.2015.1093983
33. Fan, X., Thompson, B., & Wang, L. (1999). Effects of sample size, estimation methods, and model specification on structural equation modeling fit indexes. *Structural Equation Modeling: A Multidisciplinary Journal, 6(1),* 56–83. https://doi.org/10.1080/10705519909540119
34. Faustino, B. (2020). Transdiagnostic perspective on psychological inflexibility and emotional dysregulation. *Behavioural and Cognitive Psychotherapy, 49(2),* 233–246. https://doi.org/10.1017/s1352465820000600
35. Faustino, B., Vasco, A. B., Farinha-Fernandes, A., & Delgado, J. (2021). Psychological inflexibility as a transdiagnostic construct: relationships between cognitive fusion, psychological well-being and symptomatology. *Current Psychology.* https://doi.org/10.1007/s12144-021-01943-w
36. Ferrando, L., Franco-Alfonso, L., Soto, M., Bobes-García, J., Soto, O., Franco, L., & Heinze, G., (2000). *The Mini-International Neuropsychiatric Interview (M.I.N.I.): Spanish Version.* https://www.fundacionforo.com/pdfs/mini.pdf
37. Field, A. P. (2009). *Discovering statistics using SPSS: and sex and drugs and rock 'n' roll (3rd edn).* SAGE Publications.
38. Gil-Luciano, B., Calderón-Hurtado, T., Tovar, D., Sebastián, B., & Ruiz, F. J. (2019). How are triggers for repetitive negative thinking organized? A relational frame analysis. *Psicothema, 31(1),* 53-59. https://doi.org/10.7334/psicothema2018.133
39. Gillanders, D. T., Bolderston, H., Bond, F. W., Dempster, M., Flaxman, P. E., Campbell, L., … Remington, B. (2014). The Development and Initial Validation of the Cognitive Fusion Questionnaire. *Behavior Therapy, 45(1),* 83–101. https://doi.org/10.1016/j.beth.2013.09.001
40. Gómez, A.S. (2020). Psychosocial Factors and Clinical Predictors of Suicide Risk in College Students. *Mediterranean Journal of Clinical Psychology, 8(3).* https://doi.org/10.6092/2282-1619/mjcp-2602
41. Gómez, A. S., Núñez, C., Agudelo, M. P., & Grisales, A. M. (2020). Riesgo e Ideación Suicida y su Relación con la Impulsividad y la Depresión en Adolescentes Escolares. Revista Iberoamericana de Diagnóstico y Evaluación – e Avaliação Psicológica. RIDEP, 54 (1), 147- 163. https://doi.org/10.21865/RIDEP54.1.12

42. Gómez, A. S., Núñez, C., Caballo, V. E., Agudelo, M. P., & Grisales, A. M. (2019). Predictores psicológicos del riesgo suicida en estudiantes universitarios. *Behavioral Psychology / Psicología Conductual, 27* (3), 391-413. https://www.behavioralpsycho.com/producto/predictores-psicologicos-del-riesgo-suicida-enestudiantesuniversitarios/

43. Gómez, C., Rodríguez, N., Bohórquez, A., Díazgranados, N., Ospina, M. B., & Fernández, C. (2002). Factores asociados al intento de suicidio en la población Colombiana. *Revista colombiana de psiquiatría, 31(4),* 271-283.

44. Gómez-Romero, M. J., Limonero, J. T., Toro, J., Montes, J., & Tomas, J. (2018). Relación entre inteligencia emocional, afecto negativo y riesgo suicida en jóvenes universitarios. *Estrés y ansiedad, 24*, 18-23. https://doi.org/10.1016/j.anyes.2017.10.007 1134-7937

45. Gómez-Tabares, A.S., Mogollón-Gallego E.M., Muñoz-Vanegas, A., Landinez-Martinez, D.A., Carmo, J.P. (2022). The effect of coping strategies on the risk for suicidal ideation and behavior in adolescents. *Mediterranean Journal of Clinical Psychology, 10(2).* https://doi.org/10.13129/2282-1619/mjcp-3436

