

Friendship attachment style, intolerance of uncertainty, and psychological distress among unaccompanied immigrant minors in times of COVID-19

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Funding information

Fondazione Cassa di Risparmio di Padova e Rovigo

Abstract

Introduction: This cross-sectional study used a convergent parallel mixed-method design to investigate friendship attachment style, intolerance of uncertainty, and psychological distress among unaccompanied immigrant minors (UIMs) during the second wave of the COVID-19 pandemic in Italy.

Method: Participants were 80 male UIMs ($M_{\text{age}} = 17$ years, standard deviation = 0.84) hosted in residential care communities. Individual interviews comprising questionnaires and open-ended questions assessed the constructs of interest. Qualitative data were analyzed through thematic content analysis, whereas descriptive statistics and regression analysis were computed on quantitative data.

Results: Several UIMs mentioned positive relationships with peers, but more than half also felt reluctant to trust others and build new friendships due to events experienced before and during migration. However, in quantitative data, 69% identified themselves with the secure friendship attachment style. Regarding intolerance of uncertainty, participants expressed feelings of worry about the pandemic, but also emphasized their resources in terms of confidence, optimism, and planning skills, as well as being accustomed to uncertainty; indeed, levels of this variable were low-to-medium. In regression analysis, insecure attachment and higher intolerance of uncertainty were each associated with greater psychological distress. Moreover, psychological distress was lower among securely attached UIMs with low (vs. high) levels of intolerance of uncertainty.

Conclusion: The findings suggest that, even in conditions of societal insecurity, UIMs display resilience and employ effective coping strategies; however, a lack of trust in peer relationships and the inability to tolerate uncertainty may undermine their psychological adjustment. Implications for developmental theory and practice are discussed.

KEYWORDS

COVID-19, friendship attachment style, intolerance of uncertainty, Italy, psychological distress, unaccompanied immigrant minors

1 | INTRODUCTION

Unaccompanied immigrant minors (UIMs) are individuals aged less than 18 years who arrive in a foreign country and are not accompanied, nor cared for, by an adult responsible for them (UNHCR, 1997). Reasons for migration are varied and diverse—including fleeing from violence, criminality, and persecutions, as well as seeking educational and work opportunities (Aldarondo & Becker, 2011). Abundant evidence indicates that UIMs are at increased risk of experiencing psychological distress due to the unique and potentially traumatic challenges they face before, during, and after migration,

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with separation from family being a prominent factor (Bamford et al., 2021; Corona Maioli et al., 2021; NeMoyer et al., 2019). Beyond these challenges, UIMs are involved in handling normative developmental tasks (Erikson, 1968) that might be hindered or complicated by the migration process (Migliorini et al., 2022). Among these, peer relationships play an essential role in adolescence because they provide an important source of guidance and support (Hartup & Laurson, 2014). However, UIMs may strive to establish new friendships in the receiving country because of cultural barriers, integration issues, and discrimination (Ní Raghallaigh, 2011a). Migration-related experiences and hardship generate feelings of mistrust that could compromise these youths' motivation to develop friendships (Essex et al., 2022). Moreover, the persistent uncertainty experienced by UIMs in relation to their stay in the receiving country might be linked to a heightened anxiety over their future (Oldroyd et al., 2022), even more so during an unprecedented global health emergency such as the COVID-19 outbreak. Despite this evidence, little is known about how sense of trust in peer relationships and the ability to tolerate uncertain situations may be linked to UIMs' psychological adjustment.

Building on an attachment, relational-based perspective (Juang et al., 2018; Schwartz et al., 2021), the current study aimed to address this gap by investigating the associations among friendship attachment style, intolerance of uncertainty, and psychological distress among UIMs during the second-wave of the COVID-19 pandemic in Italy. In doing so, we used a mixed-method approach to obtain a more fine-grained picture of these youths' subjective experiences and attitudes concerning peer relationships and coping with an uncertain future in relation to their psychological condition amidst the pandemic.

1.1 | Friendship attachment style

Attachment relationships play an important role in immigrant youth's psychological adjustment, supporting them in the management of postmigration stress on their path to integration (Schwartz et al., 2021). Indeed, scholars have recently emphasized how the developmental implications of immigrant status could be better captured through a relational perspective informed by interpersonal relationships and attachment research (Juang et al., 2018). This perspective is based on and expands García Coll et al.'s (1996) integrative model, which adopts a strength-based approach focusing on how promotive environments and protective factors can foster resilience among disadvantaged youth. According to attachment theory (Bowlby, 1980), the early socioemotional bonds that children form with their caregivers impact expectations of relationships with parents and peers (Ainsworth, 1989), creating either “secure” or “insecure” working models of relationships (Mikulincer & Shaver, 2007). Secure friendship attachment during adolescence is associated with positive functioning in adulthood (Furman et al., 2002; Mothander & Wang, 2014) and lower rates of negative mental health outcomes (Cook et al., 2016; Meadows et al., 2006). Moreover, it can serve as a protective factor against depression and anxiety after exposure to violence and traumatic events (Heinze et al., 2018). Engaging in close friendships involves warmth, concern, communication, and perspective-taking abilities that are beneficial for both short- and long-term psychological adjustment (Bagwell & Bukowski, 2018). On the contrary, insecure attachment is characterized by difficulties forming and maintaining socioemotional bonds (Fraley et al., 2011). Specifically, individuals with an “anxious” attachment often experience fear of rejection and tend to engage in emotional dependence, while those with an “avoidant” attachment are uncomfortable with emotional closeness (Ainsworth, 1979; Mikulincer & Shaver, 2007). In adolescence, insecure friendship attachment is related to more externalizing difficulties and mental health problems (Cook et al., 2016); furthermore, it can be a risk factor for elevated depressive symptoms when adolescents are exposed to stressful situations (Heinze et al., 2018).

Despite the relevance of friendship attachment style in adolescence, research on how UIMs experience these emotional bonds after resettlement in the host country and the extent to which such bonds might have influenced their psychological adjustment during the pandemic is scant. In a recent study, Sleijpen et al. (2022) found that young unaccompanied refugees in Norway did not show substantial changes in attachment insecurity over time. However, no information on attachment to friends was collected, and only anxious and avoidant patterns were assessed. Thus, more research is warranted to shed light on the role of friendship attachment style in UIM's psychological adjustment.

