

Psychosocial Problems in Asylum Seekers' Children

The Parent, Child, and Teacher Perspective Using the Strengths and Difficulties Questionnaire

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Abstract: Children of asylum seekers are at risk for psychosocial problems because of their flight history and exceptional living circumstances. This study aims to assess the association of sociodemographic factors and asylum procedural factors with psychosocial problems of asylum seekers' children, and differences herein by informant (parents, teachers, and children). To this end, we obtained data on psychosocial problems among a random sample of 267 children aged 4 to 16, living in Dutch asylum seekers' centers, using the multi-informant Strength and Difficulties Questionnaire. The results show that the prevalence rate of psychosocial problems among asylum seekers' children was high. The occurrence was not associated with asylum-procedural variables but only with child-contextual factors such as mental health of the mother and leaving behind a parent in the country of origin. The associations varied in strength by informant. Therefore, preventive and supportive measures to improve psychosocial health of young asylum-seekers should concentrate on these contextual issues.

Key Words: Asylum seekers', children, psychosocial problems, strengths and difficulties questionnaire, predictive variables, supportive measures.

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The process of asylum seeking is stressful with different stressors acting in the 3 different stages of the asylum seeking process: while in their country of origin, during their flight to safety, and when trying to settle down in a country of refuge (Fazel and Stein, 2002; Fazel et al., 2005; Montgomery and Foldspang, 2008). The first 2 stages are often characterized by exposure to war, conflict and/or environmental risks in their country of origin and during their migration. This exposure often affects mental health (Lustig et al., 2004; Steel et al., 2006). During the asylum procedure, both adults and children again are exposed to all kinds of negative influences: crowding, detention, isolation, language problems, setbacks, and uncertainty (Silove et al., 1993, Steel and Silove, 2004; Reijneveld et al., 2005).

Scientific evidence on psychosocial problems among asylum seekers' children in Western European countries is scarce (Bean et al., 2007; Laban et al., 2005). Well-being and (mental) health are reported to be affected by the length of stay in a reception center, the number of relocations, and the possibility of being sent back to the country they were forced to leave (Hallas et al., 2007; Hjern

et al., 1998; Laban et al., 2004). Each of these factors may increase the likelihood of psychosocial problems among this group, over and above the effects of trauma before and during their flight, but the exact pathways are mostly unknown. More research is needed to adequately assess the affect of these and other possibly important factors.

In 2001, the number of asylum seekers' children in The Netherlands reached a peak of around 28,000 (COA, 2004). Because of the protracted asylum procedures, many children grew up in asylum centers and were thus exposed to the numerous negative influences mentioned earlier. Changing regulations implied severe restrictions in the number of possible daily activities such as sports and work, adding to the already stressful situation (Ministry of Justice, 2004) for the children. However, clinical and empirical evidence suggests that contextual variables—family structure, bro-

TABLE 1. Characteristics of the Population and SDQ Scores (Percentages and Means)

	<11 yr (n = 162)	≥11 yr (n = 105)	Total (n = 267)
Mean age in yr (SD)	7.4 (2.0)	13.6 (1.6)	9.9 (3.5)
Gender (% female)	57%	40%	50%
Region of origin	—	—	—
Near east ^a	36%	38%	37%
Eastern Europe ^b	36%	44%	39%
African ^c	28%	18%	24%
Years in The Netherlands, mean (SD)	3.3 (1.3)	3.5 (1.4)	3.4 (1.3)
p-SDQ (n = 267)	—	—	—
Borderline (14–16)	10%	14%	12%
Elevated (≥17)	42%	10%	38%
Mean score (SD)	15.1 (8.0)	12.6 (7.6)	14.1 (7.9)
t-SDQ (n = 126)	—	—	—
Borderline (12–15)	11%	13%	12%
Elevated (≥16)	25%	20%	23%
Mean score (SD)	10.1 (7.9)	9.0 (7.5)	9.7 (7.7)
s-SDQ (n = 85)	—	—	—
Borderline (16–19)	—	11%	11%
Elevated (≥20)	—	9%	9%
Mean score (SD)	—	10.9 (5.6)	10.9 (5.6)

^aAfghanistan (n = 48), Iraq (n = 12), Iran (n = 21), Lebanon (n = 3), Syria (n = 13), Palestine (n = 1).