46. Guz, S., Kattari, S. K., Atteberry-Ash, B., Klemmer, C. L., Call, J., & Kattari, L. (2021). Depression and Suicide Risk at the Cross-Section of Sexual Orientation and Gender Identity for Youth. *Journal of Adolescent Health, 68(2),* 317–323. https://doi.org/10.1016/j.jadohealth.2020.06.008

47. Haas, A. P., Eliason, M., Mays, V. M., Mathy, R. M., Cochran, S. D., D'Augelli, A. R., … Clayton, P. J. (2010). Suicide and Suicide Risk in Lesbian, Gay, Bisexual, and Transgender Populations: Review and Recommendations. *Journal of Homosexuality, 58(1)*, 10–51. https://doi.org/10.1080/00918369.2011.534038

48. Hawton, K., Casañas, I., Comabella, C., Haw, C., & Saunders, K. (2013). Risk factors for suicide in individuals with depression: A systematic review. *Journal of Affective Disorders, 147(1-3),* 17–28. https://doi.org/10.1016/j.jad.2013.01.004

49. Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology, 64(6),* 1152–1168. https://doi.org/10.1037/0022-006x.64.6.1152

50. Hayes, S. C., Barnes-Holmes, D., & Roche, B. (2001). *Relational frame theory: A post-Skinnerian account of human language and cognition.* New York, NY: Kluwer Academic/Plenum. https://doi.org/10.1007/b108413

51. Hayes, S. C., Barnes-Holmes, D., & Wilson, K. G. (2012a). Contextual Behavioral Science: Creating a science more adequate to the challenge of the human condition. *Journal of Contextual Behavioral Science, 1(1-2),* 1–16. https://doi.org/10.1016/j.jcbs.2012.09.004

52. Hayes, S. C., Brownstein, A. J., Zettle, R. D., Rosenfarb, I., & Korn, Z. (1986). Rule-Governed Behavior and Sensitivity to Changing Consequences of Responding. *Journal of the Experimental Analysis of Behavior, 45(3)*, 237–256. https://doi.org/10.1901/Jeab.1986.45-237

53. Hayes, S. C., Pistorello, J., & Levin, M. E. (2012b). Acceptance and Commitment Therapy as a Unified Model of Behavior Change. *The Counseling Psychologist, 40(7),* 976–1002. https://doi.org/10.1177/0011000012460836

54. Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2011). *Acceptance and Commitment Therapy: The Process and Practice of Mindful Change (2nd edn).* New York, USA: The Guilford Press.

55. Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology, 64(6),* 1152–1168. https://doi.org/10.1037/0022-006x.64.6.1152
56. Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. *Professional Psychology: Research and Practice, 43(5)*, 460–467. https://doi.org/10.1037/a0029597
57. Hernández-Sampieri, R., Fernández-Collado, C., & Baptista-Lucio, P. (2014). *Metodología de la investigación*. (6a. ed.). McGraw-Hill.
58. Herres, J., Shearer, A., Kodish, T., Kim, B., Wang, S. B., & Diamond, G. S. (2019). Differences in Suicide Risk Severity Among Suicidal Youth With Anxiety Disorders. *Crisis, 40(5),* 333–339. https://doi.org/10.1027/0227-5910/a000571
59. Hu, L-T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to under parameterized model misspecification. *Psychological Methods, 3(4),* 424–453. https://doi.org/10.1037/1082-989X.3.4.424
60. Instituto Nacional de Medicina Legal y Ciencias Forenses (National Institute of Legal Medicine and Forensic Sciences [NILMFS]). (2022). *Boletín Estadístico Mensual Diciembre 2022*. Centro de Referencia Nacional sobre Violencia.
CRNV https://www.medicinalegal.gov.co/documents/20143/742818/Boletin_diciembre_2022.pdf
61. Instituto Nacional de Medicina Legal y Ciencias Forenses (National Institute of Legal Medicine and Forensic Sciences [NILMFS]). (2023). *Boletín Estadístico Mensual Septiembre 2023*. Centro de Referencia Nacional sobre Violencia.
62. Jöreskog, K. G., & Sörbom, D. (1996). *LISREL8 User's reference guide*. Mooresville Scientific Software.
63. Kanwar, A., Malik, S., Prokop, L. J., Sim, L. A., Feldstein, D., Wang, Z., & Murad, M. H. (2013). The association between anxiety disorders and suicidal behaviors: a systematic review and meta-analysis. *Depression and Anxiety, 30:* 917–929. https://doi.org/10.1002/da.22074
64. Kashdan, T. B., & Rottenberg, J. (2010). Psychological flexibility as a fundamental aspect of health. *Clinical Psychology Review, 30(7),* 865–878. https://doi.org/10.1016/j.cpr.2010.03.001
65. Kline, R. B. (1998). *Principles and practice of structural equation modeling*. Guilford Press.
66. Kline, R. B. (2005). *Principles and practice of structural equation modeling (2nd ed.)*. Guilford Press.
67. Krafft, J., Hicks, E.T., Mack, S.A. and Levin, M. (2019), Psychological Inflexibility Predicts Suicidality Over Time in College Students. *Suicide Life Threat Behav, 49: 1488-1496*. https://doi.org/10.1111/sltb.12533
68. Krueger, R. F., & Eaton, N. R. (2015). Transdiagnostic factors of mental disorders. *World Psychiatry, 14(1),* 27–29. https://doi.org/10.1002/wps.20175
69. Landi, G., Pakenham, K. I., Crocetti, E., Grandi, S., & Tossani, E. (2021). The Multidimensional Psychological Flexibility Inventory (MPFI): Discriminant validity of psychological flexibility with distress. *Journal of Contextual Behavioral Science, 21*, 22–29. https://doi.org/10.1016/j.jcbs.2021.05.004
70. Law 1090 of 2006: Whereby the practice of the profession of Psychology is regulated, the Code of Ethics and Bioethics and other provisions are issued. September 6, 2006. D.O. No. 46.383

71. Law, K. C., & Tucker, R. P. (2018). Repetitive negative thinking and suicide: a burgeoning literature with need for further exploration. *Current Opinion in Psychology, 22*, 68–72. https://doi.org/10.1016/j.copsyc.2017.08.027
72. Levin, M. E., MacLane, C., Daflos, S., Seeley, J. R., Hayes, S. C., Biglan, A., & Pistorello, J. (2014). Examining psychological inflexibility as a transdiagnostic process across psychological disorders. *Journal of Contextual Behavioral Science, 3(3)*, 155–163. https://doi.org/10.1016/j.jcbs.2014.06.003
73. Levin, M. E., Twohig, M. P., & Smith, B. M. (2016). Contextual Behavioral Science: An overview. In R. D. Zettle, S. C. Hayes, D. Barnes-Holmes & A. Biglan (Eds.), *The Wiley Handbook of Contextual Behavioral Science* (pp. 17-36).New York: Wiley-Blackwell. https://doi.org/10.1002/9781118489857.ch3
74. Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy, 33(3)*, 335–343. https://doi.org/10.1016/0005-7967(94)00075-u
75. Luciano, C. (2017). The self and responding to the own's behavior. Implications of coherence and hierarchical framing. *International Journal of Psychology and Psychological Therapy, 17*, 267-275.
76. Lynch, S. J., Sunderland, M., Newton, N. C., & Chapman, C. (2021). A systematic review of transdiagnostic risk and protective factors for general and specific psychopathology in young people. *Clinical Psychology Review, 87*, 102036. https://doi.org/10.1016/j.cpr.2021.102036
77. MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods, 1(2)*, 130–149. https://doi.org/10.1037/1082-989X.1.2.130
78. Mallot, R. W. (1989). The Achievement of Evasive Goals: Control by Rules Describing Contingencies That Are Not Direct Acting. In S. C. Hayes. (Ed). *Rule-Governed Behavior Cognition, Contingencies, and Instructional Control* (pp. 269-324) Plenum Press. https://doi.org/10.1007/978-1-4757-0447-1_8
79. Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First- and higher-order factor models and their invariance across groups. *Psychological Bulletin, 97(3),* 562–582. https://doi.org/10.1037/0033-2909.97.3.562
80. Martinotti, G., Schiavone, S., Negri, A., Vannini, C., Trabace, L., De Berardis, D., … Di Giannantonio, M. (2021). Suicidal Behavior and Club Drugs in Young Adults. *Brain Sciences, 11(4),* 490. https://doi.org/10.3390/brainsci11040490
81. Mascayano, F., Irrazabal, M., D Emilia, W., Vaner, S. J., Sapag, J. C., Alvarado, R., Yang, L. H., & Sinah, B. (2015). Suicide in Latin America: a growing public health issue. *Revista de La Facultad de Ciencias Médicas, 72(4)*, 295–303. https://pubmed.ncbi.nlm.nih.gov/27107280/
82. McEvoy, P. M., Watson, H., Watkins, E. R., & Nathan, P. (2013). The relationship between worry, rumination, and comorbidity: Evidence for repetitive negative thinking as a transdiagnostic construct. *Journal of Affective Disorders, 151(1)*, 313–320. https://doi.org/10.1016/j.jad.2013.06.014
83. McLaughlin, K. A., & Nolen-Hoeksema, S. (2011). Rumination as a transdiagnostic factor in depression and anxiety. *Behaviour Research and Therapy, 49(3),* 186–193. https://doi.org/10.1016/j.brat.2010.12.006

