



ASSESSING CHILDREN'S FEARS WITH REGARD TO SPECIFIC DEVELOPMENTAL PERSPECTIVES: THE PATH TEST

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ABSTRACT

It has been scientifically demonstrated that the study and consideration of situations experienced by children of pre-school and school age in respect of specific developmental fears can be associated with the wide range of difficulties related to specific development tasks. The aim of this paper is to present a tool which was produced in order to allow for the analysis of experiences related to the different developmental fears, by making it possible for the subject to elicit them using a graphic stimulus. The Path Test presents the respondent with a choice, illustrated by a picture on an A-4 sheet, between five different options, which all result in getting home. According to the author's hypothesis, these options are associated with specific developmental aspects. The data presented in this paper are the first results of the validation of this instrument. Reference is made to a preliminary study conducted in order to verify the validity of the emotional-affection criterion; here the latter is associated with the attachment bond to the caregiver and to friendship relations.

Keywords

children's fears, emotional criterion, affection criterion, friendship relations, attachment

INTRODUCTION

Data from literature show that the experiences related to phobias and fears during the developmental period seem to be associated with a higher likelihood of suffering from difficulties and disorders as regards coping strategies when children have to face problematic situations in respect of specific development tasks. The Path Test (Quaglia, 1994) is, in fact, a tool designed to study perceptions from the viewpoint of children (of pre-school and school age) with respect to various specific developmental fears: it consists of a graphic stimulus showing various options (five paths, all leading to the house of the protagonist, a child seen from the back, all interrupted by specific obstacles which the author assumes to stand for specific developmental fears); the subject is then asked to expressly choose or refuse them. The assessment procedure of the instrument is based on a twofold methodological trend: first of all the aim is to explore the validity of the tool by stating and describing the theoretical concepts underlying the specific aspects which the instrument has been designed to study. This means that each alternative suggested is traced back to a specific developmental domain, in order to study specific

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correlations with respect to the choice or refusal suggested. Moreover, a content analysis is performed as regards the reasons given by the children for the choices and refusals expressed during the test: this is done in order to find out whether there are recurring typical semantic nuclei related to the sources of fear which are most frequently mentioned by the subjects, as well as to highlight the emerging of individual elements, also elicited by administering the test, but which were not initially expected. The specific purpose of this paper, therefore, is to present a few initial suggestions deriving from the first results obtained through the standardisation process: in this case the intent was to assess the emotional – affection aspect, in its connection with friendship relationships (which the author assumes to be associated with the choice of option # 3) and with the attachment bond (which the author assumes to be associated with the choice of option # 5). The analyses presented in this paper will therefore pertain to the possible correlations between choices and refusals made by the subjects interviewed and the variables related to the two specific aspects under examination.

METHOD**Participants**

Our study involved 91 subjects, aged between 6 and 11 (average age: 8.5; ds: 1.3); they were all attending primary school and lived in the northern Piedmont area. The respondent group was balanced in terms of gender (47 males; 45 females).

