Original Article

Emotion Regulation Characteristics Development in Iranian Primary School Pupils¹

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Objectives: Emotion regulations refer to the ability of experiencing emotions as a basic human capacity and the experience of the basic emotions happiness, anger, sadness and fear are considered as reular characteristics among nations. In school-age children, problems in socioemotional development typically shows themselves as challenging, socially disruptive paterns of behavior. The purpose of the present study was to understand Emotion Regulation characteristics in Iranian primary school pupils and whether Iranian children enable to identify common emotions.

Methods: Participants included 900 children, 9 to 10 years, from elementary schools from 21 provinces in Iran. In pilot work we presented 200 children with four hypothetical vignettes of the kind typically used in display rule research. In the main study children's knowledge regarding hiding their emotions was assessed through a structured interview. The participants were presented with the interview questions after the vignettes. The answers were coded by two people and the interrater reliability was high. The children were assessed on the basis of four common emotions:Happiness, Anger,Fear,and, Sadness.

Results: The analysis of the data indicated that:1)all children were enabled to identify and differentiate all four emotions from each other, most of students hide their happiness, anger, fear and sadness, they hide their emotions in specific situation such as school and home, hide happiness and anger against peers and hide fear and sadness in front of adults.

Discussion: The study indicates that Iranian children not only differ from other culture peers in the amount of display rule use in daily life, but also in the situations they report using it and their motives for doing so; they suppress their overall emotions more frequently, especially in presence of family and for pro-social and self-protective reasons. These findings provides the basic knowledge about Iranian children emotional expression development which can be used in cultural, educational and therapeutic contexts.

Keywords: Emotion Regulations characteristics, Iranian, primary school

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Introduction

Emotion regulations refer to the ability of experiencing emotions as a basic human capacity and the experience of the basic emotions happiness, anger, sadness and fear are considered as reular characteristics among nations (1,2). In the regulation of emotions issues, psychologists who study lifespan development of emotional processes observed age related changes (3). Children develop the abilities to employ impulse control, achieve consciousness of themselves and others and their environment. Some studies examin age differences in emotion regulation or emotion behavior (4). Upon existing literature, Emotional regulation strategies is in all aspects of personal and emotional, cognitive and social development is desired (5). The work on emotion regulation began with descriptive psychodynamic studies of defense mechanisms, which in the 1960s the study on the factors influencing an individual's ability to cope with stressful situations and today continue to inspire developmental studies of children's ability to self-regulate. Building upon these studies, contemporary models conceive of emotions as arising from brain systems that appraise the significance of stimuli with respect to our goals and needs. The regulation of emotions through cognitions is inextricably associated with human life. Cognitions or cognitive processes help people regulate their

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Iranian Rehabilitation Journal -

emotions or feelings and not get overwhelmed by the intensity of these emotions (6,7). Emotion regulation and internalizing symptoms in different groups has been investigated by Dr. Rieffe and her colleagues (8,9) and emotion-regulation strategies across psychopathology were reviewed through a meta analytic study (10).

In school-age children, problems in socioemotional development typically themselves shows as challenging, socially disruptive paterns of behavior that, without interventon, can evolve into persistent antisocial behavior, such as physical aggression and bullying and ultmately adolescent delinquency (11,12). At this age, the socio-psycho-biological processes are foundatonal for brain and psychosocial development, and they have lifelong consequences. The foundation for emotional regulation is Self-awareness. It is formed as young children begin to resist an impulse and display a kind of behavior which socialy is accepted (13). When a child encounters a different situation, there are emotional cues that cause the child to feel a certain way. Although there are so many different types of emotion, it's esential to know what makes up the overall emotional response suchas "fear," "angry," "sad," or "happy." Usualy a child's emotional response comes from three emotional response tendencies: the way a child shows emotions, the way a child feels, and the way a child's body reacts to the emotion (14).

It has consistently been found that the health of an individual is related to the degree to which they express their emotions. These are rules learned early in childhood that help individuals manage and modify their emotional expressions depending on social circumstances. In fact theoretically there are many ways in which display rules can operate in order to regulate expression. Individuals can amplify deamplify (minimize) (exaggerate) or their expressions; for instance feelings of sadness may be intensified (amplification) at funerals or minimized (deamplification) at weddings. People can mask or conceal their emotions by expressing something other than what they feel. This study aimed to find the patterns of emotion regulation charecteristics and high levels of self-reported emotion regulation difficulties. In addition, exploratory analyses tested the role of emotion understanding and acceptance in elementry school individuals in Iran.