84. McLoughlin, S., & Roche, B. T. (2022). ACT: A Process-Based Therapy in search of a process. Behavior Therapy. https://doi.org/10.1016/j.beth.2022.07.010

85. Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior, 36(1),* 38–56. https://pubmed.ncbi.nlm.nih.gov/7738327/

86. Ministry of Health & Colciencias (2015). National mental health survey 2015 - Volume I. Bogotá D.C., Colombia

87. Mizock, L., & Hopwood, R. (2016). Conflation and interdependence in the intersection of gender and sexuality among transgender individuals. *Psychology of Sexual Orientation and Gender Diversity, 3(1*), 93–103. https://doi.org/10.1037/sgd0000157

88. Monestès, J.-L., Greville, W. J., & Hooper, N. (2018). Derived insensitivity: Rule-based insensitivity to contingencies propagates through equivalence. *Learning and Motivation, 59*, 55–63. https://doi.org/10.1016/j.lmot.2017.08.003

89. Monteith, L. L., Pease, J. L., Forster, J. E., Homaifar, B. Y., & Bahraini, N. H. (2015). Values as moderators of the association between interpersonal-psychological constructs and suicidal ideation among veterans. *Archives of Suicide Research, 19(4),* 122–134. https://doi.org/10.1080/13811118.2015.1004486

90. Mortier, P., Auerbach, R. P., Alonso, J., Bantjes, J., Benjet, C., Cuijpers, P., Ebert, D. D., Green, J., Hasking, P., Nock, M. K., O'Neill, S., Pinder-Amaker, S., Sampson, N. A., Vilagut, G., Zaslavsky, A. M., Bruffaerts, R., Kessler, R. C., & WHO WMH-ICS Collaborators. (2018). Suicidal Thoughts and Behaviors Among First-Year College Students: Results From the WMH-ICS Project. *Journal of the American Academy of Child & Adolescent Psychiatry, 57(4),* 263–273. https://doi.org/10.1016/j.jaac.2018.01.018

91. Nodin, N., Peel, E., Tyler, A., and Rivers, I. (2015) *The RaRE Research Report: LGB and T Mental Health – Risk and Resilience Explored.* PACE – Project for Advocacy Counselling and Education

92. Nolen-Hoeksema, S., Wisco, B.E., & Lyubomirsky, S. (2008). Rethinking Rumination. *Perspectives in Psychological Science, 3(5),* 400-424. https://doi.org/10.1111/j.1745-6924.2008.00088.x