^bArmenia (n = 23), Azerbaijan (n = 32), Belarus (n = 1), Bosnia (n = 8), Georgia (n = 3), former Yugoslavia (n = 22), Uzbekistan (n = 4), Russian Federation (n = 10), Chechen (n = 1).

^cAngola (n = 42), Congo (n = 6), Rwanda (n = 3), Sudan (n = 13), Togo (n = 1).

SD indicates standard deviation; p-SDQ, parent-version of the strength and difficulties questionnaire; t-SDQ, teacher-version of the strength and difficulties questionnaire; s-SDQ, self-report version of the strength and difficulties questionnaire.

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ken families because of the flight history, mental health of the parents, education, and so on—may be more important than asylum-procedural issues. For interventions to be successful, a more complete understanding of the underlying reasons for the poor mental health in asylum-seekers' children is therefore necessary.

The primary aim of this study is to assess the rate of psychosocial problems among asylum seekers' children, and the impact of sociodemographic and asylum-procedural factors on the Strength and Difficulties Questionnaire (SDQ) scores. A second aim was to determine possible differences in outcomes of the self- and informant-rated (parent and teacher) SDQ.

METHODS

Population

In 2003, asylum seekers were randomly allocated to the various centers in The Netherlands by the Central Organization for the Reception of Asylum Seekers. All these centers offered housing, food, leisure time facilities, primary healthcare, and education for minors in a similar way. Residents were allowed to leave the centers during day-times. Residents were in the various stages of their admission procedure with some of them having received a formal admission (positive legal status), but still waiting for suitable housing outside the center. Of all 69,526 asylum seekers during that year, 27% ($n = 18,851$) were living in 28 centers in the 3 Northern provinces of The Netherlands (Groningen, Friesland, Drenthe).

Of the 28 centers, 14 were randomly selected comprising 938 children aged 4 to 16 years. These children and their parents were invited to participate if they had been in the Netherlands for 6 months or longer, and spoke one of the 8 languages for which validated translations of the SDQ were available. Of the total of 734 children who met these inclusion criteria (78%), a random sample of 297 children was taken. We obtained data from 267 children and

their parents (nonresponse 10%). The nonresponse was mainly caused by repeated absence of the parents from the center, also making it impossible to ask permission for obtaining information from the child(ren). Response rates did not differ by country of origin or age and gender of the children ($p > 0.05$).

The general characteristics of the children are shown in Table 1.

Measures and Procedures

Parents and children were invited to take part in the study with a letter in their native language. Written informed consent was obtained after explanation of the study procedure with the help of an independent interpreter. A community youth health worker conducted a standardized interview about family background, asylum procedures, and educational level of parents, with the aid of an interpreter, if needed. Information about contact with Social Work and treatment for mental disorders was obtained from the medical department of the asylum center.

The prevalence and scope of psychosocial problems were assessed using the SDQ. The SDQ has shown to be a reliable and valid instrument for investigating these problems effectively in children from Western and non-Western populations (Goodman, 2001; Goodman et al., 2003; Leavey et al., 2004; Crone et al., 2008). The SDQ gives a total score of psychosocial problems on a scale from 0 to 40. For each of the SDQ questionnaires cut-off points are used, as defined by Goodman et al. (2003) (Table 1). The following validated language versions were used: Arabic, Dari, Dutch, Farsi, French, Portuguese, Russian, and Serbo-Croat. All parents completed the parent-version of the SDQ (p-SDQ), if needed with the help of an independent interpreter. Teachers were asked to complete the teacher-version (t-SDQ). Moreover, children ≥ 11 years completed the self-report SDQ (s-SDQ).

