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CHILDREN'S DRAWINGS AS A TRIAGE TOOL FOR THE ASSESSMENT OF NEGATIVE EMOTIONALITY IN REFUGEE CHILDREN

The study sought to examine the possible indirect trauma indicators among refugee children's drawings. We have analyzed drawings of refugee children and non-refugee children as controls (5 - 9 years old). The content and Pickard's expressive strategies for mood depiction were analyzed on 464 drawings. The content analysis revealed different content-specific categories across groups, with the category of Violence/War appearing significantly more in the drawings of the refugee group. and being used as one of the trauma indicators. The analysis revealed that negative mood was depicted by more complex and detailed drawings in both groups. An expressive strategy, namely the literal strategy, appeared to be specific to the refugee group only (e.g., absence of facial characteristics), while different patterns of non-literal expressive strategies were observed in conveying mood between the two groups. Our findings suggest that the drawings can be used as a triage tool to assess the emotional status of refugee children.

Keywords: drawings, expressive strategies, refugee children, trauma indicators

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Introduction

Reportedly, around 2,150,000 refugees and migrants have reached Europe since 2015, with hundreds of thousands of refugees flooding the “Balkan route” (i.e., Greece, Macedonia, Serbia, Croatia, and Slovenia). According to UNHCR (2015), by the beginning of 2016, the number of children has tripled, reaching 39% of the total refugee arrivals to Europe. In Serbia, the percentage of children has reached 46 percent, with every third child being unaccompanied (UNHCR, 2016).

The majority of those children have been exposed not only to war-related trauma, but also to violence, exploitation and abuse during transition. Exposed to dealing with smugglers, refugees are often forced to migrate alone. Many times children are being left by their parents, and forced to continue their journey alone. Finally, even the successful end of their journey is referred to as a period of “secondary trauma” (Fazel, Wheeler, & Danesh, 2005).

Children may not display any signs of post-traumatic psychological consequences, and may seem to be completely unaware of the trauma. However, trauma experience exposes children to all the reactions that have been attributed only to adults up until recently, affecting their behavior, cognitive and emotional functioning (Steele & Kuban, 2013). Exposure to war and violence (Garbarino & Kostelny, 1996), armed conflicts (Quosh, Eloul, & Ajlani, 2013), as well as resettlement stress (Lumley, Katsikitis, & Statham, 2018; Sack, Clarke, & Seeley, 1996), are associated with psychopathology (Lindert & von Ehrenstein, 2018). Symptoms, such as nightmares, intrusive memories, flashbacks, avoidance behavior and hyper-arousal, have also been widely documented in refugee studies (Biro, 2017; Vukcevic, Dobric, & Puric, 2015).

Hence, refugee children are at a significant risk of developing psychological problems, especially the post-traumatic stress disorder (PTSD), depression, and anxiety disorders (Hassan, Ventevogel, Jefee-Bahloul, Barkil-Oteo, & Kirmayer, 2016; Lindert & von Ehrenstein, 2018; Lustig et al., 2004; Minihan, Liddell, Byrow, Bryant, & Nickerson, 2018; Steel et al., 2009). Estimations of PTSD in refugees have shown the prevalence of 10 to 35% in adults (Fazel et al., 2005; Steel et al., 2009; Kazour et al., 2017), and 7-17% in children (Fazel et al., 2005). Therefore, early mental health screening is crucial. However, the role and the use of diagnostic assessments have been debated over years (Hollifield et al., 2002; Rhema, Gray, Verbillis-Kolp, Farmer, & Hollifield, 2014). In addition, children often exhibit a mixture of the symptoms, not necessarily fulfilling a single diagnostic category (e.g., for PTSD or Depression) (Palic, Kappel, Nielsen, Carlsson, & Bech, 2014; Steel et al., 2009; Teodorescu, Heir, Hauff, Wentzel-Larsen, & Lien, 2012).

Challenges in Screening and Providing an Appropriate Assistance

Mental health is seldom overlooked due to the primacy of providing needs for living (McElroy, Muyinda, Atim, Spittal, & Backman, 2012), the primacy of

information which is transmitted through translators, a short period of stagnation during migration (2 to 5 days), as well as a cultural specificities and language barriers (UNHCR, 2014). In these circumstances, introduction of a translator is a dangerous liability, given that there is a great risk of losing a significant amount of information in the psychological assessment, as well as in the intervention transaction. Importantly, the triggers that could signal a need for providing the first psychological aid might not be recognized, and the appropriate assistance help could not be delivered.

One of the most considerable limitations is the use of Western diagnostic instruments (Draguns, 1977; Pernice, 1994). Most of the existing psychological assessment inventories may fail to capture the variety of stress reactions in refugee children – e.g., grief, loss, anxiety (Berman, 2001; Pernice, 1994). They also may fail to detect subthreshold cases and meet cultural givens (Dana, 2001; Kleinman, 1981). While disparities in language, cultural and social norms, education, and familiarity with the research paradigms might impact verbalizing their traumatic experiences (Leaning, 2001), the verbal nature of screening and triage instruments can increase the risk of re-traumatization. Congruently, those who struggle with communicating their emotions verbally and experiencing contradictory or confusing feelings do not benefit from this form of screening (Malchiodi, 1998).