93. O'Beaglaoich, C., McCutcheon, J., Conway, P. F., Hanafin, J., & Morrison, T. G. (2020). Adolescent Suicide Ideation, Depression and Self-Esteem: Relationships to a New Measure of Gender Role Conflict. *Frontiers in Psychology, 11*,1-111. https://doi.org/10.3389/fpsyg.2020.00111

94. O'Connor, M., Byrne, P., Ruiz, F. J., & McHugh, L. (2018). Generalized Pliance in Relation to Contingency Insensitivity and Mindfulness. *Mindfulness, 10(5),* 833–840. https://doi.org/10.1007/s12671-018-1046-5

95. Oquendo, M. A., Galfalvy, H., Russo, S., Ellis, S., & Mann, J. J. (2004). Prospective Study of clinical predictors of suicidal acts after a major depressive episode in patients with major depressive disorder or bipolar disorder. *Am Journal Psychiatry, 161(14*), 33-41. https://doi.org/10.1176/appi.ajp.161.8.1433

96. Orri, M., Galera, C., Turecki, G., Forte, A., Renaud, J., Boivin, M., Tremblay, R. E., Cote, S. M., & Geoffroy, M.C. (2018). Association of childhood irritability and depressive/anxious mood profiles with adolescent suicidal ideation and attempts. *JAMA Psychiatry, 75(5),* 465-473. https://doi.org/10.1001/jamapsychiatry.2018.017

97. Park, S., & Jang, H. (2018). Correlations between suicide rates and the prevalence of suicide risk factors among Korean adolescents. *Psychiatry research, 261*, 143-147. https://doi.org/10.1016/j.psychres.2017.12.055

98. Pawlowska, B., & Szymańska, J. (2021). Suicidal ideation, plans, and attempts and the use of psychoactive substances by adolescents. *Current Problems of Psychiatry, 22(3),* 217–224. https://doi.org/10.2478/cpp-2021-0016

99. Pellicane, M. J., & Ciesla, J. A. (2022). Associations between minority stress, depression, and suicidal ideation and attempts in transgender and gender diverse (TGD) individuals: Systematic review and meta-analysis. *Clinical Psychology Review, 91,* 102113. https://doi.org/10.1016/j.cpr.2021.102113

100. Pereira-Morales, A. J., Adan, A., Camargo, A., & Forero, D. A. (2017). Substance use and suicide risk in a sample of young Colombian adults: An exploration of psychosocial factors. *The American Journal on Addictions, 26(4),* 388–394. https://doi.org/10.1111/ajad.12552

101. Plöderl, M., Wagenmakers, E.-J., Tremblay, P., Ramsay, R., Kralovec, K., Fartacek, C., & Fartacek, R. (2013). Suicide Risk and Sexual Orientation: A Critical Review. *Archives of Sexual Behavior, 42(5),* 715–727. https://doi.org/10.1007/s10508-012-0056-y

102. Reisner, S., Greytak, E., Parsons, J., and Ybarra, M. (2015) Gender minority social stress in adolescence: disparities in adolescent bullying and substance use by gender identity. *Journal of Sex Research, 52(3):* 243–256. https://doi.org/10.1080/00224499.2014.886321

103. Rimes, K. A., Goodship, N., Ussher, G., Baker, D., & West, E. (2019). Non-binary and binary transgender youth: Comparison of mental health, self-harm, suicidality, substance use and victimization experiences. *International Journal of Transgenderism, 20(2-3),* 230–240. https://doi.org/10.1080/15532739.2017.1370627

104. Rojas-Bernal, L. Á., Castaño-Pérez, G. A., & Restrepo-Bernal, D. P. (2018). Salud mental en Colombia. Un análisis crítico. *CES Medicina, 32*(2), 129-140. https://doi.org/10.21615/cesmedicina.32.2.6

105. Rolffs, J. L., Rogge, R. D., & Wilson, K. G. (2018). Disentangling Components of Flexibility via the Hexaflex Model: Development and Validation of the Multidimensional Psychological Flexibility Inventory (MPFI). *Assessment, 25(4),* 458–482. https://doi.org/10.1177/1073191116645905

