

## Ataques de Nervios and Somatic Complaints Among Island and Mainland Puerto Rican Children

Irene Lopez,<sup>1</sup> Rafael Ramirez,<sup>2</sup> Peter Guarnaccia,<sup>3</sup> Glorisa Canino<sup>2</sup> & Hector Bird<sup>4</sup>

<sup>1</sup> Department of Psychology, Kenyon College, OH, USA

<sup>2</sup> Behavioral Sciences Research Institute, University of Puerto Rico Medical Sciences Campus, USA

<sup>3</sup> Institute for Health, Health Care Policy and Aging Research, Rutgers University, USA

<sup>4</sup> Department of Psychiatry, Columbia University, USA

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### Correspondence

Irene Lopez, Department of Psychology, Kenyon College, Gambier, OH 43022, USA.

Tel.: (740) 427-5373;

Fax: (740) 427-5237;

E-mail: lopezi@kenyon.edu

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Previous research has documented the association between the Latino cultural idiom of distress, *ataques de nervios* (i.e., “attacks of nerves”), and unexplained neurological symptoms among adults. However, the associations between *ataques* and somatic complaints in children have not been sufficiently explored. Aims: In this study, we assessed the relation between this anxiety-related experience, henceforth *ataques*, and somatic complaints in a probability sample of Puerto Rican youth, ages 5–13 years, living in San Juan, Puerto Rico (N = 1353) and in the South Bronx, New York (N = 1138). When both sites were combined, children with *ataques* were significantly more likely to have either a lifetime prevalence of asthma or headaches, and tended to have more stomach aches and a history of epilepsy or seizure than children without *ataques*. Further within site analyses showed a similar patterning of complaints for the South Bronx sample as for the combined sample. However, children in San Juan with *ataques* were only slightly more likely to experience headaches, and at risk for injury, than those without *ataques*. In addition, comparisons between *ataque* sufferers across sites indicated that children in San Juan with *ataques* were at elevated risk for serious illness or injury in comparison to those in the South Bronx with *ataques*. *Ataques* are significantly associated with a wide range of physical complaints in Puerto Rican youth. However, their pattern of associations differs by context.

Previous research has noted cross-cultural differences in the clinical phenomenology and symptom profiles of various forms of adult psychopathology [1,2]. In particular, this research has highlighted how culture can help shape the meaning and expression of symptomatology, such as in the production of cultural idioms of distress and how, depending on the cultural group studied, these symptoms may take the form of various somatic complaints [3,4]. However, despite this growing awareness with adult populations, empirical research on cultural idioms of distress, and on the general somatic expression of distress, has not been sufficiently explored in diverse groups of children [5]. For Latino children this is particularly unfortunate because they are part of the largest and fastest growing minority group in the United States, with current projections indicating that Latinos will constitute approximately 25% of the population by 2050 [6]. With these concerns,

we present the results of a probability study of Puerto Rican children living in two different contexts, to explore the association between an anxiety-related cultural idiom of distress, namely, *ataques de nervios* (“attacks of nerves”) and its association with physical symptomatology across and within sites.

### Definition and the Prevalence of Ataques de Nervios

Briefly defined, *ataques de nervios* (henceforth *ataques*) are a cultural idiom of distress that has been most extensively studied in Puerto Ricans. Characterized as intense episodes of emotional distress, *ataques* are expressed through a variety of symptoms, such as trembling, crying, convulsions, and screaming, and are often provoked by

disruptions in familial bonds, such as a conflict or a death in the family [7–10]. Among Island residing Puerto Rican adults, past epidemiological research has noted a lifetime estimated prevalence of approximately 14% [11]. Similarly, among Island Puerto Rican children, more recent rates have ranged from 9% to 26% among children in community and clinical settings, respectively [12], to 3% to 4% among representative samples of both continental U.S. (i.e., South Bronx) children and Island children (i.e., San Juan), respectively [13]. As with adults, *ataques* are, therefore, a common experience among children.