The question arising from all the above-mentioned constraints is: how can we approach the refugee children in a less harmful way and avoid the consequences of potential re-traumatization?

Spontaneous drawings can be fruitful for those who have experienced trauma, as it might help them in expressing feelings which otherwise they might find difficult to express. As noted by Gross and Hayne (1998), drawings can be more informative and may reduce perceived social demands, creating a more comfortable setting. Furthermore, children may more easily organize their representations about the event as they draw and put distance between them and their problems (Gross & Hayne, 1998).

Several lines of research regarding emotional-expressive aspects of children's drawings can be distinguished (Farokhi & Hashemi, 2011). First, the interpretation follows a manifestation of children's personality traits. Children draw what they feel, and their drawings reflect their inner struggles and desires (Malchiodi, 1998). Second, there were attempts to scientific validation of 'emotional indicators' found in children's drawings of a human figure (Koppitz, 1968). The third line addresses the ways in which children choose to depict personally important or emotionally salient topics (Farokhi & Hashemi, 2011).

In recent years, the expressive strategies used in order to convey moods and emotions in their drawings have started to attract more attention among researchers (Jolley, Fenn, & Jones, 2004; Picard, Brechet, & Baldy, 2007), specifically the use of literal and non-literal (or metaphoric) strategies. While the literal expression of mood refers to the facial features (Jolley, 2010; Rose, Jolley, & Charman, 2012) and personification of nonhuman topics (Picard & Gauthier, 2012),

the non-literal strategy is expressed through content and/or abstract-expressive strategies (Jolley, 2010). Up to the present, the studies have shown that the use of literal strategies starts at the age of four or five (Cox, 2005; Golomb, 1992), while the more adept use of literal strategies, and the combination of literal and non-literal strategies become more frequent at an older age (Golomb, 1992; Picard & Gauthier, 2012).

The Present Study

The present study was prompted by the absence of a clear-cut framework for identification of the most vulnerable individuals among (unattended) refugee children during their transition throughout Serbia. The aim was to test whether the expressive drawings could be utilized as screening instruments to assess the global emotional distress and maladaptive emotions among refugee children, and to examine the possible trauma indicators among refugee children.

Method

Sample

By using the opportunistic sampling strategy, data for the study sample were collected from two groups: refugee children and Serbian children as controls, resulting in 468 drawings in total. A signed written consent was obtained from all the parents in the control group. However, this was not possible for all of the children in the refugee group, as most of those children were unaccompanied. If located, the majority of the alleged caregivers declared they only met the child unattended at the transit centers or during the journey, and denied any relations with the child. It was highly likely that some parents/caregivers were killed/wounded/disappeared in the country of origin, while the other parent(s) or caregiver were held back/killed/disappeared during the journey. Moreover, it was a common practice for parents to leave their children to continue their journey alone (or) in bigger groups, if they were not allowed to cross the borders.

A Refugee Group. Drawings ($N=354$) was collected from Syrian (48), Iraqi (12), Pakistani (18), and Afghan (22) refugee children (100 in total; 65 female) passing the “Balkan route” through Serbia, with ages ranging from 5 to 9 years old²¹. The age range included in the study was based on the previous findings which suggested that during this period children employed the literal and non-literal strategies in their drawings with equal frequency (Misalidi & Bonoti, 2014). The drawings from refugee children included in the study were collected from

² Studies showed that both the quantity and quality of the moods expressed increased with age; however, no differentiation was found between drawings produced by the 6-year-olds and the 9-year-olds, suggesting a slow period of growth between these ages (Jolley et al. 2004).

three transit centers in Šid, Adaševci, and Principovac, while they were waiting for trains to be transferred further (to Croatia and Austria).

A Control Group. To cover the same age group as in the above group, 114 drawings were collected from 100 first- and second-grade pupils (67 female) from elementary schools. A difference in the number of drawings between the refugee group and the control group was the consequence of the fact that refugee children were spontaneously more productive.

Materials and Data Preparation

Procedure. Children were given a blank sheet of paper and colored pencils and asked to draw freely. Plain A4 paper was used for the drawings, with no time limitation. The drawings from the refugee group were collected in the special facilities intended for children within the camp sites, with available interpreters. The drawings from the control group were collected during regular day activities in the school/daycare institution.

Coding of Drawings. Firstly, all drawings were coded for the content, global emotionality, and complexity. Each drawing was coded and scored individually by three raters independently. Intra-rater agreement was calculated by Cohen's Kappa, reaching the internal consistency of .94. The drawings with discrepancies in coding among raters were excluded from the analysis. The content analysis was applied in order to examine specific themes (Weber, 1990). If parts of the drawings did not relate to each other, every part was allocated in a different content category. The raters generated themes for the content of the drawing (or a part) of the drawing, and rated the global impression of emotionality of the drawing (1- *negative*, 2- *positive*, 3- *neutral*). Finally, the extent of complexity, i.e., the extent of employing details, action, and symbols, was rated on a 6-point Likert-type scale (1 – *simple*, to 6 – *very complex*; examples presented on Figure 1).