Instruments

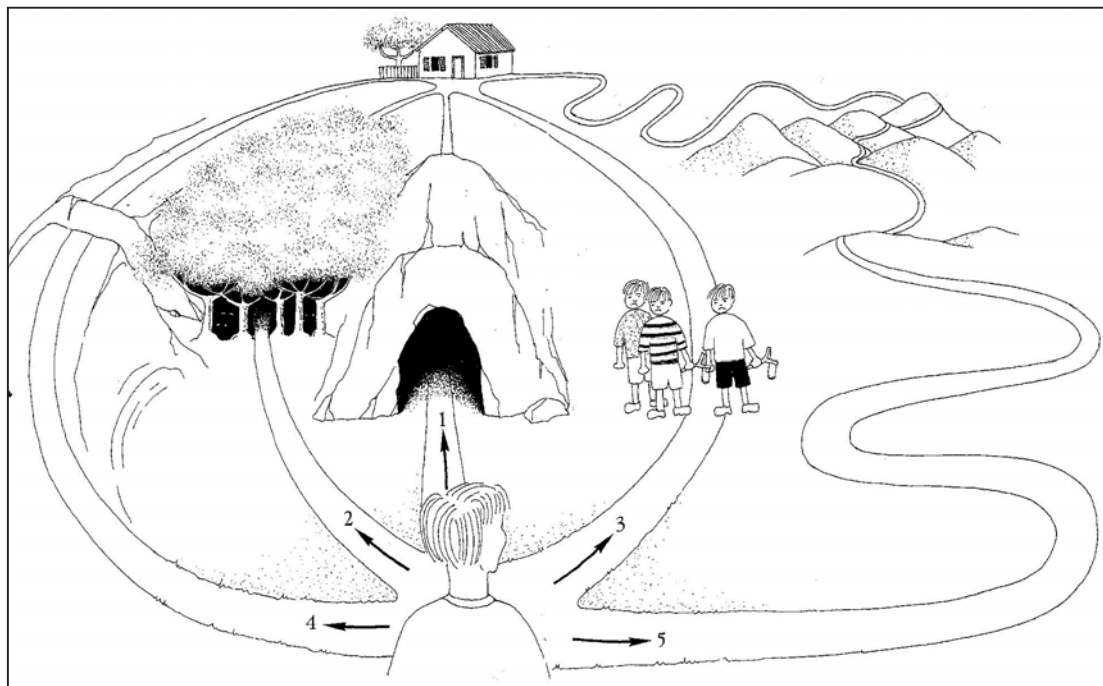
Considering the purposes of our analysis, we thought it appropriate to administer the tool for this scientific study – the Path Test - to all subjects at the same time, together with another instrument for the exploration of several issues related to the developmental aspect under examination, in this case the emotional – affection domain. In order to study the latter aspect in its relation with the type of attachment established by the subject, the procedure applied was the Manchester Child Attachment Story Task (M-Cast) (Green et al., 2000); this is an observation and semi-structured interview method which starts by presenting the respondent with a moderately stressful situation in a playful setting, thus allowing interviewers to identify the attachment style established and activated by the subject as regards specific stressors. More specifically, six different situations are presented to the child, four of them eliciting in a specific way the activation of the attachment system and of personal coping strategies. The children respond to the introduction expressly provided by the interviewer and suggest their own solution for the situation at hand; the assessment is therefore based on the subjects' narrative, as well as on their behavioural reactions. This makes it possible to identify the specific type of attachment which characterises the subjects' activation system: for the purposes of our study the aforesaid typology was analysed on the basis of the two major types of attachment - secure and insecure. This option was considered effective from a methodology viewpoint because the main area of interest here was to assess the incidence of a secure attachment on the choice of path # 5 (characterised by the presence of mountains); the aim of the study, in fact, was not an exploratory survey of the individual aspects of an insecure attachment. The data codification thus led to a "secure attachment" vs. "insecure attachment" dichotomy variable. It was considered appropriate to study the affection dimension in its aspects related to the quality of friendship relationships by administering two self-assessment scales: one of them was the Friendship Qualities Scale (Bukowski, Hoza e Boivin, 1994), while the other focused more on assessing intimate friendship, the Intimate Friendship Scale (Sharabany, 1994). The FQS, in its Italian version adapted by Fonzi, Tani and Schneider (Fonzi, Tani, Schneider, 1996), was administered to the group of subjects aged between 6 and 8; on the other hand, the Italian version of the IFS (Tani, Maggino, 2003) was administered to the sub-group of subjects attending the second level of primary school. It was considered appropriate to diversify the instrument applied according to the age of the respondents in order to make sure, as effectively as possible, that the subjects correctly understood the assignment at hand.