106. Ruiz, F. J., Flórez, C. L., García-Martín, M. B., Monroy-Cifuentes, A., Barreto-Montero, K., García-Beltrán, D. M., … Gil-Luciano, B. (2018a). A multiple-baseline evaluation of a brief acceptance and commitment therapy protocol focused on repetitive negative thinking for moderate emotional disorders. *Journal of Contextual Behavioral Science, 9, 1–14.* https://doi.org/10.1016/j.jcbs.2018.04.004

107. Ruiz, F. J., García-Martín, M. B., Suárez-Falcón, J. C., & Odriozola-González, P. (2017a). The hierarchical factor structure of the Spanish version of Depression Anxiety and Stress Scale - 21. *International Journal of Psychology and Psychological Therapy, 17*, 97-105.

108. Ruiz, F. J., Suárez-Falcón, J. C., Barbero-Rubio, A., & Flórez, C. L. (2018b). Development and initial validation of the Generalized Pliance Questionnaire. *Journal of Contextual Behavioral Science*, 12, 189-198. https://doi.org/10.1016/j.jcbs.2018.03.003

109. Ruiz, F. J., Suárez-Falcón, J. C., Cárdenas-Sierra, S., Durán, Y., Guerrero, K., & Riaño-Hernández, D. (2016). Psychometric Properties of the Acceptance and Action Questionnaire–II in Colombia. *The Psychological Record, 66(3),* 429–437. https://doi.org/10.1007/s40732-016-0183-2

110. Ruiz, F. J., Suárez-Falcón, J. C., Riaño-Hernández, D., & Gillanders, D. (2017b). Psychometric Properties of the Cognitive Fusion Questionnaire in Colombia. *Revista Latinoamericana de Psicología, 49(1)*, 80–87. https://doi.org/10.1016/j.rlp.2016.09.006
111. Ruiz, F.J., Odriozola-González, P., Suárez-Falcón, J.C., Segura-Vargas, M.A. (2022) Psychometric properties of the Valuing Questionnaire in a Spaniard sample and factorial equivalence with a Colombian sample. *PeerJ* 10:e12670 https://doi.org/10.7717/peerj.12670
112. Ruiz, F. J., Peña-Vargas, A., Ramírez, E. S., Suárez-Falcón, J. C., García-Martín, M. B., García-Beltrán, D. M., Henao, Á. M., Monroy-Cifuentes, A., & Sánchez, P. D. (2020). Efficacy of a two-session repetitive negative thinking-focused acceptance and commitment therapy (ACT) protocol for depression and generalized anxiety disorder: A randomized waitlist control trial. *Psychotherapy (Chicago, Ill.)*, *57*(3), 444–456. https://doi.org/10.1037/pst0000273
113. Siabato, E., & Salamanca, Y. (2015). Factores asociados a ideación suicida en universitarios. *Psychologia: avances de la disciplina, 9(1),* 71-81.
114. Siabato, E., Forero, I. X., & Salamanca, Y. (2017). Asociación entre depresión e ideación suicida en un grupo de adolescentes colombianos. *Pensamiento Psicológico, 15(1),* 51-61. https://doi.org/10.11144/Javerianacali.PPSI15-1.ADIS
115. Segerstrom, S. C., Tsao, J. C. I., Alden, L. E., & Craske, M. G. (2000). Worry and Rumination: Repetitive Thought as a Concomitant and Predictor of Negative Mood. *Cognitive Therapy and Research, 24(6),* 671–688. https://doi.org/10.1023/a:1005587311498
116. Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Amorim, P., Janavs, J., Weiller, E., … Dunbar, G. C. (1998). The Mini-International Neuropsychiatric Interview (M.I.N.I.): The development and validation of a structured diagnostic psychiatry interview for DSM-IV and ICD-10. *Journal of Clinical Psychiatry, 59 (20)*, 22-33.
117. Sierra, M. A., & Ortiz, E. I. (2022). Psychological inflexibility components as trans-diagnostic predictors of emotional symptomatology and suicide risk among young adults. *Mediterranean Journal of Clinical Psychology, 10*(3) https://doi.org/10.13129/2282-1619/mjcp-3565
118. Skinta, M.D. (2021) Contextual behavior therapy for gender and sexual minority clients: a practical guide to treatment. Routledge https://doi.org/10.4324/9780429030307
119. Smout, M., Davies, M., Burns, N., & Christie, A. (2014) Development of the Valuing Questionnaire (VQ). *Journal of Contextual Behavioral Science, 3*(3), 164-172. https://doi.org/10.1016/j.jcbs.2014.06.001
120. Sorg, S., Vögele, C., Furka, N., & Hans-Meyer, A. (2012). Perseverative thinking in depression and anxiety. *Frontiers in Psychology, 3*. https://doi.org/10.3389/fpsyg.2012.00020
121. Statutory Law 1266 of 2008: Whereby the general provisions of habeas data are issued and the handling of information contained in personal databases is regulated, especially financial, credit, commercial, services and information from third countries, and other provisions are issued. December 31, 2008. D.O. No. 47.219
122. Statutory Law 1581 of 2012: Whereby general provisions are issued for the protection of personal data. October 18, 2012. D.O. No. 48.587
123. Stitt, A. (2020) *ACT for Gender Identity: A comprehensive guide.* Jessica Kingsley Publishers.