Figure 1. Examples of drawings coded as a) very complex and b) simple.

Coding system by Picard et al. (2007) served as the basis for the scoring of drawings. Each mood can be conveyed in a drawing with three expressive strategies or their combination: literal, non-literal/content metaphoric and non-literal/abstract metaphoric. Each strategy is depicted via the following indicators:

a) alteration of facial features of human or personified objects (L), such as facial expressions of emotion, e.g., wide-open eyes and/or mouth (happy mood), tears and/or downward mouth (sad mood);

b) use of specific themes (NL-C), such as (i) weather, e.g., sun (happy mood), clouds and/or rain (sad mood); (ii) objects, e.g., flowers, happy details on clothing of human figures, uplifting branches, fruits and hearts (happy mood), fallen leaves, broken tree branches, etc. (sad mood); (iii) body position of human figures, such as hands drawn upwards, human figures in action, running, jumping, etc. (happy mood), hands drawn close to the body or downwards (sad mood); (iv) state of objects, such as duplication of tree features, such as multiple flowers, multiple branch leaves, etc. (happy mood), reduction of the tree's features to the minimum, e.g., leafless branches (sad mood);

c) modification of drawings' formal properties (NL-A), such as (i) size, e.g., increase (happy mood) or decrease (sad mood) of the person's (object's) size from at least 1/6 of its size; (ii) color, e.g., inclusion of three or more colors (happy mood), or unicolor use of black color (sad mood); (iii) lines, e.g., smooth/curved lines (happy) or rough/zigzag lines (sad mood);

d) and all possible combinations of the aforementioned strategies.

With regard to the original coding system, we used the modification of the coding system for the following indicators:

a) L – based on the rater's observation of the refugee's drawings, an additional indicator was included: the absence of facial parts (e.g., all facial characteristics were present and highly detailed except for the mouth).

b) NL-C – all of the indicators were analyzed.

c) NL-A³ – since the formal properties of the drawing were the most dependent on the participant's age and conditions (i.e., the use of color), these indicators were excluded from the further analysis. However, Burkitt, Barrett and Davis (2003) found that young children could use the size to emphasize positive and negative affective characteristics. Namely, Burkitt et al. (2003) found that the reduction in size of unpleasant topics served to symbolically reduce the threat, whilst drawing the nice topics larger gained psychological affinity. Therefore, we decided to keep the size as an indicator of NL-A strategy.

Three raters used the above general indicators to score each individual expressive drawing, appointing 1 in the presence and 0 in the absence of the indicator. The average inter-rater agreement was high (.93) for different expressive strategies.

³ Also, previous studies suggested that children's use of expressive formal properties might take much longer to develop (until adolescence) (e.g., Joley et al., 2014).

Results

The Content Analysis

The thematic content was independently identified among raters, followed by a consensually established common set of thematic categories. Categories were not exclusive. The drawings in the refugee group fell into 10 categories, with their frequencies presented in Table 1. Categories created for the refugee group served as the reference categories for labeling categories in the control group, with the possibility of adding new categories.

Table 1

Content-specific categories in drawings of the refugee children's and the control group

Content category	Refugees		Content category	Controls	
	<i>N</i>	%		<i>N</i>	%
Human figures w/a*	60	17.91	Human figures w/a*	42	40.38
Face/Portrait	4	1.19	Face/Portrait	5	4.80
Nature/Landscape	55	16.41	Nature/Landscape	15	14.42
House/Home	103	30.74	House/Home	22	21.15
Family	7	2.08	Family	3	2.88
Transportation**	61	18.20	Transportation**	4	3.84
Sea and Ships	65	19.40	Sea and Ships	8	7.69
Violence	31	9.25	Violence	2	1.92
- War	19	5.67	- War	0	0
Flags/Countries	67	20.00	Animals	39	37.50
Characteristic symbols***	43	12.83	Other	11	10.57

Notes. * Human figure(s) without action; ** Transportation other than ships (e.g., car, plane, bus), *** Category *Characteristic symbols* was named after consistently repeated objects with characteristic details such as candles, branches with buds in the same order, etc. In the control group, category *Other* was added instead, including simple and singular objects, such as a bow; *N* – number of drawings in the category.

Instead of *Flags/Countries*, different category appeared in the control group – *Animals*. Importantly, only two drawings in the control group portrayed violence, referring to the animal fight (a dinosaur and a snake fight, and a man on the lizard attacking with a lance), and had rather fantasy character, while strong motifs of death were characteristic for the refugee group.

A significant number (79 = 23.58%) of the refugee’s drawings portrayed clear depiction of death by drowning, or dead bodies lying in blood (Figure 2), while no such motifs were found in the control group.



Figure 2. Examples of death portrayal in the refugee’s drawings.

Differences in Mood and Complexity

Table 2 presents the means of complexity and a total number of strategies used in both groups, while the percentage of global emotionality for both groups is shown in Table 3.

Table 2
Means and standard deviations for complexity and a number of strategies

	Refugees	Control
	<i>M (SD)</i>	<i>M(SD)</i>
Complexity	3.05 (1.24)	2.55 (.98)
Number of strategies	3.36 (1.31)	3.75 (1.21)

Note. *M* - mean, *SD* - standard deviation.