## Ataques and Anxiety

Among both age groups, clinical and epidemiological studies have consistently noted that, although some *ataques* may be culturally proscribed and sanctioned, a significant portion are still strongly comorbid with an array of disorders, most notably anxiety disorders [14–16]. In fact, in the most recent study to date, upon which our current study is based, Puerto Rican children with *ataques* were approximately three times more likely to be diagnosed with any anxiety disorder, even after controlling for several sociodemographic covariates and psychosocial stressors [13].

The association between *ataques* and anxiety can partly be explained by new research indicating that *ataque* sufferers have higher levels of anxiety sensitivity, thus further solidifying the comorbidity between *ataques* and anxiety [17]. In addition, as with other anxiety disorders, it may be that people with *ataques* are prone to misinterpreting their bodily sensations and that during times of stress, an *ataque* sufferer may experience hyperarousal, which may lead to belabored breathing, and subsequently initiate a cycle of further arousal, fear, and catastrophic cognitions [18].

## Ataques and Physical Symptoms

Symptomatically, the emphasis on the bodily experience of *ataques* is in keeping with past epidemiological studies that have consistently shown that Puerto Ricans report higher rates of somatic symptoms in comparison to Whites and other Latinos, such as Mexican Americans [19], even after controlling for a host of sociodemographic factors [20,21]. More specifically, clinical research has noted a significant association between *ataques* and unexplained neurological symptoms among Latinos [22]. For Latino children, somatic expression of distress is particularly relevant because a growing body of research is beginning to document that anxiety-related disorders manifest themselves somatically [23]. Thus, the primary

aim of this study was to ascertain whether *ataques*, due to its previously established relationship to anxiety, would also be associated with physical symptoms and impairment among Puerto Rican children.

With regards to the choice of somatic complaints, we were particularly interested in investigating the association of *ataques* with well-known markers of physical distress, such as headaches and stomach aches, because past epidemiological research has noted that these two symptoms are the most frequently experienced pediatric symptoms worldwide [24–26] and continue to increase in prevalence [24,27]. Related to this, we also wished to assess whether there was a relation between having an *ataque* and being diagnosed by a doctor with any other serious illness or injury, given that past research has indicated that *ataques* may be related to aggression and violence [8].

In addition, we wished to investigate the association between *ataques* and other symptoms that were more pronounced among Puerto Ricans, such as asthma. In the United States, pediatric asthma is the most common chronic condition affecting children, affecting 13% of all children in the United States between the ages of 2–17 years [28]. In comparison to White and Black children, who have lifetime asthma prevalence rates of 13% and 16%, respectively, Puerto Rican children have a lifetime asthma prevalence of 26% [28]. In addition, they have the highest rates of age-adjusted death rates from asthma [29]. Furthermore, within this population, studies have noted that pediatric asthma is related to childhood psychopathology, such as anxiety disorders [30].

Similarly, epilepsy, which is the most common neurological disease in children, and has an estimated prevalence of 0.05–1%, has also been found to be related with a host of emotional problems and childhood psychopathology [31]. In addition, we were interested in assessing the association of *ataques* to epilepsy because epilepsy can be often confused with having an *ataque*. In fact, among Latinos, both epilepsy and asthma are often referred to as simply having an *ataque* perhaps because of the convulsions that characterize these two experiences. With this in mind, we also wished to assess whether there was a relation between having an *ataque* and being impaired, either because children were identified as being limited in their current activities, or because of previous hospitalization due to any other physical illness, injury, or asthma.