1.2 | Intolerance of uncertainty

Intolerance of uncertainty is an individual's tendency to perceive fear and discomfort in the face of uncertainty, linked to an inability to tolerate such situations and their unpredictability (Carleton et al., 2007; Liao et al., 2016). It is associated with intense negative emotional reactions to uncertain and ambiguous events regardless of their probability of occurrence, as well as to avoidant behavioral tendencies aiming to reduce anxiety (Osmanağaoğlu et al., 2018). Research has shown that high levels of intolerance of uncertainty are linked to excessive worries and anxiety-related problems (Rosser, 2019). Furthermore, cross-sectional studies conducted during the pandemic found positive associations of this construct with fear of the coronavirus disease, sleep difficulties, and emotional symptoms (Sandin et al., 2021; Wu et al., 2021).

Immigrant and refugee populations commonly experience high levels of uncertainty concerning their future due to resettlement issues (e.g., obtaining a residence permit, finding a job, securing a stable accommodation). However, to our knowledge, studies investigating UIMs' capacity to tolerate uncertain events are still lacking. A cross-sectional study of Colombian internal migrants indicated that high intolerance of uncertainty was positively associated with depressive and anxious symptoms; moreover, it mediated the relation between perceived discrimination and mental health difficulties (Urzúa et al., 2023). These findings support the idea that intolerance of uncertainty is a relevant dimension among individuals with an immigrant background, and that it can be influenced by contextual factors (e.g., discrimination) by heightening people's tendency to consider negative events and the perspective of an uncertain future as unacceptable or overwhelming. Yet, the extent to which intolerance of uncertainty may be related to both psychological distress and UIMs' subjective experiences during the pandemic remains unclear.

1.3 | The relationship between friendship attachment style, intolerance of uncertainty, and psychological distress

Beyond possible associations of friendship attachment style and intolerance of uncertainty with psychological distress, in this study we also explored whether these two variables had a joint effect on UIM's outcomes. Indeed, there is some evidence from research on parental attachment that insecure attachment style is linked to less tolerance of uncertain situations (and vice versa), and that this relational construct might interact with intolerance of uncertainty in contributing to negative emotional responses and the development of psychopathological outcomes. For instance, a cross-sectional study found that, in an adult community sample, attachment anxiety and avoidance were positively associated with higher intolerance of uncertainty, and that these variables were positively correlated with increased worry (Wright et al., 2017). More recently, a longitudinal study by Zdebek et al. (2022) found that ambivalent and disorganized-controlling maternal attachment patterns assessed during childhood were associated with greater levels of anxiety via higher intolerance of uncertainty among young adults. A possible explanation is that, because insecure attachment styles are a consequence of the caregiver's inconsistency in providing support and children's reactions to stressful events are tied to their expectations of the caregiver's behavior, insecure maternal attachment patterns may prevent children from learning how to regulate their distress. This, in turn, may lead to a general sense of uncertainty and the experience of greater anxiety in ambiguous or unpredictable situations.

In separate lines of research, friendship attachment style and intolerance of uncertainty have also been found to moderate the association between environmental stressors and mental health. Specifically, a longitudinal study by Heinze et al. (2018) indicated that a secure friendship attachment style served as a buffer against adverse contextual factors, with securely attached adolescents exposed to violence showing faster decreases in depressive and anxious symptoms in comparison to their insecurely attached counterparts. As regards intolerance of uncertainty, Smith et al. (2020) found that after the COVID-19 outbreak, the association between social isolation and distress/anxiety was stronger for individuals with high (vs. low or average) levels of this variable. In a similar vein, Liao et al. (2016) reported that the association between racial microaggressions and anxiety symptoms was significant at high (vs. low) levels of intolerance of uncertainty among Black American university students (Liao et al., 2016), thereby constituting a risk factor.

Taken together, these findings suggest that an insecure attachment style, in combination with a high intolerance of uncertainty, might be associated with more psychological distress, whereas individuals with a secure attachment style and low intolerance of uncertainty might experience lower levels of this outcome variable. However, more research is needed to explore these associations among UIMs.

1.4 | The social ecology of UIMs in Italy

In the past 10 years, Italy has witnessed the arrival of over 100,000 UIMs coming mainly via the Mediterranean route (Save the Children, 2023). The country currently hosts 20,089 UIMs (Italian Ministry of Labor and Social Policy, 2023); of these, the vast majority (85%) is male, and over two-thirds (68%) are aged 16–17 years. The most represented nationalities are Ukraine (25%), Egypt (24%), Tunisia (9%), Albania (7%), and Pakistan (5%). During the initial tracing phase (i.e., when local authorities proceed to age identification and status ascertainment), UIMs are hosted for a maximum period of 3 months in specialized governmental structures known as first-level reception facilities. Then, they are transferred to second-level reception facilities (e.g., residential care communities) where they are supported by social workers in continuing their education and finding a traineeship/job (see Rania et al., 2018). When they come of age, they need to exit the reception system; however, the Italian law establishes that they can remain in charge of social services for an additional period, should they have not reached autonomy by the time they turn 18.

The outbreak of the COVID-19 pandemic had major consequences for UIMs and the entire reception system (Barn et al., 2021). In the first wave, the national lockdown involved the suspension of essential services (e.g., provision of legal

information and psychosocial support, administrative procedures related to occupational and educational integration) which caused elevated distress and conflicts within the residential care communities (CIR, 2020). After a short period during the summer when most restrictions were suspended, in the second wave—during which the current study was conducted—many were restored (e.g., online school lessons; social distancing measures and daily COVID-19 testing at work/training), generating discomfort and loneliness (Faraci et al., 2022). Indeed, the tightening of the reception system conditions, the introduction of social distancing measures, and a general, COVID-19 related precarity have likely contributed to an increased isolation and disruption of social relationships among UIMs, as well as to a greater anxiety over the uncertainty of their future (Barn et al., 2021; Oldroyd et al., 2022).

1.5 | The present study

The overall goal of this study was to investigate friendship attachment style, intolerance of uncertainty, and levels of psychological distress among UIMs during the second wave of the pandemic in Italy. Specifically, we had three main aims. First, we examined friendship attachment style and participants' perceptions of their bond with peers. Indeed, despite recent contributions emphasized the importance of friendships for the adjustment of refugee youth (e.g., Schwartz et al., 2021), the construct of friendship attachment style has not yet been investigated. Here, we conceptualized this construct as a protective, relational factor based on recent theoretical contributions emphasizing the positive role of interpersonal relationships and attachment in immigrant and refugee youths' adaptation and resilience (see Juang et al., 2018). Second, we examined participants' intolerance of uncertainty and experiences in dealing with uncertain situations, including the ongoing COVID-19 pandemic. Intolerance of uncertainty was investigated as a pivotal, potential risk factor that has not been studied in this specific population, although it is particularly salient for immigrant youth because of the uncertainty around their legal status and the outcomes of the migration process (El-Shaarawi, 2015; Urzúa et al., 2023). Third, we explored the associations among friendship attachment style, intolerance of uncertainty, and psychological distress. In particular, we analyzed the main and interactive effects of the two above-mentioned variables on psychological distress based on emerging evidence suggesting that (in)secure attachment styles and intolerance of uncertainty might have a joint effect on psychological adjustment (Wright et al., 2017; Zdebik et al., 2022). Furthermore, we addressed whether and how participants described a relation among these constructs in their subjective perceptions.