124. Tanaka, J. S., & Huba, G. J. (1985). A fit index for covariance structure models under arbitrary GLS estimation. *British Journal of Mathematical and Statistical Psychology, 38(2),* 197–201. https://doi.org/10.1111/j.2044-8317.1985.tb00834.x

125. Tebbe, E. A., & Moradi, B. (2016). Suicide risk in trans populations: An application of minority stress theory. *Journal of Counseling Psychology, 63(5),* 520–533. https://doi.org/10.1037/cou0000152

126. Testa, R. J., Hendricks, M. L. (2015). Suicide risk among transgender and gender-nonconforming youth. In P. Goldblum, D. L. Espelage, J. Chu & B. Bongar (Eds.), *Youth Suicide and Bullying: Challenges and Strategies for Prevention and Intervention* (pp. 121-133). Oxford University Press. https://doi.org/10.1093/med:psych/9780199950706.003.0011

127. Tighe, J., Nicholas, J., Shand, F., & Christensen, H. (2018). Efficacy of Acceptance and Commitment Therapy in Reducing Suicidal Ideation and Deliberate Self-Harm: Systematic Review. *JMIR Mental Health, 5(2),* e10732. https://doi.org/10.2196/10732

128. Törneke, N., Luciano, C., & Valdivia-Salas, S. (2008). Rule-Governed Behavior and Psychological Problems. *International Journal of Psychology and Psychological Therapy, 8*(2), 141-156.

129. Törneke, N., Luciano, C., Barnes-Holmes, Y., & Bond, F. W. (2016). RFT for Clinical Practice: three core strategies in understanding and treating human suffering. In R. D. Zettle, S. C. Hayes, D. Barnes-Holmes, A. Biglan (Eds.), *The Wiley Handbook of Contextual Behavioral Science* (pp. 254-272). New York: Wiley-Blackwell. https://doi.org/10.1002/9781118489857.ch12

130. Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika, 38(1),* 1–10. https://doi.org/10.1007/BF02291170

131. Tyndall, I., Waldeck, D., Pancani, L., Whelan, R., Roche, B., & Pereira, A. (2018). Profiles of Psychological Flexibility: A Latent Class Analysis of the Acceptance and Commitment Therapy Model. *Behavior Modification, 44(3),* 365–393. https://doi.org/10.1177/0145445518820036

132. Walser, R. D., Garvert, D. W., Karlin, B. E., Trockel, M., Ryu, D. M., & Taylor, C. B. (2015). Effectiveness of Acceptance and Commitment Therapy in treating depression and suicidal ideation in veterans. *Behaviour Research and Therapy, 74*, 25-31. https://doi.org/10.1016/j.brat.2015.08.012