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A preliminary analysis was conducted on twenty subjects chosen from the same setting used for the group on which the study was actually conducted; this showed that the items included in the IFS were indeed difficult to understand for children aged between 6 and 8; on the contrary, such difficulties were not encountered as regards the items in the FQS. The focus of the survey was then turned to the individual perspectives explored through the instruments, whereby particular attention was paid to aspects which seemed to be similar from a theoretical viewpoint. The normal distribution of scores in the two groups, in any case, allows for generalised conclusions, even though they were studied separately. As regards the structuring of the tests administered, there are other elements which deserve to be underlined. The Path Test serves the purpose of eliciting specific children's fears associated with various developmental aspects. The instrument, designed for children of pre-school and school age, consists of a picture (ref. fig. # 1) showing a child seen from the back, who has to choose between five different paths, all of them leading to his/her home. Along each of these paths, however, there is a different kind of hindrance, which the Author assumes to be associated with specific developmental difficulties and fears: more specifically, the first path is interrupted by a tunnel, the second requires walking through a wood, and the third is partly obstructed by a small group of threatening children. The fourth path is blocked by a cliff, while the fifth leads across a chain of mountains. The test was drafted with a view to representing in a diversified way the widest possible range of the most frequent children's fears (Oliverio Ferraris, 1980): from the ancestral fear of the dark and of the unknown (which the Author assumes to be represented by the tunnel and, in part, also by the wood, bearing in mind that the latter more openly refers to oedipal issues), to the fear associated with one's physical capabilities (jumping over a cliff), to the fears related with one's relational and social skills (represented by the path blocked by the group of children), and those related to confidence in exploring the surrounding environment (the mountainous path). The children are asked to identify the path they would refuse and the one which, on the contrary they would choose, in order to reach their house. Moreover they are asked to state the reasons which, in both cases, lead to selecting a specific path.

Figure # 1: Path Test Diagram



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Procedure

Results

As regards the paths chosen or refused by the group under investigation, first of all it should be noted that the path most frequently chosen by the respondents was # 5, which is characterised by mountains (55.6%); it is followed by the paths characterised by the presence of a cliff and a tunnel (both chosen by 17.8% of respondents), and the paths characterised by the presence of woodland (4.4%) and threatening children (4.4%). On the other hand, the path most frequently refused was # 2 (woodland, 28.9% of subjects), followed by path # 1 (tunnel, 24.4%) and by the path blocked by a group of children (refused by 21.1% of respondents). Only 14.4% of the children refused the path blocked by a cliff, while 11.1% refused the path characterised by the presence of mountains. There does not seem to be a significant correlation as regards the choices or refusals expressed and the age variable, which is not the case for the gender variable (value of X^2 equal to 14.49, df: 4, $p = 0.006$): when choosing which path to take, the girls tend to select the one blocked by a cliff; on the other hand, the boys seem to be more clearly oriented towards the path characterised by the presence of mountains. No similar significant correlation was found between gender and path refusal.

As regards the results emerging from the administration of M-CAST, the X^2 test was applied with respect to the possible relations between variables referring to the type of attachment (codified according to the "Secure" and "Insecure" categories) and the variables referring to the choices, refusals and paths mentioned. This analysis (see table # 3) led to significant results as regards the correlation between path chosen and type of attachment ($p = 0.04$): the respondents with a secure attachment, in fact, seem to be oriented towards choosing path # 5, characterised by the presence of mountains.

	Path chosen	Path refused	Path 1 mentioned	Path 2 mentioned	Path 3 mentioned	Path 4 mentioned	Path 5 mentioned
Type of attachment	0.04	0.91	0.42	0.61	0.75	0.17	0.76

Table # 3: Type of attachment – Path chosen, refused Correlation, specific paths mentioned (significance considered for $p \leq 0.05$: significant values in bold type)

The correlation between choices and refusals expressed on the one hand, and the scores obtained on the two friendship relation self-assessment scales on the other, was studied by applying the variance analysis technique (ANOVA one way) to the different distributions (with reference to the scores distributed in the subgroups pertaining to the specific paths mentioned, chosen and refused). In the case of subjects to whom the FQS was administered (see table # 1) no significant correlation values were reported between the choice of path and the overall scale score, or between the choice suggested and the partial scores referring to the different dimensions. Also as regards the "Path refused" variable, no significant correlation values between the two variable were reported. On the contrary, significant results emerged as to the relationship between the path mentioned (variable created considering all the times the respondents mentioned a certain path, either as choice or as refusal) in the case of the second path, characterised by woodland, and the aspects related to Safety ($p = 0.05$) and Intimacy ($p = 0.03$). In other words, as the partial score for the Safety-related aspects increases, the subjects seem more inclined to mention the second path; in the second case, on the other hand, the relationship between the two variables seems to be inversely proportional (i.e. subjects with high scores on the Intimacy scale seem less inclined to mention the second path). In the subgroup of respondents to whom the IFS was administered (see table # 2) similar results were reported: it is not possible to establish significant correlations between the global score obtained by the subjects and the paths chosen or refused, or between the paths mentioned for the various options. However, as regards the aspect related to "Sensitivity and knowledge" a significant correlation ($p = 0.02$) was reported with the path refused: as the partial