Methods

The present study was a research evaluating the emotion regulation characteristics development in Iranian primary school pupils. Over the 21 states of the country with different culture, the emotion regulation characteristics was the scope of this study. Parental consent was obtained for all participants.

Participants - There are 37 provinces in Iran from which randomly 21 provinces were selected for the study. Participants included 900 children from elementary schools from these provinces (table 1). There were boys and girls and the age was 9 to 11 years old. We have chosen to focus on children aged 9-11 years because developmental research suggests that children's capacity to reflect on their emotions and behaviours, in relation to various internal states, improves significantly during the primary school years (15).

	P	Denset	C 1. C
province	Frequencey	Percent	Cumulative Frequency
Tehran-1	39	4.3	4.3
Ghazvin	23	2.6	6.9
Zanjan	36	4.0	10.9
Rezavi Khorasan	39	4.3	15.2
Fars	93	10.3	25.6
Semnan	59	6.6	32.1
Esfahan	42	4.7	36.8
Hamedan	49	5.4	42.2
Golestan	57	6.3	48.6
Kermanshah	27	3.0	51.6
South Khorasan	54	6.0	57.6
North Khorasan	54	6.0	63.6
Kerman	49	5.4	69.0
Sistan	26	2.9	71.9
Khozestan	60	6.7	78.6
Hormozgan	32	3.6	82.1
Mazandaran	30	3.3	85.4
Azarbayjan	1	0.1	85.6
Kordestan	24	2.7	88.2
Lorestan	30	3.3	91.6
Tehran-2	76	8.4	100.0
Total	900	100.0	

Table1. Distribution of students in terms of residence

Material – In pilot work that we conducted for the present study, we presented 200 children with four hypothetical vignettes of the kind typically used in display rule research, where the protagonist is identified as having a clear reason for concealing emotions from a peer audience (16). The mean proportion of stories where children predicted that the protagonist would express his or her real emotion, out of the total number of stories where the real emotion was predicted correctly.

In the main study children's knowledge regarding hiding their emotions was assessed through a structured interview (17), which was administrated in farsi. we use a structured interview to identify 9 to 11 year children's self-reported use of emotional display rules in their own experience. This emic approach to the topic is likely to help us draw more culturally sensitive conclusions about children's emotional development, in comparison with an etic approach based on using hypothetical vignettes that are themselves potentially culturally biased. The next four questions were asked: 1) Did you ever feel angry, but you did not want other people to know? [If no: If you would want to, would you be able to? If the child still answered 'no', the next three questions were asked about a hypothetical child, who was hiding his or her anger], 2) When was it that you did not want other people to know you were angry? 3) Why did you not want other people to know how you felt? 4) How did you do that, not letting other people know you were angry? Following this, the same questions were repeated for sadness, joy and fear.

Scoring - Responses on the first question were scored for whether or not children reported that they once experienced hiding an emotion or when they were able to imagine it. Concerning when they would do so, their responses to question 2 were scored for whether children referred to the presence of family (parents, grandparents, or siblings), to the presence of peers (classmates, friends), or to situations were performance is an issue (exams,

matches). An example of the last situations is: 'I was happy because I received a high mark', or 'I was sad that I couldn't concentrate on my exam'. Children's responses on how they would hide their emotion (question 3) were divided into emotion-regulation, neutralization, substitution or avoidance, in the same way as in Study 1. Motives for hiding emotions (question 4) were coded as pro-social, or selfprotective, as in the first Study. Note that the categories of the last three questions are not exclusive, since children could obtain scores in more than one of the categories. Data was coded missing based on the same criteria as described. Children's answers on the questions 2, 3, and 4 were excluded from further analysis when it was shown that the child could not imagine hiding the presented emotion.

Procedure - The participants of this study were presented with the interview questions after the vignettes, still being in the same separate, quiet room. After a short introduction, the interview was read aloud by the interviewer. This assessment took approximately 15 minutes. Children's responses were tape-recorded and transcribed afterwards. The answers were coded by two people and the interrater reliability was high (92%).

Results

In the pilot study, we first examined children's selfreported experience of hiding anger, sadness, happiness, and fear. The result indicated that 100% of children's self-reported experience shows the protagonist expressed their real emotion. By analyzing the data from the structured interview which studied children's knowledge regarding hiding their emotions, table (2) shows the percentages and the total numbers of children claiming to have concealed each emotion. Analysis of variance and Gender between subjects, and Emotion (happiness, fear, anger, sadness) within subjects showed main effects for Emotion (p < .001).