## Ataques and Context

Within this framework, we believe it is important to also assess the role of context in understanding the association

between *ataques* and somatic complaints. This is because previous research has indicated that not only do Puerto Rican children have different psychosocial profiles depending on where they live [32–34], but the psychosocial correlates of *ataques* may also differ by context [13]. For example, Puerto Rican children residing in the mainland (e.g., the South Bronx) are more likely to live in single-headed households and to have less educated mothers than their peers in San Juan [34]. In addition, despite similar rates of *ataques* among Island and mainland Puerto Rican children, *ataques* are associated with worse outcomes among mainland children, such as greater stressful life events and more exposure to violence [13]. Thus, we sought to explore whether there would be a site difference in somatic complaints as indexed by *ataque* status.

## Goals of this Study

With these concerns in mind, we present the results of a comparative study of *ataques de nervios* using cross-sectional data from a study that included representative samples of Puerto Rican children living in the South Bronx, New York, and in the San Juan metropolitan area in Puerto Rico [32–34]. Using a series of across and within site comparisons of children with and without *ataques*, we examined the association of *ataques* and various somatic complaints. We hypothesized that *ataques* would be related to physical complaints for both sets of children but that *ataques* would be associated with greater physical distress and impairment in Puerto Rico because we believed that *ataques* would be more salient in Puerto Rico and, as an anxiety-related experience, would put this sample at greater risk for illness. In addition, we predicted that the relation between *ataques* and asthma would be greater for children residing in Puerto Rico because of the high frequency of asthma in this site.

## Method

### Participants

Participants were Puerto Rican youth ( $N = 2951$ ), ages 5–13 years, and their caregivers. Youth were either residing in the South Bronx, New York ( $N = 1138$ ), an area with the largest Puerto Rican population outside of Puerto Rico (U.S. Census, 2001), or the Standard Metropolitan Areas in Puerto Rico, which comprises the more densely populated areas in the northeast section of Puerto Rico, including the San Juan and Caguas metropolitan areas ( $N = 1353$ ). The biological mother was the adult informant in 89% of the cases.

Previous research on this sample showed that in the South Bronx, 4.3% of children were identified as having lifetime *ataques* ( $N = 50$ ) compared to 5.4% in San Juan ( $N = 74$ ), indicating that there were no significant site differences in lifetime estimated prevalence of *ataques*. In addition, we did not find any differences in the occurrence of *ataques* between girls and boys; although in San Juan, girls were more likely to have *ataques* than girls in the South Bronx, 6.8% versus 4% [13].

Across both samples, children with *ataques* were more likely to be older than those without *ataques*, South Bronx (9.8 vs. 9.2 years) and San Juan (10.3 vs. 9.1 years). However, there were no age differences between the two *ataque* subgroups and in both sites the mean age of the first episode was 7.8, with a similar age range of 2–13 years in both samples. Both samples had approximately one *ataque* in the last year, 1.34 versus 1.46 in San Juan and the South Bronx, respectively. More specifically, across both samples, over half of all participants reported having anywhere from 1 to 3 *ataques* in the last year (i.e., 57% and 61% in the South Bronx and San Juan, respectively).

### Sample Design and Procedure

This study was part of a larger study whose aim was to assess and compare the level of psychopathology among Puerto Rican youth in two different contexts [32–34]. To be eligible for the study, a household had to include at least one child, and a residing primary caregiver, who identified as Puerto Rican. Whenever possible, parents and children were simultaneously interviewed by different interviewers in the language of their choice. In the South Bronx sample, an overwhelming majority of parents (75%) and children (97%) completed their interviews in English, whereas all the subjects completed their interviews in Spanish in San Juan. Interviews typically took place in the home.

Data for this study were collected and analyzed following approvals by the Institutional Review Boards at the New York State Psychiatric Institute, the University of Puerto Rico Medical School, and Rutgers University. Informed consent was obtained from all adult informants and assent was obtained for all children over 7 years old. With parental and child approval, interviews were audiotaped and 15% of all interviews were systematically spot-checked for quality control. Upon completion, each parent–child dyad received 75 dollars. The overall response rate was 84.4% (80.5% and 88.7% for the South Bronx and San Juan, respectively). The majority of the interviews were conducted between 2001 and 2004.