To achieve these goals, we used a mixed-method approach with a convergent parallel design involving the collection of quantitative and qualitative data in the same timeframe (Mathur et al., 2020; Tulane et al., 2018). This design was based on other recent studies with underrepresented populations (e.g., Hartonen et al., 2021; von Haumeder et al., 2019) and allowed us to assess the frequency/magnitude of our main constructs (i.e., friendship attachment style, intolerance of uncertainty, psychological distress) via standardized questionnaires, as well as to obtain more in-depth and nuanced insights through participants' answers to open-ended questions.

2 | METHODS

2.1 | Participants

We individually interviewed 80 male UIMs hosted in 24 residential care communities in 3 Italian regions (i.e., Veneto, Emilia-Romagna, and Calabria). Participants were recruited through informal contacts with social cooperatives managing the above-mentioned facilities. Inclusion criteria were (a) being aged less than 18 years or having turned 18 in the 6 months before the interview, (b) being male, and (c) living in a residential care community for minors. Criterion (a) was established in relation to the Italian law, according to which UIMs can be exceptionally supported and hosted by social services for a further period after turning 18. To ensure homogeneity in our sample, however, we included criterion (c) to make sure that their living conditions did not substantially differ from their younger peers. As for criterion (b), considering that most UIMs living in Italy are males, the percentage of female minors hosted in the involved communities was so low that we chose not to include them in the analytic sample. Yet, to avoid generating feelings of exclusion, the two girls residing in one of the facilities were nonetheless given the possibility to participate in the interview. Finally, we established as the only exclusion criterion having a psychiatric diagnosis to prevent reactivating feelings of distress in potentially vulnerable individuals, although the interview did not cover particularly sensitive or personal topics. Overall, 298 UIMs were originally asked to participate in the study; however, about half of them ($n = 150$) did not meet the inclusion criteria. Among the eligible UIMs, 80 accepted to take part in the interview, with a participation rate of 53%.

Before data collection, approval of the Ethics Committee of the School of Psychology at University of Padova was sought and granted (protocol n. 3805) for the study material and procedures. Before conducting the interviews, we collected written informed consent from the participants' legal guardians (in case of minors) or from the participants themselves (in case of participants aged 18 years). We emphasized that participation was voluntary, and that it would not have any consequence

whatsoever on their residence permit procedure. Moreover, we specified that no information would have been released to the authorities, the cooperatives' staff or the legal guardians.

Sample characteristics are reported in Table 1. Participants' mean age was 17 years (standard deviation = 0.84, range = 14–18). Overall, 13 different countries of origin were represented, the main ones being Albania (25%), Bangladesh (24%), Pakistan (19%), Morocco, Tunisia, and Egypt (7.5% each). UIMs' average length of stay in the residential care communities was 17 months (mean = 2.33, range = 4–63). Data are publicly available in the Open Science Framework at the following link: <https://osf.io/jx6r7/>.

2.2 | Procedure

Data collection took place during the second wave of the COVID-19 pandemic (December 2020 to May 2021). In that period, the severity of COVID-related restrictions varied on a regional basis depending on the number of cases, health system conditions, and so forth. The three regions in which the data was collected were characterized by medium-severe restrictions (e.g., hybrid teaching in schools, partial closure of shops and restaurants, requirement to wear face masks both indoor and outdoor) for most of the time.

Individual interviews lasted between 45 and 60 min each, and included both standardized questionnaires and open-ended questions concerning participants' personal characteristics, peer relationships, and psychosocial adjustment (see Measures section). Interviews were conducted online through video-calls due to health safety norms and local restrictions. Through collaboration with the facilities' coordinators and social workers, we ensured that participants could carry out the video-interviews in a private and quiet room in the residential care facilities. Specifically trained and supervised researchers led the interviews and offered participants the possibility to speak in Italian, English or French. For those UIMs who were not proficient in any of these languages, linguistic-cultural mediators were made available. The majority of interviews (62%) was carried out in Italian; 5% of the participants chose English, and only 1% chose French. The remaining interviews (32%) were conducted in four different languages (Bengali, Arabic, Urdu, and Albanian) with the assistance of linguistic-cultural mediators.

2.3 | Measures

2.3.1 | Sociodemographics

Participants were asked about their age, country of origin, religion, length of time in the residential care communities in Italy (in months), Italian language proficiency, family composition, educational level, pre and postmigration occupation.

TABLE 1 Sample characteristics, $N = 80$.

	N (%)
Religion	
Muslim	69 (86.3)
Christian (catholic, orthodox, and protestant)	11 (13.8)
Educational level	
No education	1 (1.3)
Attended or completed primary school	8 (10)
Attended or completed middle school	34 (42.5)
Attended or completed high school	37 (46.3)
Occupational status (N , %)	
Unemployed	6 (7.5)
Student	36 (45)
Student worker	31 (38.8)
Employed	4 (5)
Other	3 (3.8)
Time since arrival in residential care community (months)	17

2.3.2 | COVID-19 perceived dangerousness and likelihood of infection

UIMs reported on their subjective perception of the dangerousness of COVID-19 on a 5-point Likert scale (1 = not at, 5 = extremely), and on the likelihood of contracting the disease using a continuous scale from 0 to 100 (Ceccon & Moscardino, 2022).

2.3.3 | Friendship attachment style

Qualitative reports. Participants answered the following open-ended question: “How are your relationships with your friends? For example: do you have a lot of friends or are you better off on your own, do you trust easily or do you struggle to open up, what are your difficulties or fears in relating to your peers...?”