Children in the refugee group drew somewhat more complex and more detailed drawings, while both groups used three strategies on average to express their mood.

Most of the refugee children's drawings fell into the neutral category, while more than one fifth of the drawings were rated as emotionally negative. In the control group, the majority of drawings were emotionally positive (Table 3).

Table 3

Differences in positive, negative, and neutral drawings among groups

		Refugees %	Control %	$\chi^2(df)$	95% CI	<i>p</i>
Global emotionality	positive	32	65	26.62 (1)	20.10 - 44.75	.001
	neutral	46.2	26.7	9.77 (1)	6.86 - 31.24	.001
	negative	21.8	8.3	8.14 (1)	3.99 - 22.30	.004

Note. χ^2 – chi square; CI – confidence intervals.

A two-way MANOVA was used to compare the effects of the global emotionality (negative, positive, and neutral) of the drawings in both the refugee group and the control group on two dependent variables: the complexity of the drawings and the number of strategies used to convey the mood. There was a statistically significant interaction effect on a multivariate level, $F(4, 400) = 2.91, p = .02$; Pillai's Trace = .056. However, this interaction effect was significant for the complexity of drawings, $F(2) = 3.81, p = .02$, but not for the number of strategies used to convey the mood. Both groups used more complex drawings to convey the negative mood, however, refugee children employed significantly more elements and details to depict the negative mood compared to the positive or the neutral mood.

Neither the interaction of the independent variables, nor the main effect of the group on the number of strategies used in the drawings was significant at the multivariate level.

Expressive Strategies in the Negative Mood Prediction

The binary logistic regression was performed to ascertain effects of the presence of the expressive strategies on the likelihood that participants were in the refugee group. The model was statistically significant, $\chi^2(6) = 20.48, p < .05$, and correctly classified 73.0% of the cases on the basis of the presence or absence of the specific strategies. Two specific expressive strategies of L and NL content appeared as strong predictors for the refugee group: the absence of facial characteristics (L; e.g., mouth or eyes, but with all other facial parts present) ($B = 1.61, p < .05$), and the state of object drawn (NL), i.e., multiplication of certain types of objects only ($B = 2.11, p < .01$). The type of object, i.e., positive objects only (such

as flowers, gifts, rainbow, etc. ($B = -1.84, p < .01$) appeared as the only predictor for the control group.

To get more insight into the specific strategies that could predict the mood portrayal among the groups, we performed the multinomial logistic regression. In two datasets (defined by the group membership), global emotionality was set to be the categorical dependent, while five expressive strategies (literal and non-literal) were entered as independent variables. As there were three categories of the dependent variable (classified as positive, negative, and neutral), the category of drawings coded as negative were set as the reference group.

In both groups, the regression model was significant, $\chi^2(192) = 107.89, p < .01$ for the refugees, and $\chi^2(12) = 29.40, p < .01$ for the control group, respectively) and fitted the data well (Pearson chi-square statistic was not significant). In the refugee group, the model explained 53.0% (Nagelkerke R^2) of the variance in global emotionality and correctly classified 65.3% of cases, while 47.0% of the variance was explained in the control group, and 76.7% of correctly classified cases. The overall effects of specific strategies on expressing mood, for both groups, are shown in the Table 4.

Table 4
Overall effects of expressive strategies on global emotionality

Group	Effect	χ^2	<i>df</i>
Refugees	L faces	3.28	2
	L omitted	19.55*	2
	NL-C weather	1.31	2
	NL-C objects	19.00*	2
	NL-C position	6.02*	2
	NL-C state of object	6.64*	2
Controls	L faces	36.26*	2
	L omitted	7.09	2
	NL-C weather	1.26	2
	NL-C objects	4.89	2
	NL-C position	5.47	2
	NL-C state of object	3.91	2

Note. χ^2 – chi square; * $p < .05$.

Four strategies, both literal and non-literal, were found to have significant effects on the global emotionality in the refugee group, and only one, literal strategy, was found significant in the control group.

Literal Strategies. The multinomial logit for omitted facial parts ($B = -20.98$, $p < .05$) indicated slower likelihood for conveying positive relative to negative mood, given that all the other predictor variables in the model were held constant. In other words, the use of specific literal strategy, i.e., omission of the facial details was more likely to be used to convey the negative mood than the positive or the neutral one. This effect was found significant only in the refugee group.

However, the presence of faces in the drawings in the control group differentiated only neutral ($B = -11.83$, $p < .01$) from negative drawings, indicating that faces were less likely to appear in the neutral drawings. This was obviously due to the less human or humanoid objects included in the neutral drawings.

Non-literal Content Strategies. The type of objects drawn was also found to be significant in differentiating positive, negative, and neutral mood among refugees only. The presence of negative objects (e.g., knives, tears, dead bodies, etc.) was significantly less likely to appear in positive ($B = -2.32$, $p < .01$) or neutral drawings ($B = -3.95$, $p < .01$). The second non-literal strategy that appeared to be significant was the position of the body. Based on the parameter estimates, this NL strategy was significantly less likely to be used in neutral ($B = -2.01$, $p = .016$) relative to negative drawings. Using the position of the body as a strategy to convey mood did not differentiate positive and negative drawings. Finally, the state of the object, both multiplication ($B = -1.10$, $p < .05$) and reduction of the object ($B = -1.22$, $p < .05$), were less likely to appear in neutral relative to negative drawings, but this was not the case with positive relative to negative drawings.