133. Watkins, E. R. (2008). Constructive and Unconstructive Repetitive Thought. *Psychological Bulletin, 134*, 163-206. https://doi.org/10.1037/0033-2909.134.2.163

134. Watkins, E., Moulds, M., & Mackintosh, B. (2005). Comparisons between rumination and worry in a non-clinical population. *Behaviour Research and Therapy, 43(12*), 1577–1585. https://doi.org/10.1016/j.brat.2004.11.008

135. West S. G., Taylor A. B., Wu W. (2012). Model fit and model selection in structural equation modeling. In Hoyle R. H. (Ed.), *Handbook of structural equation modeling* (pp. 209-231). Guilford Press.

136. Wilcox, H. C., Arria, A. M., Caldeira, K. M., Vincent, K. B., Pinchevsky, G. M., & O'Grady, K. E. (2010). Prevalence and predictors of persistent suicide ideation, plans, and attempts during college. *Journal of Affective Disorders, 127(1-3),* 287–294. https://doi.org/10.1016/j.jad.2010.04.017

137. Wilkinson, P., Kelvin, R., Roberts, C., Dubicka, B., & Goodyer, I. (2011). Clinical and psychosocial predictors of suicide attempts and nonsuicidal self-injury in the Adolescent Depression Antidepressants and Psychotherapy Trial (ADAPT). *American Journal of Psychiatry, 168(5),* 495-501. https://doi.org/10.1176/appi.ajp.2010.10050718

138. Wilson, K. G., & Luciano, C. (2002). *Terapia de Aceptación y Compromiso: Un Tratamiento conductual orientado a los valores*. Pirámide
139. World Health Organization. (2014). *Preventing suicide: A global imperative*. World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/131056/9789241564779_eng.pdf
140. World Health Organization (2017). Depression and other common mental disorders global health estimates. https://iris.who.int/bitstream/handle/10665/254610/WHO-MSD-MER-2017.2-eng.pdf?sequence=1
141. World Health Organization. (2019). *Suicide in the world: Global Health Estimates*. World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/326948/WHO-MSD-MER-19.3-eng.pdf
142. World Health Organization. (2022a). *Mental Disorders*. World Health Organization. https://www.who.int/es/news-room/fact-sheets/detail/mental-disorders
143. World Health Organization. (2022b). *News - COVID-19 pandemic triggers 25% increase in prevalence of anxiety and depression worldwide*. World Health Organization. https://www.who.int/es/news/item/02-03-2022-covid-19-pandemic-triggers-25-increase-in-prevalence-of-anxiety-and-depression-worldwide
144. World Health Organization. (2023a). *Depression*. World Health Organization. https://www.who.int/es/news-room/fact-sheets/detail/depression
145. World Health Organization. (2023b). *Suicide*. World Health Organization. https://www.who.int/news-room/fact-sheets/detail/suicide
146. World Health Organization. (2022). *Global Health Observatory Data Repository. Suicide mortality rate (per 100,000 population)*. World Health Organization. https://data.worldbank.org/indicator/SH.STA.SUIC.P5?locations=ZJ
147. World Medical Association (2013). World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects. *JAMA, 310(20),* 2191–2194. https://doi.org/10.1001/jama.2013.281053
148. Wolford-Clevenger, C., Cannon, C. J., Flores, L. Y., Smith, P. N., & Stuart, G. L. (2017). Suicide Risk Among Transgender People: A Prevalent Problem in Critical Need of Empirical and Theoretical Research. *Violence and Gender, 4(3),* 69–72. https://doi.org/10.1089/vio.2017.0006
149. Zettle, R. D., & Hayes, S. C. (1982). Rule-Governed Behavior: A Potential Theoretical Framework For Cognitive–Behavioral Therapy. *Advances In Cognitive - Behavioral Research And Therapy*, 73–118. https://doi.org/10.1016/B978-0-12-010601-1.50008-5

DOI: 10.13129/2282-1619/mjcp-3924