TABLE 2. Associations Between Child Characteristics and Parent- and Teacher SDQ; Regression Coefficients and 95% Confidence Intervals (All Children)

All Children ($N = 267$)	Parent SDQ (p-SDQ)		Teacher SDQ (t-SDQ)	
	Crude B (CI)	Adjusted B (CI)	Crude B (CI)	Adjusted B (CI)
Gender (ref. female)	1.32 (−0.58 to 3.22)	1.97 (0.14 to 3.81)*	0.53 (0.11 to 0.95)*	0.47 (0.07 to 0.87)*
Age (yr)	−0.21 (−0.48 to 0.06)	—	−0.03 (−0.09 to 0.03)	—
Years of education child	−0.56 (−0.95 to −0.17)**	−0.63 (−1.01 to −0.26)***	−0.06 (−0.16 to 0.05)	—
Family size	−0.95 (−1.61 to −0.28)**	−0.71 (−1.38 to −0.05)*	−0.21 (−0.36 to −0.06)**	−0.27 (−0.42 to −0.12)**
Region of origin (ref. eastern Europe) ^a				
Near east	−0.11 (−2.27 to 2.04)	0.08 (−2.04 to 2.21)	−0.11 (−0.61 to 0.39)	—
African	−3.58 (−6.00 to −1.16)**	−3.96 (−6.38 to −1.53)***	0.10 (−0.46 to 0.65)	—
Parent in country of origin (ref. “no”)	2.96 (−0.73 to 6.64)	—	0.76 (0.04 to 1.48)*	—
Mental health problems mother (ref. “no”)	4.31 (2.02 to 6.61)***	4.10 (1.87 to 6.32)***	−0.33 (−0.81 to 0.15)	—
Mental health treatment mother (ref. “no”)	4.25 (1.53 to 6.97)**	—	−0.69 (−1.27 to −0.11)*	−0.84 (−1.39 to −0.29)**
Legal status (ref. “no”)	−2.47 (−7.26 to 2.31)	—	0.43 (−0.51 to 1.36)	—
Years in The Netherlands.	−0.12 (−0.83 to 0.59)	—	−0.06 (−0.21 to 0.09)	—
No. reallocations to other centers	−0.12 (−0.73 to 0.49)	—	0.08 (−0.05 to 0.22)	—
Adjusted R^2	$R^2 = 0.14$		$R^2 = 0.15$	

^aFor explanation of “Region of origin” see Table 1.

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

CI indicates confidence interval; SDQ, strength and difficulties questionnaire.

The s-SDQ and p-SDQ were completed at home without the help of a health worker. The questionnaires were returned to the Youth Health Care worker at the next regular visit. The (Dutch) t-SDQ was completed by the teacher at school for 127 (47%) of the children. Main reasons for not completing the t-SDQ were lack of time and inability of parents to indicate the school their child attended.

Analyses

The percentage of borderline and elevated SDQ scores was determined by using the internationally accepted cut-off points per SDQ questionnaire (Table 1).

To determine the predictive value of the various variables, we followed the recommendations of Vostanis and performed the analyses on the continuous scores because of the variation in psychometric properties and cut-off scores that are appropriate for different populations (Vostanis, 2006). In the analyses, we included age, gender, country of origin, religion, mental health problems and/or their treatment of father and mother, members of the family in country of origin and family size, education of parents, education of the child, years in The Netherlands, number of relocations, and legal status.

Using linear regression analysis with stepwise selection ($p < 0.05$), it was determined which variables had a significant association with the level of the self- and informant-rated SDQ score. For the t-SDQ, an approximation to a normal distribution was achieved by a square root transformation. For the s-SDQ and p-SDQ, no transformations were necessary.

Finally, using Cohen's Kappa coefficients the association between informant- and self-rated SDQ scores was assessed.

To allow for possible differences between primary and secondary schoolchildren the scores of the p- and t-SDQ were analyzed separately for 2 age groups, <11 years and ≥11 years. As men-

tioned before, only children ≥11 years completed the s-SDQ questionnaire. Analyses were performed using SPSS (version 17, 2008). A p value of 0.05 was taken as a threshold for statistical significance.

RESULTS

All Children

For the p-SDQ, the percentages of elevated were much higher than that of the t-SDQ and s-SDQ (Table 1).

For the continuous scores of the p-SDQ, mental health problems of the mother had the strongest association (higher if present). Furthermore, scores were significantly higher in boys, if children had received less education, and if family size was smaller. Also, region of origin proved to be significant with children from African origin having the lowest scores (Table 2).

The t-SDQ scores were higher in boys, if the mother received treatment for mental health problems, and if family size was smaller (Table 2).