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score referring to this scale increases, the subjects seem more inclined to refuse the path blocked by a group of children. Similar results were obtained as regards the scale related to "Imposition", which in this case was correlated ($p = 0.04$) to mentioning the second path: those children who score higher on this scale seem more inclined to mention the second path, where they have to walk through a wood.

	FQS Overall score	FQS Conflict	FQS Being together	FQS Assistance	FQS Safety	FQS Intimacy
Path chosen	0.57	0.88	0.58	0.78	0.67	0.82
Path refused	0.32	0.82	0.36	0.33	0.41	0.26
Path 1 mentioned	0.11	0.95	0.10	0.36	0.62	0.12
Path 2 mentioned	0.68	0.83	0.52	0.90	0.05	0.03
Path 3 mentioned	0.26	0.59	0.87	0.10	0.13	0.39
Path 4 mentioned	0.25	0.93	0.36	0.24	0.60	0.43
Path 5 mentioned	0.28	0.42	0.10	0.79	0.11	0.38

Table # 1: Friendship relations (FQS group) – Path chosen, refused correlation, specific paths mentioned; values of p (significance considered for $p \leq 0.05$: corresponding values in bold type)

	IFS Overall score	IFS Sincerity Spontaneity	IFS Sensitivity Knowledge	IFS Attachment to the friend	IFS Exclusivity	IFS Sharing	IFS Imposition	IFS Common activities	IFS Trust
Path chosen	0.59	0.53	0.71	0.67	0.72	0.48	0.61	0.50	0.43
Path refused	0.67	0.21	0.02	0.97	0.63	0.98	0.68	0.44	0.79
Path 1 mentioned	0.28	0.55	0.91	0.66	0.23	0.38	0.09	0.56	0.46
Path 2 mentioned	0.27	0.38	0.20	0.66	0.07	0.43	0.04	0.91	0.42
Path 3 mentioned	0.25	0.18	0.15	0.68	0.24	0.32	0.10	0.75	0.25
Path 4 mentioned	0.28	0.50	0.67	0.61	0.23	0.43	0.07	0.45	0.47
Path 5 mentioned	0.19	0.54	0.59	0.68	0.13	0.43	0.10	0.20	0.37

Table # 2: Friendship relations (IFS group) – Path chosen, refused correlations, specific paths mentioned (significance considered for $p \leq 0.05$: significant values in bold type)

DISCUSSION

The data presented here allow for the following remarks about the initial assumptions.

As regards the results emerging from the study of aspects related to the attachment bond, our initial assumptions in respect of the choices made by the child seem to be confirmed. A secure attachment appears to be associated with the choice of path # 5 (characterised by the presence of mountains): this would confirm the expectations regarding the aspect elicited by this option, regarding the specific attachment and exploration system developed by the subject. On the other hand, there do not seem to

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be clear correlations with respect to the type of attachment and the path chosen by the respondent, in the same way as the generic mentioning of the path does not seem to be associated with a specific style of attachment. This subsequently leads to reconsidering the assumptions regarding this concept: indeed the expectations postulated a significant correlation of the attachment style both with the choice made and the refusal expressed. In other words, the expectation was that a secure attachment bond – a theoretical concept (Bowlby, 1969, 1988) openly correlated with positive and efficient characteristics of the corresponding exploration system (as was actually shown by the values of the analysis) – would lead to more willingness to choose path # 5. This choice, as a matter of fact, requires the children to imagine that they would be away from home for a longer period of time (because it is the longest path) and forced to explore an environment completely unknown to them. By the same token, the expectation was that there would be an increase in the refusal responses of that path, exactly because of these features, by respondents who had an insecure style of attachment: this, however, was disconfirmed by the results. The initial assumption, therefore, seems to be confirmed only in one respect: subjects who have a secure attachment bond seem to be more prone to trust their exploration skills. However, it is not possible to support statement identical and opposite to this: it has not been proved that an insecure attachment bond necessarily makes subjects more prone to avoiding and refusing an experience which implies activating their exploration skills. In this respect, these aspects of our initial assumptions could be reconsidered in the light of further intervening variables which have not yet been taken into account.