Quantitative reports. Friendship attachment style was measured by the Attachment Questionnaire for Children (Muris et al., 2001). Adolescents were provided with three sentences and were requested to choose the description that applied best to how they felt and perceived their relationships with peers. The three sentences were: (1) “I find it easy to become close friends with other youth. I trust them and I am comfortable depending on them. I do not worry about being abandoned or about another peer getting too close friends with me” (secure); (2) “I am uncomfortable being close friends with other youth. I find it difficult to trust them completely and to depend on them. I get nervous when another peer wants to become close friends with me. Friends often come closer to me than I want them to” (insecure-avoidant); (3) “I often find that other youth do not want to get as close as I would like them to be. I am often worried that my best friend doesn't really like me and wants to end our friendship. I prefer to do everything together with my best friend. However, this desire sometimes scares other peers away” (insecure-ambivalent). This instrument has shown good convergent and discriminant validity, with secure attachment style being positively linked to trust (Muris et al., 2001), and avoidant and ambivalent styles being associated with higher levels of psychological distress (Ko et al., 2019; Muris et al., 2003). In the current study, we first calculated the distribution of friendship attachment styles categorized as 1 = secure, 2 = insecure-avoidant, and 3 = insecure-ambivalent. Then, to compute descriptive statistics and regression analysis, we combined the avoidant and ambivalent insecure styles into one insecure category and recoded friendship attachment style as 1 = secure and 2 = insecure (avoidant and ambivalent) following prior research (Cook et al., 2016; Heinze et al., 2018) to increase parsimony.

2.3.4 | Intolerance of uncertainty

Qualitative reports. We asked participants to answer the following question: “How are you coping with the present COVID-19 related uncertain situation? And how do you react to uncertainty in general?”

Quantitative reports. Intolerance of uncertainty was measured using the Intolerance of Uncertainty Scale—Short Form (Carleton et al., 2007). Participants were asked to express their level of agreement with 12 items (e.g., “I always want to know what the future has in store for me”; “When I am uncertain I can't function very well”); responses range from 1 = “not at all characteristic of me” to 5 = “entirely characteristic of me.” This instrument has been validated in various countries, including Italy (Lauriola et al., 2016), and has been used with adolescents (e.g., Dekkers et al., 2017). Cronbach α for this instrument was 0.67, 95% CI [0.56–0.75].

2.3.5 | Psychological distress

We used the Patient Health Questionnaire-4 (Kroenke et al., 2009), which assesses the frequency of symptoms of depression (e.g., “little pleasure in doing things”) and anxiety (e.g., “feeling nervous”) over the past 2 weeks. Response options range from 0 = never at all to 3 = almost everyday; a high cumulative score indicates a higher degree of psychological distress. The total score ranges from 0 to 12, with 6 being the recommended cut-point to detect moderate/severe distress. In our sample, 51% ($N = 41$) of participants reported moderate to severe levels of psychological distress. The Patient Health Questionnaire-4 has been previously validated, showing good reliability and invariance across different ethnic groups (Tibubos & Kröger, 2020). In the present study, Cronbach α for this scale was 0.63, 95% CI [0.44–0.74].

2.4 | Analyses

Qualitative analyses were conducted using thematic content analysis (see Boyatzis, 1998; Ceccon & Moscardino, 2022; Moscardino et al., 2007). This method entails the following phases: (1) two independent coders (i.e., the first author and

another research team member blind to the study hypotheses) read through each participant's responses to familiarize with the data; (2) based on recurring themes identified in the participants' responses, each coder developed a list of codes/labels which also included quotes to illustrate each theme; (3) the two researchers independently coded a subsample of interviews ($n = 10$) using the thematic categories independently identified to assess interrater reliability. The mean percentage of agreement between coders was 91% (range = 87–100). Next, the two coders collapsed overlapping categories and, in case of differing categories, they discussed until agreement was reached. After achieving agreement on each theme, the codes were applied to all the interviews. Finally, qualitative data were transformed into categorical data (i.e., percentage of the frequency with which the themes appear). Themes for each open-ended question and their percentages are presented in Table 2.

Quantitative analyses were conducted using IBM SPSS statistics (version 26, IBM CORP) and R. In preliminary analyses, we screened for and handled missing data. Only 1 participant had missing values in the questionnaires. Specifically, 1.25% ($n = 1$) had more than 10% of missing values in the Patient Health Questionnaire-4 (i.e., did not respond to 1 of 4 items), but there was no recurrent response pattern. Hence, we used a mean imputation method for this score. Furthermore, there were no missing values in the Attachment Questionnaire for Children or in the Intolerance of Uncertainty Scale—Short Form. We then computed descriptive statistics and bivariate correlations for sociodemographic variables, COVID-19 perceived dangerousness and likelihood of infection, friendship attachment style, intolerance of uncertainty, and psychological distress (see Table 3). In addition, with respect to our third aim, we used multiple linear regression analysis. Friendship attachment style and intolerance of uncertainty were entered as independent variables, and psychological distress was considered as the dependent variable. Given that time since arrival in the receiving country may impact negatively on UIMs' adjustment (Oppedal et al., 2020), and because older unaccompanied refugee adolescents tend to report more mental health problems than younger ones (Bamford et al., 2021), these variables were controlled for in the analysis. We also included COVID-19 perceived dangerousness and likelihood of infection as covariates in the model to account for pandemic-related factors that have been shown to be associated with greater psychological distress in the general population (Li & Lyu, 2021; Serafini et al., 2020).

We adopted a simultaneous bidirectional framework to present our findings, because the two types of data (i.e., qualitative and quantitative) were integrated after conducting the thematic and statistical analyses (Fetters et al., 2013; Moseholm & Fetters, 2017). To this end, we organized the Results section into three subsections corresponding to each of our aims, with qualitative results describing contents and quotes related to the common themes identified in participants' answers to open-ended questions, followed by quantitative results. The findings obtained from both methods were then compared and merged for interpretation in the Discussion.

3 | RESULTS

3.1 | Friendship attachment style

UIMs' narratives with respect to their relationships with friends revolved around six main themes (see Table 2). Interestingly, lack of trust emerged as a prominent theme among more than half of the sample: "First, I need to observe the person, I have to see if they have a 'good soul': I don't care where they come from or what they believe in, but how they behave." Participants explained that they often felt reluctant to fully trust others and were cautious towards new friendships, especially after their migration experience or because they grew up in dangerous environments: "I don't trust others easily, I am afraid because people are only interested in money: I know this, because I grew up on the streets and it worked that way."; "I trusted people before arriving here, but now I try to give as little trust as possible: I saw many things during my journey...". Nonetheless, several participants felt surrounded by positive relationships with peers and reported having a lot of friends, while only a few said they usually preferred to stay on their own. Beyond their established friendships, several interviewees found it hard to make friends for a number of reasons, such as fear of others' judgment, their own personality (i.e., being shy, reserved, or wary), or factors related to the country of resettlement: "When I was in Bangladesh it was easy to make friends: it's more difficult if you don't speak the same language, and there are few chances to meet people 'in the flesh' because of COVID." In addition, some participants specified a relevant difference between "real friends" and "face friends" or acquaintances, and how it was extremely difficult, but rewarding, to build deep and enduring friendships: "My true friends are like 'brothers' to me and I trust them blindly, not like my 'just' friends." Of note, various participants also compared their emotional bond with friends from their home country and friends met in the receiving country: some said they felt equally close to both "old" and "new" friends, some differentiated between them and reported trusting and having more frequent contacts with friends from the home country, or that in Italy they had befriended mostly other compatriots or peers with an immigrant background like themselves.