Table 2. Percentages of children reporting use of emotional display rules, by emotion

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	Emotion	Iranian $(n = 900)$
	Happiness	8.7% (79)
	Fear	1.6% (14)
	Anger	56.1% (5.5)
	Sadness	33.6% (3.2)
-		

Next, an analysis of variance was carried out between subjects, and Audience (family vs. peers) and Motive

(prosocial vs. self-protective) within subjects. For this analysis, we grouped together responses to all

emotions, such that scores represented the number of reported display rules of a certain type (family vs. peer audience; prosocial vs. self-protective motive) divided by the total number of emotions for which the child reported using, or stated that they could imagine using, a display rule (table 3).

Emotion	Audience	Motive	Students
Happiness	Family	Pro-social	.24 (.43)
		Self-protective	.02 (.16)
	Peer	Pro-social	.22 (.42)
		Self-protective	.15 (.36)
Anger	Family	Pro-social	.08 (.27)
		Self-protective	.08 (.27)
	Peer	Pro-social	.33 (.48)
		Self-protective	.12 (.33)
Fear	Family	Pro-social	.08 (.28)
		Self-protective	.42 (.33)
	Peer	Pro-social	.00 (.00)
		Self-protective	.27 (.45)
Sadness	Family	Pro-social	.22 (.42)
		Self-protective	.20 (.40)
	Peer	Pro-social	.09 (.29)
		Self-protective	.09 (.29)

Table 3. Means (SD) of students reporting display rule use, subdivided by Emotion, Motive, and Audience

The results showed that 1) prosocial motives with a family audience were common among the school children especially for happiness and to a lesser extent for sadness; 2) self-protective motives with a family audience were more common among the children especially for fear and sadness; 3) prosocial motives with a peer audience were more common among children for anger only.

Discussion

The results of this study indicate that particular paterns of emotional display and regulation developed among Iranian school pupil. The structured interviews children's self-reported experiences of using display rules have revealed significant cultural differences consistent with our theoretical expectations. The results reveal that although the majority of children reported having experienced situations where they concealed each of the four emotions, such regulation was clearly more apparent among the children. Furthermore, there were systematic variations in the references to audiences and motives for emotional display rules. The children referred more often to family audiences and less often to peer audiences, and more often to prosocial motives and less often to selfprotective motives. Further analysis revealed that children identify prosocial and self-protective motives for concealing emotions from a family audience (especially prosocial motives for concealing happiness and to some extent sadness, and selfprotective motives for concealing fear and sadness), but were significantly less likely to identify selfprotective motives for concealing all three negative emotions from a peer audience. These findings are consistent with the perivous studies (8,18,19).

The findings suggest that the socialisation of emotional expression is sensitive to differences in sociocultural norms and values. The results corroborate our expectations that growing up with orientations that stress social hierarchy and group harmony would result in responses from the Iranian children to our interview questions about emotional display rules. We found out that the Iranian children may conceal both positive and negative emotions more often, these reflect personal concerns and draw attention to the individual, thereby undermining group focus and the higher status of the other person. Expressing personal needs could be a threat to the "intense emotional connectedness and interdependence" (20) on the one hand and high expectations of respectful behaviour to elderly on the other hand (21), which are both characteristics of Iranian interpersonal relationships. Despite a general tendency for Iranian children to refer less often to self-protective motives, it was clearly the case that those children identified both prosocial and selfprotective motives for display rules in front of family audiences. Also children viewed emotion regulation within family contexts as important for ensuring positive outcomes for themselves, as well as for others. This is evidenced by greater reference to self-protective motives for concealing fear and sadness from family members. The expression of emotion as mentioned above, requires interaction

between one or more individuals. This interaction takes place within a framework, but the interaction itself contains the expression of affectivity. The children of Iranian society provides for basic frames which clue individuals as to appropriate language behavior for any given situation. The basic dimensions of Iranian society are not complex in a structural sense, but they provide for a rich play of linguistic expression. The contrast between inside and outside is pervasive, and governs many other aspects of national life.