Children <11 Years of Age

For children <11 years, the percentages of elevated scores were considerably higher for the p-SDQ than for the t-SDQ (Table 1).

For the continuous scores of the p-SDQ, gender had the strongest association (higher scores for boys). Furthermore, scores were higher if the mother had mental health problems and lower if the region of origin was African (Table 3).

For the continuous scores of the t-SDQ, only the mother being treated for mental health problems proved to be significant (higher if true— $p < 0.05$), resulting in a rather low explained variance of $R^2 = 0.04$ (Table 3).

TABLE 3. Associations Between Child Characteristics and Parent- and Teacher SDQ; Regression Coefficients and 95% Confidence Intervals (Children <11 yr)

Children <11 yr (N = 162)	Parent SDQ (p-SDQ)		Teacher SDQ (t-SDQ)	
	Crude B (CI)	Adjusted B (CI)	Crude B (CI)	Adjusted B (CI)
Gender (ref. female)	4.22 (1.79 to 6.64)**	4.58 (2.25 to 6.91)***	0.42 (-0.12 to 0.96)	—
Age (yr)	0.69 (0.06 to 1.31)*	—	0.01 (-0.12 to 0.15)	—
Years of education child	0.74 (-0.09 to 1.58)	—	-0.07 (-0.25 to 0.11)	—
Family size	-0.64 (-1.62 to 0.35)	—	-0.01 (-0.23 to 0.22)	—
Region of origin (ref. Eastern Europe) ^a				
Near east	1.24 (-1.59 to 4.07)	1.80 (-0.96 to 4.55)	0.15 (-0.49 to 0.79)	—
African	-4.12 (-7.13 to -1.11)**	-3.52 (-6.49 to -0.55)*	0.07 (-0.60 to 0.75)	—
Parent in country of origin (ref. "no")	1.22 (-3.72 to 6.15)	—	0.10 (-0.80 to 1.00)	—
Mental health problems mother (ref. "no")	3.95 (1.00 to 6.91)**	3.65 (0.84 to 6.45)*	-0.41 (-1.01 to 0.18)	—
Mental health treatment mother (ref. "no")	4.28 (0.94 to 7.61)*	—	-0.74 (-1.44 to -0.04)*	-0.74 (-1.44 to -0.04)*
Legal status (ref. "no")	-4.23 (-10.31 to 1.84)	—	0.58 (-0.66 to 1.81)	—
Years in The Netherlands.	0.46 (-0.48 to 1.40)	—	-0.05 (-0.25 to 0.15)	—
No. relocations to other centers	-0.42 (-1.21 to 0.37)	—	-0.01 (-0.20 to 0.18)	—
Adjusted R^2	$R^2 = 0.16$		$R^2 = 0.04$	

^aFor explanation of "Region of origin" see Table 1.

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

CI indicates confidence interval; SDQ, strength and difficulties questionnaire.

TABLE 4. Associations Between Child Characteristics and Parent- and Teacher SDQ: Regression Coefficients and 95% Confidence Intervals (Children ≥11 yr)