Despite the trust issues and difficulties revealed by the thematic analysis, the majority of participants (69%) identified themselves with the description of the secure friendship attachment style when responding to the Attachment Questionnaire for Children (Muris et al., 2001). Among the insecurely attached participants (the remaining 31%), 21% recognized themselves in the description of the insecure-avoidant style, and 10% in the insecure-ambivalent one (see Figure 1).

TABLE 2 Themes emerging across participants in response to open-ended questions, N = 80.

Question	Theme (label)	Explanation	Examples of verbatim quotes	N (%)
How are your relationships with your friends?	(1) Trust issues/lack of trust in peers	The participant describes himself as someone who doesn't easily trust others or takes a long time before trusting someone	"I trusted people before arriving here, but now I try to give as little trust as possible: I saw many things during my journey..." "I have a hard time figuring out whom to trust, you can tell over time. I hardly trust people and open up to them. Not everyone is good."	41 (51.9)
	(2) Being surrounded by many friends	The participant refers to be surrounded by many friends and characterizes these bonds as positive relationships	"I have many friends and a girlfriend here in Italy. I am in touch with my family and friends who are in Senegal, but I also have many friendships in Parma as well. Right from the start, I have met people with whom I'm very close." "I have many friends and never feel lonely, even during the lockdown I always had someone I could talk to."	27 (33.8)
	(3) Difficulties or obstacles in making new friends	The participant says it's difficult for him to make new friends, bringing both personal reasons (e.g., being shy) or contextual postmigration reasons (e.g., obstacles in making friends because of the language, COVID, being in a residential care community,...)	"It is not easy for me to make friends, I am often afraid of what they think of me, which is why I have a hard time being the first to 'jump' into a friendship." "When I was in Bangladesh it was easy to make friends: it's more difficult if you don't speak the same language, and there are few chances to meet people 'in the flesh' because of COVID."	16 (20)
	(4) Comparison between friends in home country and receiving country	The participants refers to both friends from his home country and friends met in the receiving country, by either highlighting similarities or differences between the two (e.g., being closer to friends from home country)	"I have many friends in both Italy and Pakistan, with whom I can talk about everything." "I only trust people I know since when I was in Bangladesh, I don't trust that much my Italian friends."	16 (20)
	(5) Distinction between "true" friends and acquaintances	The participant mentions a difference among types of friendships, in particular between "true" friends (whom they trust, have known for longer, are a good example for them, but are usually not many) and "superficial" friends (who are more numerous than the "real" ones, but they don't trust or rely on them)	"My true friends are like 'brothers' to me and I trust them blindly, not like my 'just' friends..." "I have many friends, making friends is easy; however, it is difficult to form a deep, true relationship."	15 (18.8)
	(6) Preference to stay on their own	The participant reports he prefers being on his own, doing things by himself and not being around people, or even sometimes pushing away friends	"I would rather do things by myself than ask for help. Sometimes my friends, even the ones I had in Pakistan, I felt they were too close and sometimes I wanted to push them away." "I prefer to be alone, I have only one friend whom I hear from often and who is close to me."	6 (7.5)

TABLE 2 (Continued)

Question	Theme (label)	Explanation	Examples of verbatim quotes	N (%)
How are you coping with the present COVID-19 related uncertain situation? And how do you react to uncertainty in general?	Negative emotional reactions	The participant describes negative emotional reactions (e.g., nervousness, worries, concern, fear) to the uncertainty caused by the pandemic or uncertain situations in general.	<p>"I get nervous about the COVID-19, because of this uncertainty I can't make plans for my future."</p> <p>"Uncertainty makes me feel in the middle of the sea, and it suffocates me. I try to think as little as possible about the things that I'm worried about, otherwise I'll feel bad about it."</p>	26 (32.5)
	Optimistic and resilient attitude	The participant reports to feel calm and optimistic about future developments of the COVID-19 situation. Explanations point to personal strength/resilience, planning abilities, or other coping strategies (e.g., religious coping) in the face of uncertainty	<p>"This situation will get better. Getting stuck in the face of uncertainty is not an answer; you have to figure things out, then deal with them. I don't always like thinking about a plan B, but I know I have to, so I do."</p> <p>"I'm fine, what will happen depends on God, so I feel calm."</p>	16 (20)
	Being used to uncertain situations	The participant mentions being used to uncertainty in his present condition and, despite a sense of wait and/or tiredness, he affirms that this helps him dealing with the COVID-19 situation	<p>"I'm waiting, I just keep doing the things I usually do. I'm used to uncertainty, when I'm faced with it I always do my best"</p>	8 (10)

TABLE 3 Correlations and descriptive statistics for study variables, *N* = 80.

	1.	2.	3.	4.	5.	6.	7.
1. Friendship attachment style		0.25*	0.24*	-0.04	0.04	-0.25*	0.02
2. Intolerance of uncertainty			0.15*	-0.02	0.04	-0.15	-0.03
3. Psychological distress				0.16	-0.05	-0.24*	0.10
4. Perception of COVID-19 dangerousness					0.38**	-0.25*	0.22
5. Perception of COVID-19 likelihood of infection						-0.01	0.13
6. Time since arrival in residential care community							-0.06
7. Age							
<i>M</i> (<i>SD</i>)	1.31 (0.47)	2.40 (0.54)	5.64 (3.10)	2.99 (1.20)	54.16 (30.34)	17.30 (10.05)	17.18 (0.84)

Note: Friendship attachment style was coded as 1 = secure, 2 = insecure (avoidant/ambivalent).

p* < .05; *p* < .001.