Conclusion

In conclusion, emotion mobilize children to action. They arouse physiological system, direct attention, and motivate children to action. Emotions are critical for adaptation in the lifespan, but developmental process alter multiple facets of emotional experinces, including cognitive appraisals, behavioral responces and environmenta issues. The analysis of the data indicated that most of the children were enabled to identify and differentiate all four emotions from each other, hide their happiness, anger, fear and sadness, hide their

References

- 1. Russell JA. Culture and the categorization of emotions. Psychological bulletin. 1991; 110(3): 426-50.
- Novin S, Banerjee R, Dadkhah A, Rieffe C. Self-reported Use of Emotional Display Rules in the Netherlands and Iran: Evidence for Sociocultural Influence. Social Development. 2009; 18(2): 397-411.
- 3. Giedd JN. Structural magnetic resonance imaging of the adolescent brain. Annals of the New York Academy of Sciences. 2004; 1021(1): 77-85.
- Kunzmann U, Kupperbusch CS, Levenson RW. Behavioral inhibition and amplification during emotional arousal: a comparison of two age groups. Psychology and aging. 2005; 20(1): 144.
- Dadkhah A, Shirinbayan P. Cognitive Emotion Regulation in aged people: Standardization of Cognitive Emotion Regulation Questionnaire in Iran. Iranian Rehabilitation Journal. 2012; 10(15): 24-7.
- Journal. 2012; 10(15): 24-7.
 Garnefski N, Kraaij V, Spinhoven P. Negative life events, cognitive emotion regulation and emotional problems. Personality and Individual differences. 2001; 30(8): 1311-27.
- Garnefski N, Kraaij V, van Etten M. Specificity of relations between adolescents' cognitive emotion regulation strategies and internalizing and externalizing psychopathology. Journal of Adolescence. 2005; 28(5): 619-31.
 Rieffe C, Oosterveld P, Terwogt MM, Mootz S, Van
- Rieffe C, Oosterveld P, Terwogt MM, Mootz S, Van Leeuwen E, Stockmann L. Emotion regulation and internalizing symptoms in children with autism spectrum disorders. Autism. 2011; 15(6): 655-70.
- 9. Rieffe C, Meerum M, Tolland A, editors. Emotion awareness and somatic complaints in children. First European Conference on Emotion Research Amsterdam: The Netherlands; 2004.
- Aldao A, Nolen-Hoeksema S, Schweizer S. Emotionregulation strategies across psychopathology: A meta-analytic review. Clinical psychology review. 2010; 30(2): 217-37.

emotions in specific situation such as school and home, hide happiness and anger against peers and hide fear and sadness in front of adults, and finally they hide all four emotions through neutralization.

The study indicates that Iranian children not only differ from other culture peers in the amount of display rule use in daily life, but also in the situations they report using it and their motives for doing so; they suppress their overall emotions more frequently, especially in presence of family and for pro-social and selfprotective reasons. These findings provides the basic knowledge about Iranian children emotional expression development which can be used in cultural, educational and therapeutic contexts.

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- 11. Powell DS, Fixsen DL, Dunlap G. Pathways to service utilization: A synthesis of evidence relevant to young children with challenging behavior: Center for Evidence-Based Practice; 2003.
- 12. Wilson DB, Gottfredson DC, Najaka SS. School-based prevention of problem behaviors: A meta-analysis. Journal of quantitative criminology. 2001; 17(3): 247-72.
- 13. Berk L. Infants and children prenatal through middle childhood. Boston: Pearson; 2008.
- Gross JJ. The emerging field of emotion regulation: An integrative review. Review of general psychology. 1998; 2(3): 271-99.
- 15. Harris PL. Children's understanding of emotion. Cambridge: Cambridge University Press; 1989.
- Banerjee R, Rieffe C, Terwogt MM, Gerlein AM, Voutsina M. Popular and rejected children's reasoning regarding negative emotions in social situations: The role of gender. Social Development. 2006; 15(3): 418-33.
- Rieffe C, Potharst E, Terwogt MM, Begeer S, Stockmann L, Cowan R. Expressie van emoties bij hoogfunctionerende kinderen met autisme. Kind en adolescent. 2005; 26(2): 75-82.
- Wiefferink CH, Rieffe C, Ketelaar L, Frijns JH. Predicting social functioning in children with a cochlear implant and in normal-hearing children: The role of emotion regulation. International journal of pediatric otorhinolaryngology. 2012; 76(6): 883-9.
- Theunissen SC, Rieffe C, Kouwenberg M, De Raeve LJ, Soede W, Briaire JJ, et al. Behavioral problems in school-aged hearing-impaired children: the influence of sociodemographic, linguistic, and medical factors. European child & adolescent psychiatry. 2014; 23(4): 187-96.
- Behzadi KG. Interpersonal conflict and emotions in an iranian cultural practice: Qahr andashti. Culture, medicine and psychiatry. 1994; 18(3): 321-59.
- 21. Nassehi-Behnam V. Change and the Iranian family. Current anthropology. 1985: 557-62.