Although the overall effect for the state of the object was rather marginal in yielding significance in the control group ($p = .051$), we decided to take a closer look in the parameter estimates. Both positive and neutral drawings were differentiated on the basis of this strategy, but in a different way. Namely, in the control group, the likelihood was higher for multiplication to be found in positive relative to negative drawings ($B = 15.59$, $p < .01$), while the less likely reduction differentiated neutral from negative drawings ($B = -18.68$, $p < .01$).

The groups used different patterns of strategies to convey positive, negative, and neutral mood. What appeared to be characteristic for the refugee group was the use of literal strategy, i.e., drawing faces to convey mood, however, in a very specific way by omitting parts of the facial characteristics. In addition, more NL content strategies were found to be predictive in global emotionality of the drawings in the refugee group, than in the control group.

Discussion

Our findings suggested important differences in the content of the drawings of the refugee children. While the most dominant categories in the control group included human figures, animals, homes, and landscapes, which was in accordance with the developmental stage of our sample, most of the drawings in the refugee

group were related to the themes of home, flags and countries, sea, ships, and vehicles. This was partially in line with the results obtained in the study described by Farokhi & Hashemi (2011), which showed that depiction of the houses was represented in 60% of the children's free drawings. They suggested that the depiction of homes symbolized the "emotions and stability that are achieved by life in the home, a place where basic needs are pursued" (p. 2223). Home was found to be highly frequent category in our study, and while it could be accounted for a large portion of one's life in the control group, it was more likely that home could be something refugee children longed for the most. However, the most surprising finding was that the explicit themes of violence and war appeared in almost 10% of drawings of the refugee group. Furthermore, we tested the group differences in the complexity of drawings, and the number of strategies used to convey different moods. Refugee children, relative to controls, employed more details and drew more complex drawings in order to depict negative mood. These findings align with the psychoanalytic theory, suggesting that children draw what they feel.

Our results also highlighted the group differences in using different patterns of expressive strategies to depict their current mood. Using literal strategies, i.e., drawing faces to depict positive or negative mood was found to be a differentiating predictor in the control group only, and only for differentiating neutral drawings. More importantly, children from the refugee group often left out the facial parts in the drawings rated as negative. Previous studies also found the bias of drawing happy faces, relative to sad ones, in their literal depiction of the mood (Buckalew & Bell, 1985), following the children's comprehension of positive and negative moods expressed in the pictures (Jolley & Thomas, 1994, 1995; Parsons, 1987). This could be attributed to their beliefs and/or everyday experience which rarely involved pictures expressing negative moods. Moreover, as an enjoyable and fun activity for children, drawing was less likely to involve negative content and would occur in specific occasions of unfolding current negative feelings. In the light of our results, this might suggest that the children from the refugee group reflected their expectations of "nice pictures" even in their attempt to draw expressive negative moods. However, in the refugee group, the use of facial characteristics did not differentiate positive, negative or neutral drawings, but the omission of the facial parts (most frequently the mouth) was predictive for negative drawings. These findings yield yet another possible explanation. As a reminder, children are often found with mixed symptoms and often do not meet diagnostic criteria for a certain disorder. The situation refugees are currently in, running away from traumatic experiences, but also hoping to reach their goal of better life in future, – can produce a variety of mixed feelings for (both parents and) children. Facial characteristics serve as a common descriptor of emotions, and as seen in the control group, together with the state of the objects drawn, it was enough to differentiate between the presence and the absence of the mood depiction. Omission of the relevant facial parts in the refugee group could be related to their hesitation to fully confront negative emotions. Even though research have

reported ambiguous results, some studies do note the importance of body parts omission and emotional disturbances, specifically, mouth and arms among poorly adjusted children (Vane & Eisen, 1962), and mouth among children with clinical manifestations (Goldman & Warren, 1976), or shy or depressed children (Koppitz, 1968). However, in the context of other non-literal strategies used to differentiate between positive and negative emotions in drawings, it would be more appropriate to consider it as a strategy, rather than a lack of one, to unload and deal with current negative emotions. Putting these results together with the fact that 9% of the refugee's drawings included explicit scenes of violence and war, this pattern of expressive strategies could reflect their symbolic control over events that were confusing and frightening. Employing as much strategies as possible to convey negative emotions might be an indicator of being overwhelmed, and might be salient in a therapeutic sense. Some authors interpret the omission of the mouth as a clear indicator of emotional disturbance. While Klepsch and Logie (2014) suggest that children may use this to express their concern about communication or language problems, Leibowitz (1999) suggest that the mouth has strong affective significance, because it serves to verbalize one's inner state and express feelings related to affective interactions. Therefore, he refers to the omission of the mouth as "an incapacity to make contact" and as an indication of one being "severely cut-off from significant others, i.e., profoundly withdrawn". According to Leibowitz, the omission of the mouth is an indicator of a severe deficit in affective interactions and implies "an affect state of severe depressiveness" (p. 76). This is in line with the fact that the majority of the refugee children were without parents or caregivers.