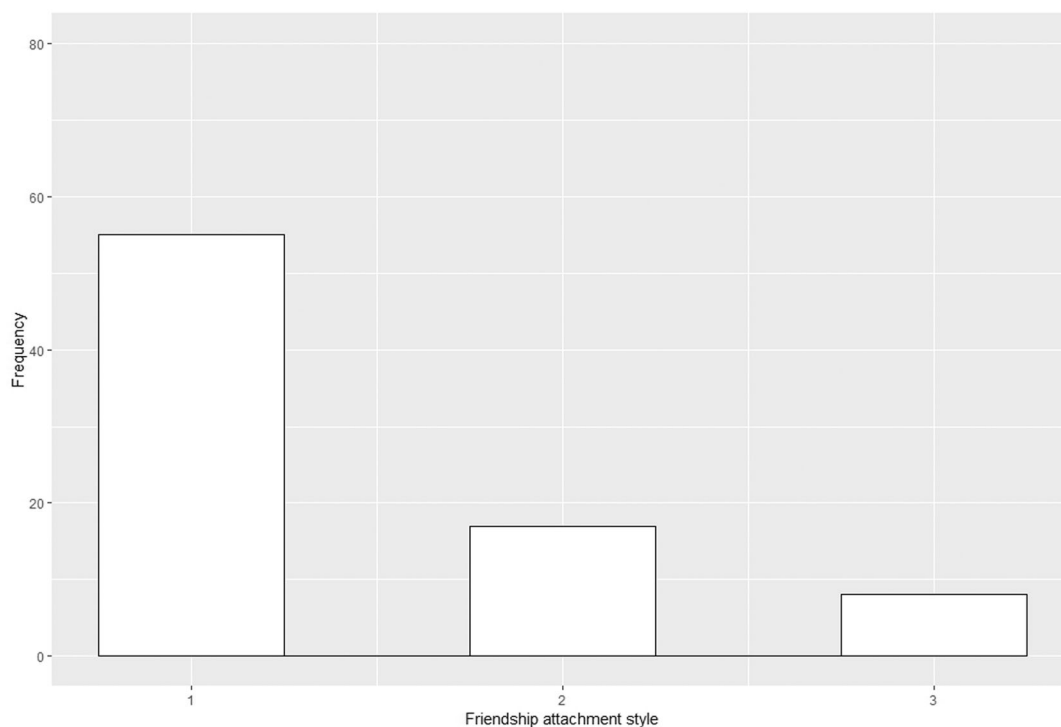


FIGURE 1 Distribution of friendship attachment styles, *N* = 80. Friendship attachment style was coded as 1 = secure, 2 = insecure-avoidant, 3 = insecure-ambivalent.

3.2 | Intolerance of uncertainty

Participants' answers to open-ended questions evidenced three different attitudes/emotional reactions in the face of uncertainty and, more specifically, toward the ongoing pandemic situation. Many interviewees described negative emotional reactions, namely nervousness and worry, exacerbated by the pandemic but often present in their everyday lives: "Sometimes questions keep coming to my mind and I wonder what will happen... But really, even without the COVID we don't know what will happen tomorrow, so we are always in uncertainty, although maybe a little more now." On the other hand, several participants appeared to be calm and optimistic about future developments. Some of them felt confident in their own personal strength or planning abilities to deal with uncertain situations ("The more difficulties one encounters, the more mature one becomes"; "I have my plan A, but also a plan B and C"), while others relied on other coping strategies, such as their religious faith ("I'm not nervous because Allah decides my future, so he will decide well for me"). Another recurring theme was being used to uncertainty: this state of limbo and waiting was

associated with sensations like “boredom” and “tiredness,” but also with being more equipped to deal with the COVID-related situation: “I’m waiting, I just keep doing the things I usually do. I’m used to uncertainty, when I’m faced with it I always do my best.” The coexistence among participants of negative feelings triggered by uncertainty and resilience was mirrored by quantitative scores, which showed a low-to-moderate mean level of intolerance of uncertainty (see Table 3).

3.3 | Associations among friendship attachment style, intolerance of uncertainty, and psychological distress

Bivariate correlations showed a significant positive association between insecure friendship attachment style and intolerance of uncertainty. In addition, these variables were linked to more psychological distress.

Results of multiple linear regression analysis are reported in Table 4. The overall regression model was statistically significant ($R^2 = 0.18$, $F(7, 70) = 2.243$, $p = .041$). Insecure attachment style and intolerance of uncertainty were each independently and significantly associated with higher levels of psychological distress. Moreover, a significant interaction between friendship attachment style and intolerance of uncertainty emerged, with the association between intolerance of uncertainty and psychological distress varying across securely and insecurely attached participants. The graphical representation of this interaction (see Figure 2) suggests a protective role of secure friendship attachment style, but only at low levels of intolerance of uncertainty.

TABLE 4 Multiple linear regression on psychological distress, $N = 80$.

	β (SE)	t	p	η_p^2
Age	0.16 (0.42)	0.387	.700	0.01
Time since arrival in residential care community (months)	-0.05 (0.04)	-1.258	.212	0.02
COVID-19 likelihood of infection	-0.02 (0.01)	-1.509	.136	0.03
COVID-19 perceived dangerousness	0.47 (0.36)	1.306	.196	0.02
Friendship attachment style	9.43 (3.97)	2.375	.020	0.04
Intolerance of uncertainty	4.53 (2.03)	2.233	.029	0.01
Friendship attachment style x Intolerance of uncertainty	-3.20 (1.54)	-2.078	.041	0.06

Note: Friendship attachment style was coded as 1 = secure, 2 = insecure (avoidant/ambivalent).

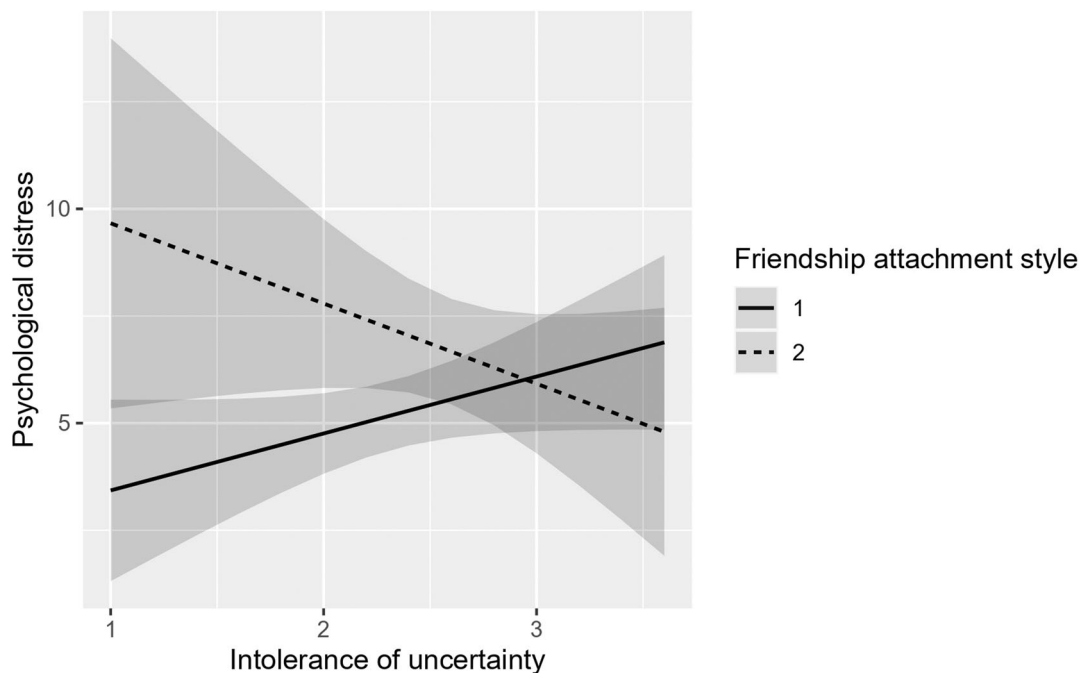


FIGURE 2 Interaction between friendship attachment style and intolerance of uncertainty on psychological distress, $N = 80$. Friendship attachment style was coded as 1 = secure, 2 = insecure (avoidant/ambivalent).