Children ≥11 yr (N = 105)	Self-Rated SDQ (N = 83)			Parent SDQ			Teacher SDQ		
	Crude B (CI)	Adjusted B (CI)	Crude B (CI)	Adjusted B (CI)	Crude B (CI)	Adjusted B (CI)	Crude B (CI)	Adjusted B (CI)	
Gender (ref. female)	-2.40 (-4.81 to 0.00)	-2.58 (-4.73 to -0.43)*	-2.13 (-5.10 to 0.84)	—	—	0.87 (0.16 to 1.57)*	—	—	
Age (yr)	0.22 (-0.47 to 0.90)	—	-0.62 (-1.56 to 0.32)	—	—	-0.16 (-0.39 to 0.07)	—	—	
Years of education child	-0.76 (-1.29 to -0.23)**	-0.62 (-1.11 to -0.13)*	-1.18 (-1.80 to -0.56)***	-1.12 (-1.72 to -0.53)***	—	-0.01 (-0.21 to 0.18)	—	—	
Family size	-0.64 (-1.41 to 0.14)	—	-1.08 (-1.97 to -0.18)*	-0.99 (-1.81 to -0.16)*	—	-0.40 (-0.59 to -0.20)***	-0.32 (-0.53 to -0.12)**	—	
Region of origin (ref. eastern Europe) ^a	—	—	—	—	—	—	—	—	
Near east	-1.02 (-3.73 to 1.69)	—	-2.22 (-5.44 to 1.00)	—	—	-0.53 (-1.33 to 0.28)	—	—	
African	-1.24 (-4.81 to 2.33)	—	-3.15 (-7.21 to 0.92)	—	—	0.19 (-0.83 to 1.22)	—	—	
Parent in country of origin (ref. "no")	7.50 (3.03 to 11.98)***	6.06 (1.81 to 10.31)**	5.54 (0.11 to 10.98)*	—	—	2.05 (0.90 to 3.19)**	1.26 (0.09 to 2.43)*	—	
Mental health problems mother (ref. "no")	3.41 (0.30 to 6.52)*	3.31 (0.43 to 6.18)*	4.60 (0.97 to 8.23)*	3.75 (0.37 to 7.13)*	—	-0.22 (-1.08 to 0.64)	—	—	
Mental health treatment mother (ref. "no")	2.02 (-2.40 to 6.44)	—	3.36 (-1.39 to 8.11)	—	—	-0.64 (-1.71 to 0.44)	-1.00 (-1.86 to -0.14)*	—	
Legal status (ref. "no")	-4.92 (-16.19 to 6.40)	—	0.39 (-7.29 to 8.06)	—	—	0.26 (-1.23 to 1.74)	—	—	
Years in The Netherlands.	-0.65 (-1.53 to 0.24)	—	-0.83 (-1.88 to 0.23)	—	—	-0.07 (-0.30 to 0.17)	—	—	
No. reallocations to other centers	-0.01 (-0.81 to 0.79)	—	0.40 (-0.53 to 1.34)	—	—	0.19 (-0.01 to 0.38)	—	—	
Adjusted R ²	R ² = 0.25			R ² = 0.19			R ² = 0.38		

^aFor explanation of "Region of origin" see Table 1.
 *p < 0.05.
 **p < 0.01.
 ***p < 0.001.
 CI indicates confidence interval; SDQ, strength and difficulties questionnaire.

Children ≥11 Years of Age

For children ≥11 years, the p-SDQ percentages of elevated and borderline scores were virtually the same as those of the s-SDQ but lower than those of the t-SDQ (Table 1).

The s-SDQ scores were higher in girls, if the number of years at school was lower, if the mother had mental health problems, and especially if a parent was left behind in the country of origin. None of the other variables, specifically variables pertaining to asylum-procedural factors (legal status, number of relocations, and length of stay) were significantly associated with the SDQ scores (Table 4).

For the p-SDQ, the association of SDQ score with number of years at school was highly statistically significant. Other variables of influence were family size (higher if family was smaller) and, again, mental health problems of the mother.

The t-SDQ scores were higher if family size was smaller, a parent was left behind in the country of origin, and if the mother was treated for mental health problems. This resulted in a relatively high adjusted explained variance of $R^2 = 0.38$ (Table 4).

Comparisons Between Informant- and Self-Rated SDQ Scores

The p-SDQ and s-SDQ scores (children 11 years and older) were statistically significantly correlated ($p < 0.001$). However, there was no statistically significant correlation between t-SDQ and p-SDQ or s-SDQ (p varies from 0.50 to 0.94; Table 5).

DISCUSSION

Contrary to the findings in many studies (Lustig et al., 2004; Nielsen et al., 2008; Steel et al., 2006), none of the asylum-procedural variables (length of stay, number of relocations, legal status) were significantly associated with self-rated or multi-informant SDQ scores. An explanation for this can perhaps be found in the fact that many of the studies did not include contextual variables

like those mentioned in the analyses. In our study, these variables proved to be far more important than procedural issues. This was especially true for the following variables: mental health problems of the mother, family size (larger families seem to have a protective effect), and leaving behind a parent in the country of origin.

The findings of this study may reflect the influence contextual variables have on mental well-being, independent of the local or national situation and legislation. The results of this study are relevant to the care for asylum seekers' children in other countries as well. After all, in most countries, including The Netherlands, interventions aimed at improving mental health of asylum seekers' children mainly focus on asylum-procedural factors.