Regarding one of the most common spontaneous children activity, our results suggest that the use of drawings can provide an invaluable advantage in psychological assessment. The use of spontaneous drawings facilitates psychologists' work in limited conditions, not only by providing a valuable amount of information about the child's past experiences, but it can also facilitate children's ability to express their emotionally laden experiences through a nonthreatening activity.

Regarding all the limitations and warnings related to drawings as a projective test, understanding it in the context and as a process of children's externalization of complex feelings can serve instead as an efficient triage tool for providing future mental care and more extensive psychological examination. Nevertheless, while the politicized nature of the refugee crisis focuses on the legal and economic needs essential for the survival of thousands of refugees, the mental health of the refugees, especially of the refugee children, is most likely to be dealt with when they are settled in the country of interest. In addition, most of the existing studies are focused more on identifying psychopathological symptoms among child refugees (Fazel et al., 2005), as well as coping strategies and resilience, once they have been resettled in a "new life", while the studies referring to trauma indicators during the transitioning period are significantly deficient (due to practical and ethical reasons, mostly).

The purpose of our research was not to argue the value of psycho-diagnostic interview or any other diagnostic instrument, but rather to accentuate the contribution of children drawings and its potential to improve the processes and outcomes of psychological assistance provision, for both refugees and clinicians. Application of genuine settings for psychological assessment and techniques designed to capture emotional status may risk an additional psychological harm (Malchiodi, 1998), while drawings can provide a non-intrusive, less time consuming and efficient way to approach refugee children and their current emotional status.

Conclusion

Our results have shown that children's drawings could be used as a triage tool for the assessment of negative emotionality in refugee children. The drawings of the refugee children were significantly different from drawings of children in the control group both in the content and in the expressive strategies.

References

- Berman, H. (2001). Children and war: Current understandings and future directions. *Public Health Nursing, 18*, 243–252. doi:10.1046/j.1525-1446.2001.00243.x
- Biro, M. (2017). Problems that refugees bring and problems they will face– the experiences of psychologists on the “Balkan Route”. In T. Varady (Ed.), *Migrants in 21st Century Europe* (pp. 217–228). Novi Sad: SANU.
- Buckalew, L. W., & Bell, A. (1985). Effects of colors on mood in the drawings of young children. *Perceptual and Motor Skills, 61*, 689–690. doi:10.2466/pms.1985.61.3.689
- Burkitt, E., Barrett, M., & Davis, A. (2003). The effect of affective characterization on the size of children's drawings. *British Journal of Developmental Psychology, 21*, 565–584. doi:10.1348/026151003322535228
- Cox, M. (2005). *The pictorial world of the child*. Cambridge: Cambridge University Press.
- Dana, R. H. (2001). Clinical diagnosis of multicultural populations in the United States. In L. A. Suzuki, J. G. Ponterotto, & P. G. Meller (Eds.), *Handbook of Multicultural Assessment: Clinical, Psychological, and Educational Applications* (pp. 101–131). San Francisco: Jossey-Bass.
- Draguns, J. G. (1977). Problems of defining and comparing abnormal behavior in cross-cultural research. *Annals of the New York Academy of Science, 285*, 664–675. doi:10.1111/j.1749-6632.1977.tb29389.x
- Farokhi, M., & Hashemi, M. (2011). The analysis of children's drawings: social, emotional, physical, and psychological aspects. *Procedia-Social and Behavioral Sciences, 30*, 2219–2224. doi:10.1016/j.sbspro.2011.10.433

- Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: a systematic review. *The Lancet*, 365, 1309–1314. doi:10.1016/s0140-6736(05)61027-6
- Garbarino, J., & Kostelny, K. (1996). The effects of political violence on Palestinian children's behavior problems: a risk accumulation model. *Child Development*, 67, 33–45. doi:10.1111/j.1467-8624.1996.tb01717.x
- Goldman, R. K., & Warren, D. (1976). Preliminary analyses of human figure drawings as a kindergarten screening measure. *Perceptual and Motor Skills*, 43, 58–68. doi:10.2466/pms.1976.43.1.58
- Golomb, C. (1992). *The child's creation of a pictorial world*. Berkeley: University of California Press. doi:10.4324/9781410609250
- Gross, J., & Hayne, H. (1998). Drawing facilitates children's verbal reports of emotionally laden events. *Journal of Experimental Psychology: Applied*, 4, 163–179. doi:10.1037//1076-898x.4.2.163
- Hassan, G., Ventevogel, P., Jefe-Bahloul, H., Barkil-Oteo, A., & Kirmayer, L. J. (2016). Mental health and psychosocial wellbeing of Syrians affected by armed conflict. *Epidemiology and Psychiatric Sciences*, 25, 129–141. doi:10.1017/s2045796016000044
- Hollifield, M., Warner, T., Lian, N., Krakow, B., Jenkins, J., Kesler, J., & Westermeyer, J. (2002). Measuring trauma and health status in refugees: A critical review. *The Journal of the American Medical Association*, 288, 611–621. doi:10.1001/jama.288.5.611
- Jolley, R. R. (2010). *Children and pictures: Drawing and understanding*. West Sussex: Wiley-Blackwell.
- Jolley, R. P., Fenn, K., & Jones, L. (2004). The development of children's expressive drawings. *British Journal of Developmental Psychology*, 22, 545–567. doi:10.1348/0261510042378236
- Jolley, R. P., & Thomas, G. V. (1994). The development of sensitivity to metaphorical expression of moods in abstract art. *Educational Psychology*, 14, 437–450. doi:10.1080/0144341940140406
- Jolley, R. P., & Thomas, G. V. (1995). Children's sensitivity to metaphorical expression of mood in line drawings. *British Journal of Developmental Psychology*, 13, 335–346. doi:10.1111/j.2044-835x.1995.tb00684.x
- Kazour, F., Zahreddine, N. R., Maragel, M. G., Almustafa, M. A., Soufia, M., Haddad, R., & Richa, S. (2017). Post-traumatic stress disorder in a sample of Syrian refugees in Lebanon. *Comprehensive Psychiatry*, 72, 41–47. doi:10.1016/j.comppsy.2016.09.007
- Kleinman, A. (1981). *Patients and Healers in the Context of Culture: Exploring the Borderland Between Anthropology, Medicine and Psychiatry*. Berkeley: University of California Press.
- Klepsch, M., & Logie, L. (2014). *Children draw and tell: An introduction to the projective uses of children's human figure drawing*. London: Routledge.