However, because no significant slopes emerged,¹ we cannot draw any further conclusion with respect to differential effects among different groups of participants (e.g., less or more intolerance of uncertainty).

4 | DISCUSSION

The current study provides a novel contribution to the emerging literature concerning friendship attachment style, intolerance of uncertainty, and levels of psychological distress among UIMs during the COVID-19 health emergency. Specifically, we adopted a mixed-method approach to gain a more nuanced understanding of participants' subjective experiences, particularly with regard to their relationships with peers and their ability to tolerate uncertainty.

Our first aim focused on participants' friendship attachment style. While many UIMs appeared to be surrounded by friends, several also described unique difficulties in building new friendships, including cultural and linguistic barriers, which often led UIMs to befriend mostly other migrant youth rather than local, nonmigrant adolescents (Ní Raghallaigh, 2011a). This is not surprising, since poor language proficiency and lack of social support, together with experiences of discrimination and daily hassles, have been identified among the most frequent postmigration stressors faced by UIMs (Bamford et al., 2021). Interestingly, some participants spontaneously referred to a difference between friends from their home country and peers met in the receiving country, that is, feeling closer or trusting more those friendships established before migration, while others equally valued the "new" friendships in Italy. Another recurrent theme concerned issues of trust that frequently originated from hardships experienced during these adolescents' childhood in their home country as well as from migration-related traumatic experiences, a finding that aligns with extant research on refugee and asylum seeking youth (Essex et al., 2022). The dimension of trust is a key aspect of peer relationships in adolescence: a meta-analysis on peer attachment and internalizing problems showed how trust, together with alienation, was the factor more strongly related to adolescents' depressive symptoms (Gorrese, 2016).

Partially contrasting the qualitative findings which highlighted trust issues and obstacles in building new friendships in the receiving country (which are specific and salient to our participants' condition), the majority of interviewed UIMs (69%) could be classified into the secure attachment pattern, whereas the remaining 31% reported an insecure attachment pattern. Although caution is needed when interpreting this result, it resembles prior studies using the same measure with adolescents, in which most participants identified themselves with the secure friendship attachment style (63%, Nishikawa et al., 2010; 77%, Puissant et al., 2011). It should be noted, however, that the Attachment Questionnaire for Children asks participants to report on their overall attachment style over time: this might explain why the majority of UIMs described themselves as securely attached. Indeed, while negative relational events experienced during or after migration might have impacted on these youths' attitudes toward befriending or trusting peers, attachment styles tend to remain stable over time (Jones et al., 2018). Specifically, secure individuals have been found to maintain a secure style even in the face of potentially traumatic events, while insecure individuals might be more vulnerable to change as a function of both individual characteristics (e.g., coping strategies, adjustment) and contextual changing circumstances (Zhang & Labouvie-Vief, 2004). Overall, this partial discrepancy between qualitative and quantitative results supports the usefulness of adopting mixed-method approaches, not only to confirm and expand similar findings, but also to detect different nuances that might be captured only by distinct sources (Mertens & Hesse-Biber, 2012).

The second aim was to examine intolerance of uncertainty, a construct that has largely been neglected among the UIM population despite their existential condition of uncertainty in relation to their legal status (El-Shaarawi, 2015). In answers to open-ended questions, participants admitted to be affected by worry and concern about the future, but they also felt confident in their planning and coping strategies to overcome the uncertainty connected to the pandemic. Consistent with previous studies involving both Muslim and Christian refugees and UIMs (Adedoyin et al., 2016; Ní Raghallaigh, 2011b), a few participants also indicated their religious beliefs as a source of support and strength in uncertain times. With respect to quantitative data, in the present study participants reported a low-to medium level of intolerance of uncertainty. This moderate level might be explained as a result of the same pattern elicited by qualitative answers, that is, exhibiting a negative emotional response but still being able to function on a cognitive and behavioral level in the face of uncertainty. Our study suggests that this collective emergency likely contributed to heightening the unstable condition experienced by UIMs, as shown by the interviewees' answers reporting feelings of fear and anxiety when dealing with the current situation. This uncertainty, however, preceded the pandemic outbreak and had continuity throughout their migration process, which led them to develop effective coping strategies that they were able to employ in the face of this further stressor. This seems to be supported also by quantitative data in the regression analysis, revealing no significant effect of COVID-19 perceived dangerousness and likelihood of infection on psychological distress.

¹To probe the interaction effect, a simple slope analysis was performed via the package *interactions* (Long, 2019) in R software. No significant slopes emerged, neither among participants with a secure attachment style ($\beta = 1.45$, $SE = 0.87$, $p = .10$) nor among those with an insecure attachment style ($\beta = -2.24$, $SE = 1.52$, $p = .14$).

As regards our third aim, although open-ended questions did not specifically address interactions among our study variables, as previously mentioned many interviewees reported feelings of “nervousness,” “fear,” “worry,” and “concern” with respect to the ongoing pandemic situation when describing their emotional reactions and attitudes toward uncertainty. This pattern was corroborated by the quantitative analysis showing a significant positive correlation between intolerance of uncertainty and psychological distress. At the bivariate level, we also found a positive association between insecure friendship attachment style and intolerance of uncertainty, confirming prior studies which reported a similar link between insecure attachment patterns and the inability to tolerate uncertain situations (Wright et al., 2017; Zdebik et al., 2022).