## Measures

### Translation

All questions were translated from English into Spanish, back-translated, and culturally adapted to ensure that they would be equivalent to their originals using established research methods [35]. All questionnaires were administered and coded by trained lay interviewers using laptop computers.

### Ataques de Nervios

In accordance with past research, children 9 and older self-identified whether they ever had an *ataque*, whereas caregivers identified whether younger children ever had an *ataque* [11–13,16]. In keeping with previous psychiatric epidemiological methods [36], children were identified as having an *ataque* when either they, or their adult informant, reported this experience [11,13].

### Somatic Symptoms

Caregivers were asked a variety of questions regarding the health of their children and whether they believed their children were limited in any way due to these conditions or symptoms. In particular, caregivers were asked if their children had ever had asthma or been hospitalized for asthma. In addition, they were asked if their children ever had frequent and strong stomach aches, frequent headaches or migraines, and a seizure or a history of epilepsy. Finally, they were asked if their children were ever diagnosed by a doctor with any other serious illness or injury, had ever been hospitalized for any other physical illness or injury, and if their children were currently limited in activities because of any physical impairment, condition, or other health problem.

## Statistical Analyses

Data analyses were conducted using specialized statistical software, SUDAAN, which adjusted for differences in the probability of selection and for the multistage cluster design [37]. In addition, the data were weighted to match the age and gender distributions of the 2000 U.S. Census. All parameters in the statistical model were estimated with Taylor series linearization methods. In addition, we used robust standard errors [38]. Although SUDAAN does not allow for the adjustments of confidence intervals, to account for multiple comparisons, the  $\alpha$  level was raised to 0.01. All such adjusted  $p$ -values are provided.

Data analyses were conducted in three phases. First, the overall prevalence for somatic complaints and impairment were computed for each site. Second, we computed the odds ratios of having each complaint and impairment as indexed by *ataque* status for the combined sample, as well as within each sample. Finally, we directly compared *ataque* sufferers with each other across sites.

## Results

### General Prevalence Rates of Somatic Complaints

As shown in Table 1, approximately 15% and 12% of the combined sample were identified as having headaches and stomach aches, respectively, although more children in San Juan were identified as having these ailments than children in the South Bronx (21% vs. 14% for headaches and 20% vs. 10% for stomach aches). Children in San Juan were also more likely to have been diagnosed with an illness or injury than their peers in the South Bronx, 14% versus 9%.

The prevalence of asthma was exceptionally high in both sites, with over a third of the combined sample reporting that their children had asthma (see Table 1). In

**Table 1** Comparison of physical symptoms of children across sites

	Combined sample (N = 2491)	South Bronx (N = 1138)	San Juan (N = 1353)	Contrasts $X^2$
Asthma	36.81% (958)	35.90% (401)	41.69% (557)	5.48 <sup>†</sup>
Hx for asthma	14.44% (417)	13.35% (146)	20.26% (271)	14.06**
Headaches	15.07% (480)	13.87% (164)	21.52% (316)	24.63***
Stomach aches	12.08% (401)	10.55% (122)	20.26% (279)	36.99***
Illness/injury	10.37% (320)	9.60% (111)	14.48% (209)	10.12*
Seizure/epilepsy	3.57% (106)	3.39% (39)	4.53% (67)	1.28
Limited activities	6.62% (153)	6.88% (81)	5.10% (72)	3.29
Hx for other illness	15.88% (493)	14.43% (167)	23.60% (326)	24.48***

Note: Percentages were weighted to adjust for complex sampling design. Actual sample size is unweighted and in parenthesis.

Hx = hospitalization.

<sup>†</sup> $p < 0.02$ ; \* $p < 0.01$ ; \*\* $p < 0.001$ ; \*\*\* $p < 0.0001$ .

addition, there was a tendency for more children in San Juan to have asthma than in the South Bronx, 42% versus 36%, respectively. Furthermore, although approximately 14% of the children had been hospitalized for asthma across both sites, significantly more children in San Juan were hospitalized for asthma than in the South Bronx, 20% versus 13%, respectively. In contrast, the rate of seizure/epilepsy was approximately 3% for both samples.