- Koppitz, E. M. (1968). Emotional indicators on human figure drawings of shy and aggressive children. *Journal of Clinical Psychology, 22*, 466–469. doi:10.1002/1097-4679(196610)22:4<466::aid-jclp2270220430>3.0.co;2-i
- Leaning, J. (2001). Ethics of research in refugee populations. *Lancet, 357*, 1432–1433. doi:10.1016/s0140-6736(00)04572-4
- Leibowitz, M. (2013). *Interpreting projective drawings: A self-psychological approach*. London: Routledge. doi:10.4324/9780203777992
- Lindert, J., & von Ehrenstein, O. (2018). Anxiety, depression and post-traumatic stress disorder among refugees—a systematic review. *The European Journal of Public Health, 28*, 48–091. doi:10.1093/eurpub/cky048.091
- Lumley, M., Katsikitis, M., & Statham, D. (2018). Depression, Anxiety, and Acculturative Stress Among Resettled Bhutanese Refugees in Australia. *Journal of Cross-Cultural Psychology, 49*, 1269–1282. doi:10.1177/0022022118786458
- Lustig, S. L., Kia-Keating, M., Knight, W. G., Geltman, P., Ellis, H., Kinzie, J. D., ... & Saxe, G. N. (2004). Review of child and adolescent refugee mental health. *Journal of the American Academy of Child & Adolescent Psychiatry, 43*, 24–36. doi:10.1097/00004583-200401000-00012
- Malchiodi, C. (1998). *Understanding children's drawings*. London: Jessica Kingsley.
- McElroy, T., Muyinda, H., Atim, S., Spittal, P., & Backman, C. (2012). War, displacement and productive occupations in northern Uganda. *Journal of Occupational Science, 19*, 198–212. doi:10.1080/14427591.2011.614681
- Minihan, S., Liddell, B. J., Byrow, Y., Bryant, R. A., & Nickerson, A. (2018). Patterns and predictors of posttraumatic stress disorder in refugees: A latent class analysis. *Journal of Affective Disorders, 232*, 252–259. doi:10.1016/j.jad.2018.02.010
- Misalidi, P., & Bonoti, F. (2014). Children's expressive drawing strategies: the effects of mood, age and topic. *Early Child Development and Care, 184*, 882–896. doi:10.1080/03004430.2013.823409
- Palic, S., Kappel, M. L., Nielsen, M. S., Carlsson, J., & Bech, P. (2014). Comparison of psychiatric disability on the health of nation outcome scales (HoNOS) in resettled traumatized refugee outpatients and Danish inpatients. *BMC psychiatry, 14*, Article 330. doi:10.1186/s12888-014-0330-8
- Parsons, M. J. (1987). *How we understand art: A cognitive developmental account of aesthetic experience*. Cambridge: Cambridge University Press.
- Pernice, R. (1994). Methodological issues in research with refugees and immigrants. *Professional Psychology: Research and Practice, 25*, 207–213. doi:10.1037//0735-7028.25.3.207
- Picard, D., & Gauthier, C. (2012). The development of expressive drawing abilities during childhood and into adolescence. *Child Development Research*, Article ID 925036. doi:10.1155/2012/925063
- Picard, D., Brechet, C., & Baldy, R. (2007). Expressive Strategies in Drawing are Related to Age and Topic. *Journal of Nonverbal Behaviour, 31*, 243–257. doi:10.1007/s10919-007-0035-5