Another interesting result concerns the influence of the region of origin. In this study the African children, especially those <11 years, had a significantly better score than those from other regions. This was mainly because of the fact that African children had better scores on the SDQ hyperactivity subscale (analysis not shown). This is in line with the finding that as coping mechanism, children tend to use emotion-inhibiting strategies resulting in lower scores on the hyperactivity subscale (Leavey et al., 2004; Lustig et al., 2004).

The lack of association between the t-SDQ and s- and p-SDQ is at variance with findings in others studies (Papageorgiou et al., 2008; Roussos et al., 1999), and again, this might be due to the introduction of contextual variables. This is further illustrated by the fact that mental health treatment of the mother resulted in lower t-SDQ scores. This seems to indicate that teachers assessed the children not so much based on direct observations but more on external information concerning the (contextual situation of the) child. This is in accordance with the finding that UK-born teachers are less aware of the psychological difficulties of children from other ethnic groups (Leavey et al., 2004). Other studies found that parents tend to pay more attention to emotional and social aspects of their children's problematic behavior than does teachers (Papageorgiou et

TABLE 5. Agreement (%) Between Categorized SDQ Scores With Sample Size (N) and Kappa Coefficients (Kappa) With p Values (p)

	s-SDQ			N Kappa (p)	t-SDQ			N Kappa (p)
	Normal	Borderline	Elevated		Normal	Borderline	Elevated	
All children								
p-SDQ								
Normal	96	4	0	$N = 85$ $0.32 (<0.001)$	68	15	17	$N = 126$ $0.03 (0.681)$
Borderline	87	13	0		67	0	33	
Elevated	38	24	38		61	12	26	
Age <11 yr								
p-SDQ								
Normal	—	—	—	—	68	12	20	$N = 81$
Borderline	—	—	—	—	71	0	29	$0.03 (0.694)$
Elevated	—	—	—	—	60	13	27	
Age ≥11 yr								
p-SDQ								
Normal	96	4	0	$N = 82$ $0.33 (<0.001)$	70	20	10	$N = 45$ $0.01 (0.943)$
Borderline	87	13	0		63	0	37	
Elevated	38	24	38		65	12	23	
s-SDQ								
Normal	—	—	—	—	75	12	13	$N = 32$
Borderline	—	—	—	—	80	0	20	$0.09 (0.503)$
Elevated	—	—	—	—	50	0	50	

p-SDQ, parent-version of the strength and difficulties questionnaire; t-SDQ, teacher-version of the strength and difficulties questionnaire; s-SDQ, self-report version of the strength and difficulties questionnaire.

al., 2008; Roussos et al., 1999). Vollebergh et al suggested that teachers may be influenced by general images created by media and politics (Vollebergh et al., 2005).

The strength of this study lies in the fact that here, contrary to many other studies, contextual variables are also included in the analysis. Also, in this study, the level of association between variables and SDQ scores was determined using continuous SDQ scores rather than the cut-off points generally used. In our primary analyses, it became clear that too much information was lost if only categorized values were used.

There are some possible limitations to this study. First of all, the study focuses on a single Dutch region, which may cast doubt on the representativeness of the study population. However, in those years more than 25% of the asylum centers were located in that part of the country and, also asylum seekers were randomly allocated. Moreover, the countries of origin were comparable to those of the asylum seekers in other Western European countries. Second, information bias because of language barriers may have played a role. However, because the questionnaires used were thoroughly validated after translation, information bias on these grounds is less likely. Finally, the explained variance in the different models is relatively small, emphasizing the fact that there are other influences involved here that may play an important part in the mental well-being of asylum seekers' children. This seems especially the case where the t-SDQ for children younger than 11 years is concerned.

CONCLUSIONS

This study shows that especially younger asylum seekers' children have considerably more psychosocial problems than the general population. The SDQ scores are only influenced by contextual factors. Therefore, supportive measures should concentrate more on matters like reuniting the family and supporting the mother. The results of this study can therefore be helpful to improve the effectiveness of mental health interventions for asylum-seekers' children.

When interpreting the results of the SDQ scores, it should be taken into account that the information from teachers is of a different order than that from parents or the children themselves. This may influence the targeting of children that can benefit the most from the preventive or supportive measures.

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