Approximately, 6% of the entire sample reported that their children were currently limited in their activities because of some physical impairment, condition, or other health problem. In addition, close to 16% of the entire sample reported that their children had at some point been hospitalized for another physical illness or injury, with a significantly greater percentage of children in San Juan being admitted than children in the South Bronx, 24% versus 14%, respectively.

### Ataques and Somatic Complaints in the Combined Sample

Table 2 details the somatic profile of children with and without a lifetime history of *ataques* for both sites combined, as well as within each site. When both sites were combined, there was a significant association between *ataque* status, asthma, and headaches. Specifically, children with *ataques* were twice as likely to be identified as asthmatic and to have headaches as those without *ataques*.

Children with *ataques* also had a tendency to have frequent and strong stomach aches, to have a history of either seizures or epilepsy, and to be more limited in their activities than children without *ataques*. However, there were no associations between *ataque* status and

any type of hospitalization, nor were *ataques* associated with any other serious illness or injury in the combined sample.

### Ataques and Somatic Complaints Within the South Bronx

Within each sample, these same patterns of associations generally held true for children with *ataques* in the South Bronx. In particular, children in New York who had *ataques* were three times more likely to have asthma than those without *ataques*. In addition, they were approximately two and a half times as likely to have frequent headaches or migraines. They also had a tendency to experience more stomachaches and to have a history of seizures or epilepsy than those without *ataques* in New York. Finally, as in the larger sample, there were no associations between *ataque* status and any type of hospitalization or any other seriously diagnosable illness or injury.

### Ataques and Somatic Complaints Within San Juan

In San Juan, a much different picture emerged with regards to the association between childhood *ataques* and somatic complaints. For the most part, there were no significant associations between *ataques* and somatic complaints or impairment. Instead, there was only a tendency for children with *ataques* to have frequent headaches and to be at elevated risk for serious illness or injury in comparison to their peers without *ataques* in Puerto Rico.

**Table 2** Odds ratio of somatic complaints for children with lifetime history of *ataques de nervios*

	Combined sample (N = 2491)		South Bronx (N = 1138)		San Juan (N = 1353)	
	OR	95% CI	OR	95% CI	OR	95% CI
Asthma	2.74	1.45–5.18*	3.20	1.44–7.09*	1.39	0.84–2.28
Hx for asthma	1.05	0.57–1.93	0.95	0.42–2.12	1.30	0.69–2.44
Headaches	2.39	1.38–4.12*	2.46	1.25–4.83**	2.02	1.15–3.54†
Stomach aches	2.14	1.17–3.94‡	2.28	1.05–4.98†	1.63	0.94–2.81
Illness/Injury	0.83	0.42–1.64	0.51	0.16–1.68	1.95	0.99–3.83†
Seizure/epilepsy	3.62	1.29–10.16‡	4.19	1.28–13.75‡	1.77	0.76–4.15
Limited activities	1.95	1.00–3.83†	2.06	0.96–4.40	1.52	0.58–3.97
Hx for other illness	1.28	0.74–2.22	1.37	0.70–2.68	.96	0.46–1.98

Note: Percentages were weighted percentages to adjust for complex sampling design.

Hx = hospitalization.

† $p < 0.05$ ; ‡ $p < 0.02$ ; \* $p < 0.01$ ; \*\* $p < 0.001$ .