- Quosh, C., Eloul, L., & Ajlani, R. (2013). Mental health of refugees and displaced persons in Syria and surrounding countries: a systematic review. *Intervention, 11*, 276–294. doi:10.1097/wtf.0000000000000013
- Rhema, S. H., Gray, A., Verbillis-Kolp, S., Farmer, B., & Hollifield, M. (2014). Mental health screening. In A. Annamalai (Ed.), *Refugee health care: An essential medical guide* (pp. 163–171). New York, NY: Springer Science and Business Media. doi:10.1007/978-1-4939-0271-2_12
- Rose, S. E., Jolley, R. P., & Charman, A. (2012). An investigation of the expressive and representational drawing development in National Curriculum, Steiner and Montessori schools. *Psychology of Aesthetics, Creativity and the Arts, 6*, 85–93. doi:10.1037/a0024460
- Sack, W. H., Clarke, G.N., & Seeley, J. (1996). Multiple forms of stress in Cambodian adolescent refugees. *Child Development, 67*, 107–116. doi:10.2307/1131689
- Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R. A., & Van Ommeren, M. (2009). Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: a systematic review and meta-analysis. *The Journal of the American Medical Association, 302*, 537–549. doi:10.1001/jama.2009.1132
- Steele, W., & Kuban, C. (2013). *Working with grieving and traumatized children and adolescents: Discovering what matters most through evidence-based, sensory interventions*. New York: John Wiley & Sons.
- Teodorescu, D. S., Heir, T., Hauff, E., Wentzel-Larsen, T., & Lien, L. (2012). Mental health problems and post-migration stress among multi-traumatized refugees attending outpatient clinics upon resettlement to Norway. *Scandinavian Journal of Psychology, 53*, 316–332. doi:10.1111/j.1467-9450.2012.00954.x
- UNHCR (2014). *The Future of Syria: Refugee Children in Crisis*. Geneva: UNHCR.
- UNHCR (2015). *Mediterranean Sea arrivals - 2015. Data by location, country of arrival, demographic and country of origin*. Retrieved from <http://data.unhcr.org/mediterranean/download.php?id=490>
- UNHCR (2016). *Serbia Inter-agency Operational Update: April 2017 (with monthly figures)*. Retrieved from <http://data.unhcr.org/mediterranean/regional.php>
- Vane, J. R., & Eisen, V. W. (1962). The Goodenough Draw-a-Man test and signs of maladjustment in kindergarten children. *Journal of Clinical Psychology, 18*, 276–279. doi:10.1002/1097-4679(196207)18:3<276:aid-jclp2270180308>3.0.co;2-b
- Vukcevic, M., Dobric, J., & Puric, D. (2014). *Psychological Characteristics of Asylum seekers from Syria, in Survey of the Mental Health of Asylum seekers in Serbia*. Belgrade: UNHCR. Retrieved from <http://www.unhcr.rs/media/Mental-HealthFinal.pdf>
- Weber, R. P. (1990). *Basic content analysis*. London: Sage.

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DEČJI CRTEŽI KAO TRIJAŽNO SREDSTVO ZA PROCENU NEGATIVNE EMOCIONALNOSTI KOD DECE IZBEGLICA

Psiholozi koji rade sa ljudima u krizi suočavaju se sa problemom nedostatka dijagnostičkog instrumentarijuma koji može brzo i efikasno ukazati na indikatore traumatskog iskustva, čime bi se omogućila blagovremena i na pravi način osmišljena intervencija. Taj problem je posebno naglašen kod dece, odnosno, kod subjekata sa kojima je otežana verbalna komunikacija (npr. zbog nepoznavanja jezika), kao i kod ljudi u pokretu. Autori ovog rada bili su deo psihološkog interventnog tima na tzv. „Balkanskoj ruti“ i suočili su se sa populacijom u krizi, koja je imala sve napred navedene odlike. Iz tog razloga, sprovedeno je istraživanje čiji je cilj bio da registruje moguće indirektno indikatore traume u spontanim crtežima dece izbeglica. Koristeći izražajne strategije koje deca koriste kako bi prikazala raspoloženje u svojim crtežima, fokusirano se na moguće pokazatelje traume. Od srpske dece iz domicilne populacije formirana je kontrolna grupa istog uzrasta kao i u grupi izbeglica (5 - 9 godina). Ukupno je prikupljeno 464 crteža na kojima je primenjena analiza sadržaja i analiza Pickardovih ekspresivnih strategija. Analiza sadržaja je pokazala različite sadržajno specifične kategorije u odnosu na posmatrane grupe, pri čemu se kategorija nasilja i rata pojavljuje isključivo na crtežima u izbegličkoj grupi i korišćena je kao jedan od pokazatelja traume. Dalja analiza je pokazala da je negativno raspoloženje prikazano složenijim i detaljnijim crtežima u obe grupe. Literalna ekspresivna strategija bila je specifična za izbegličku grupu, dok su različiti obrasci neliteralnih ekspresivnih strategija prepoznati kao indikatori raspoloženja u obe grupe. Nalazi ukazuju na to da se spontani dečiji crteži mogu koristiti kao trijažni alat za procenu emocionalnog stanja dece izbeglica i da imaju više prednosti u odnosu na druge dijagnostičke instrumente – dobijaju se brzo, spontano i ne dovode do retraumatizacije.

Ključne reči: crteži, ekspresivne strategije, izbeglička deca, trauma indikatori