At the multivariate level, the regression analysis indicated that both insecure friendship attachment style and more intolerance of uncertainty were linked to higher levels of psychological distress. This finding supports previous research on adolescents showing that insecure friendship attachment and low tolerance of uncertain situations are associated with poorer mental health outcomes (Cook et al., 2016; Rosser, 2019), also among immigrant populations (Urzúa et al., 2023). Indeed, insecure working models of attachment can negatively impact on individuals' expectations of others as being a source of security and support, possibly leading to mental health problems (Mikulincer & Shaver, 2007). Furthermore, those who have difficulty dealing with uncertain situations tend to experience anxiety and worry, which are two main manifestations of psychological distress (Rosser, 2019). Our study also revealed a significant interaction between friendship attachment style and intolerance of uncertainty on psychological distress indicating that a secure attachment style, in combination with low intolerance of uncertainty, may be associated with less psychological distress. Although this finding needs to be interpreted with caution and warrants replication due to the nonsignificant slopes and the limited proportion of insecurely attached UIMs (31%, $n = 25$) on the total sample, it suggests that the relation between intolerance of uncertainty and psychological distress varies across secure and insecure attachment styles. In particular, peer support and attachment—especially in the absence of family members—might buffer the detrimental effect of the uncertainty intrinsic to UIMs' unique postmigration experience and ultimately help them navigate the acculturation process by increasing cultural competence and promoting their wellbeing and adjustment to the host country (Ní Raghallaigh, 2011a; Oppedal & Idsoe, 2015).

4.1 | Limitations

This study is among the first to explore friendship attachment style, intolerance of uncertainty, and their associations with psychological distress among UIMs in times of COVID-19, providing insights into the subjective experiences of this potentially vulnerable population through the use of a mixed-methods approach. Indeed, participants' qualitative feedback allowed us to better understand the role of the pandemic in their adjustment, integrating recent research that points to an increased distress experienced by immigrant youth (Barn et al., 2021; Ceccon & Moscardino, 2022). However, some limitations need to be acknowledged.

First, the cross-sectional design limits causal inference of the identified associations among our study variables. In particular, the lack of pre-pandemic data precludes a direct comparison of UIM's psychological distress before and during the pandemic. Although this design was motivated by the unique characteristics of UIMs' living conditions (e.g., high mobility and precariousness, difficulty with recruitment), future studies should adopt a longitudinal design to tackle developmental trajectories and test causal relationships among variables to identify the mechanisms underpinning UIMs' psychological adjustment over time in the context of the COVID health emergency (Bonati et al., 2022). Of importance, longitudinal studies would also allow to test possible mediating processes following the extant literature, for example, whether insecure friendship attachment style leads to higher intolerance of uncertainty which, in turn, predicts greater psychological distress (see Zdebik et al., 2022), a hypothesis that could not be addressed in the present study. Second, our participants were recruited by social workers through a nonrandom sampling procedure, which might have caused a bias in the participants' selection. Also, our sample was exclusively composed of male adolescents due to the unbalanced gender distribution of UIMs who migrate to Italy (Save the Children, 2023). Even though this situation is common to many other receiving countries, future studies are needed to investigate the experience of unaccompanied girls, who are at increased risk of experiencing sexual violence and therefore deserve particular attention (Oldroyd et al., 2022). Third, the heterogeneity in terms of participants' countries of origin prevented us from taking possible influences of their cultural values into account. Given that these variables have been found to influence individuals' expectations about intimacy, gender roles, and relationships with peers (Del Giudice, 2019; Wongpakaran et al., 2012), further research may involve larger samples of UIMs representing different cultural groups to ascertain the role of such variable in how UIMs experience attachment relationships with friends and cope with uncertain situations. A fourth limitation concerns the relatively low internal reliability of the measures (i.e., Cronbach's $\alpha = 0.67$ for the Intolerance of Uncertainty Scale—Short Form and 0.63 for the Patient Health Questionnaire-4) in this study, although we had purposely chosen these instruments due to the good psychometric properties exhibited in previous studies with migrant/refugee youth (e.g., Urzúa et al., 2023). This finding might inform future studies on the appropriateness of these questionnaires with the specific population of UIMs. Finally, to shorten the interview and prevent participant fatigue, we assessed only participants' general friendship attachment, without differentiating between

relationships established in the home country before migration and new friendships developed in Italy. Because previous studies evidenced different relational patterns and obstacles in befriending native peers after the migration experience (Ní Raghallaigh, 2011a), and our participants spontaneously reported similar difficulties, future research could further explore this pivotal issue. Moreover, given that parent-child relationships are essential in shaping individuals' internal working models (Gorrese & Ruggieri, 2012), studies that also include a measure of adolescents' attachment to parents/caregivers are warranted to provide a more complete picture of UIMs' attachment styles (Sleijpen et al., 2022).

5 | CONCLUSIONS

To conclude, our study lends support to the view that potentially vulnerable populations like UIMs, despite their condition of existential uncertainty and the many migration-related challenges they face, may display resilience and employ effective coping strategies also in times of collective emergencies like the COVID-19 pandemic. However, the results also indicated that insecure friendship attachment style and higher levels of intolerance of uncertainty were each significantly and independently associated with greater psychological distress, and that the relations between these variables varied according to participants' attachment style. Although further replication is warranted, these findings underscore the potentially protective role of UIMs' sense of trust in peer relationships at certain levels of intolerance of uncertainty, and highlight the usefulness of integrating quantitative and qualitative approaches to obtain a more nuanced picture of UIMs' perceptions and experiences during this unique historical period. Interventions designed to help UIMs form and maintain secure relationships with peers—from their home country as well as from the receiving one—might represent a promising approach to help reduce negative psychological outcomes, strengthen the capacity to cope with postmigration stressors, and ultimately facilitate the acculturation process and intergroup contact (Ní Raghallaigh, 2011a; Rania et al., 2018). Moreover, given the existential condition of uncertainty which characterizes these adolescents' everyday lives, boosting their sense of agency to reduce excessive worry appears essential. To this end, both the provision of psychosocial support or specific evidence-based interventions targeting intolerance of uncertainty (Wahlund et al., 2020), as well as resources for integration into host communities, could help meeting their unique developmental needs and strengthening their resilience.

ACKNOWLEDGEMENTS

This work was supported by a PhD scholarship from the CARIPARO foundation to C. C. We would like to thank all our participants, as well as the social workers and linguistic-cultural mediators who supported the implementation of the study. We are also grateful to Francesca De Sensi, Sara Quattrone, and Arianna Spagni for their help during data collection.

CONFLICT OF INTEREST STATEMENT

The author declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data from the present study is available in the Open Science Framework (OSF) at the following link: <https://osf.io/jx6r7/>.

ETHICS STATEMENT

All study materials and procedures have been approved by the Ethics Committee of the School of Psychology at University of Padova (protocol n. 3805).

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How to cite this article: Cecon, C., & Moscardino, U. (2024). Friendship attachment style, intolerance of uncertainty, and psychological distress among unaccompanied immigrant minors in times of COVID-19. *Journal of Adolescence, 96*, 81–97. <https://doi.org/10.1002/jad.12254>