**Table 3** Comparison of children with lifetime history of *ataques de nervios* across sites

	Total ataque (N = 124)	South Bronx (N = 50)	San Juan (N = 74)	Contrasts $\chi^2$
Asthma Hx	15.01%	12.80%	24.57%	2.50
Asthma	60.43%	63.01%	49.42%	1.43
Headaches	28.74%	27.39%	34.47%	0.62
Stomach aches	22.03%	20.48%	28.67%	1.01
Illness/injury	8.84%	5.29%	23.99%	8.87*
Seizure/epilepsy	10.79%	11.56%	7.49%	0.32
Limited activities	11.74%	12.77%	7.36%	1.04
Hx for other illness	19.37%	18.55%	22.89%	0.29

Note: Percentages were weighted to adjust for complex sampling design.  
Hx = hospitalization.

\* $p < 0.01$ .

### Comparisons Among Ataque Sufferers Across Both Sites

As the calculations earlier only compared *ataque* sufferers with those who did not have *ataques* within each site, additional analyses were made directly comparing those with *ataques* across sites (see Table 3). Overall, there were no differences in the symptoms profiles of *ataque* sufferers across sites, except that in San Juan those with *ataques* were significantly more likely to have another serious illness or injury as compared to their *ataque* peers in the South Bronx, 24% versus 5%.

### Discussion

To our knowledge, this is the first comparative probability study of somatic complaints in Latino children, as well as the first to assess the association of these complaints to a cultural idiom of distress. Based on data from one ethnic group residing in two different contexts, we were able to show similar and different lifetime prevalence rates for a host of physical concerns and further demonstrated how each of these differ in the relationship to *ataques de nervios*.

In comparison to other representative epidemiological studies, Puerto Rican children generally higher rates of headaches or migraines (15% vs. 10%) and stomach aches (12% vs. 2.4%) than other youth [25,39]. This is of concern because these symptoms, both individually and combined, can be comorbid with a host of child-related psychosocial stressors, such as missed days from school, and various forms of child psychopathology, such as anxiety [24]. Thus, although these symptoms are not always indicative of distress, their elevated presence is especially problematic given that Latino children appear more likely to somatize their distress than other children [23,40].

Of course, in the assessment of somatic complaints, it is essential to measure impairment because physical symptoms can be very prevalent in nondisordered populations. With this in mind, our results become even more concerning given that approximately 7% of the combined sample were identified as being more limited in their current activities because of some physical problem, and close to 16% were hospitalized at least once for some type of illness. Most startling were the elevated rates of asthma among Puerto Rican children (approximately 37%) and the fact that 14% have been hospitalized for what is a manageable and treatable disease.

When these findings are taken in conjunction with other results, such as the fact that 10% of the combined sample were children who were diagnosed with another serious illness or injury, and that rates of reported epilepsy/seizures were markedly higher than other national estimates (i.e., approximately 3.5% as compared to other national rates that range from 0.05% to 1%), we are left with a problematic symptom profile. In short, these findings indicate that, in general, Puerto Rican children have significantly higher rates of somatic illness which is troubling because previous research has noted that Latino children are not consistently getting the appropriate health services they require [41].

However, most telling were the dramatic site differences in the prevalence of many of these symptoms. Overall, children in San Juan were sicker and had worse outcomes than their counterparts in the South Bronx. In particular, they had a tendency to have more asthma, and were significantly more likely to have headaches, stomach aches, or a serious illness or injury. In addition, they were more likely to be hospitalized for asthma or some other type of illness than mainland children.

Still, when the association of somatic complaints was indexed by *ataque* status, it was children in the South Bronx with *ataques* who were at greater risk for health-related problems. In particular, within the South Bronx, children with *ataques* were at significantly greater risk for asthma and headaches, and had a tendency to have more stomach aches and seizures compared to those without *ataques*. However, the same was not true in San Juan.

Thus, contrary to our initial hypothesis, whereas children in Puerto Rico did have a worse somatic profile than their peer in New York, *ataques* were not associated with worse outcome in Puerto Rico. Although these results initially surprised us, they were in fact, similar to the previously reported findings on the psychosocial correlates of *ataques* with this same sample. Specifically, despite similar prevalence rates and psychiatric correlates of *ataques* among Island and mainland Puerto Rican youth, *ataques* were correlated with greater exposure to violence and

significantly more stressful life events for children with *ataques* in the South Bronx than for those in San Juan [13].

Taken together, these findings suggest that experience of an anxiety related phenomena, such as *ataques de nervios*, may have been associated with more somatic concerns among children in the South Bronx because in this context there was more exposure to general risk factors, such as stress and violence. Thus, one possible pathway is that in conditions of high and chronic stress, there is the activation of a culturally shaped expression of anxiety, such as *ataques de nervios*, and this in turn, is directly responsible for greater somatic complaints. However, in Puerto Rico, where there is already a high prevalence of somatic distress, perhaps in part due to differences in resources, the expression of *ataques* is not associated with an increase in physical distress perhaps because *ataques* are more culturally accepted. In either case, *ataques* were concurrent with physical and psychological vulnerability in the South Bronx.

However, although the overall presence of *ataques* in the South Bronx is associated with more physical symptoms than those children without *ataques* in this site, when *ataque* sufferers are compared directly, *ataque* children in San Juan may possibly have a more high-risk profile because of the increased likelihood of a diagnosed injury, 24% versus 5%. Indeed, past research has noted that a substantial proportion of *ataque* sufferers engage in aggressive acts, either toward themselves or others, which may place them at heightened risk for injury [8]. This finding is especially intriguing in light of recent research noting that, in fact, among many clinical samples, it may be U.S. born Latinas that may be at risk for self-injury [42].

### Limitations of the Study

This study has a few limitations that warrant mention. First, although careful attempts were made to sample areas of Puerto Rico and the continental United States with the densest concentrations of Puerto Ricans, the results of this study may not necessarily generalize to all Puerto Rican children because other urban and rural areas were not sampled. In addition, although this study did attempt to measure impairment associated with physical illness, it did not assess the degree, duration, or frequency of the symptoms as expressed directly from the child. Instead, it relied on lifetime prevalence as indicated by parental reports of child symptoms. Still, parental reports have consistently been shown to underreport children's symptoms [27].

Finally, the cross-sectional analysis of this study limits our inferences, making it difficult to ascertain the di-

rectionality of associations. As suggested earlier, there continues to be debate surrounding the temporal relation of these experiences. In particular, some researchers claim that each disorder/symptom increases the risk for the other threefold [43] perhaps because they both share either an underlying genetic or psychosocial stressor, whereas others claim that in fact, anxiety disorders can serve as a trigger for later somatic complaints [44].

### Future Directions

Based on this study, it is clear that the associations between physical distress and anxiety need to be further investigated among Latino youth. In addition to considering the temporal order of variables, it would also be important to consider the meaning and expression of such symptoms within their appropriate context. For example, are particular symptoms, such as shortness of breath, related to more culturally salient way of expressing either distress or psychopathology among Latinos [18]? Is shortness of breath, and the interpretation of this physical sensation, the factors that sustain the link between the elevated rates of anxiety among Latinos, *ataques de nervios*, and asthma [45,46]?

In addition, exploring the differences in the social worlds of Puerto Rican youth living in two different contexts can shed further light on why, despite the elevated rates of physical symptoms in San Juan, it is children in the South Bronx who have *ataques* who are at more elevated risk for somatic complaints when compared to those without *ataques* in this site. For example, it is clear from recent longitudinal data that the same somatic complaint can be related to different forms of distress for girls and boys [47]. Thus, the gendering of physical and emotional distress, and the mechanisms responsible for these different pathways, are an additional avenue to investigate. Although cross-sectionally we did not find differences in the prevalence rates of *ataques* by gender, the longitudinal design of this study would allow us to re-examine the issue of gender and to explore its associations with distress in the future. In the end, the answers to these types of questions warrant further investigation into the social world of Latino children because context can help shed light on which variables, whether universal or culturally specific, can alter the usual relations between somatic complaints and distress.

### Conflict of Interest

The authors have no conflict of interest.

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