As regards the quality of the friendship bonds, the data show that there is no strong connection between the choices, refusals and specific paths mentioned on the one hand and this variable on the other. More specifically, this would not seem to confirm the incidence of a high score obtained in respect of the qualitative aspects of friendship bonds and the choice of path # 3, characterised by the presence of a group of children. The choice or refusal of walking down a path which presents this kind of difficulties, on the whole, does not seem to depend on the different level of reciprocity and affection attributed by the respondents to their friendship bonds. Some interesting elements, however, emerged from the analysis of the averages regarding the specific aspects studied using the FQS and the IFS: in the group where the FQS was administered, the mentioning of the second path (involving walking through a wood) seems to be significantly correlated with the dimension of Safety and Intimacy of the friendship bond; by the same token, as regards the group to whom the IFS was administered, they seem to be associated with Imposition. The relation is directly proportional in the case of Mentioning P. 2/ Safety (subgroup FQS) and Mentioning P. 2/Imposition (subgroup IFS), whereas it is inversely proportional in the case of Mentioning P. 2/Intimacy. The consideration (in a positive sense as choice, or negatively as refusal) of such option, therefore, seems to be correlated with higher levels of reliability attributed to the friendship bond, as well as to higher expectations concerning the possibility of solving in a collaborative way any problematic situations and to a more developed openness and willingness to ask for help from the friend in question. On the contrary, there seems to be an inversely proportional relationship between mentioning the second path and the score referring to the aspect of Intimacy (subgroup FQS): the more limited importance attributed to the affection aspects of the bond, as well as the reflected perception of the subjects' own value within the friendship relationship, seem to make respondents more prone to mentioning the second path. The option related to the second path thus seems to be partially influenced by variables associated with the perception of friendship bonds. On the other hand, the refusal of path # 3 (the one where there is a group of threatening children) seems to be related (subgroup IFS) with the initial score achieved as regards the aspect of "Sensitivity and knowledge of the other": the respondents more prone to refuse this path seem to be those who attribute more importance to the aspects of knowledge and empathy with respect to the other. Therefore, only a minimal part of our initial assumption is confirmed, and only in respect of a specific aspect of the concept under examination, namely empathy in friendship bonds. Indeed this is the only aspect where it seemed possible to highlight a significant relation with option # 3 suggested in the Path Test.



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CONCLUSIONS

The data presented above show that, even though our initial assumptions were confirmed only in part, on the whole there is the possibility of reaching new and interesting conclusions. As regards the aspects related to emotional – affection elements studied in relation to the attachment bond concept, the results are encouraging in terms of continuing to work in this direction, focusing the analysis more on those variables which affect the refusal of the fifth path. In this respect it might be interesting to verify the effect of any further moderating variables which were not considered initially and to conduct, in a parallel way, a more in-depth analysis including the various categories associated with the insecure style of attachment. On the other hand, the results regarding the quality of the friendship bond, invite us to reconsider from a different perspective the option presented by path # 2 (woodland), which was not postulated to be associated with these aspects. Secondly, it seems necessary to consider how path # 3 (small group of children) appears to be connected with a very specific emotional aspect of the friendship bond: empathy. In conclusion, the data presented in this paper lead us to reconsidering and further limiting our working assumptions with respect to the specific aspects of the concept under investigation: in the future it will be more appropriate not to consider the whole range of quality aspects in friendship relationships, but rather to conduct more specific in-depth studies focusing on aspects such as empathy, intimacy and perception of reliability in respect of the other person.

REFERENCES:

- Bowlby, J. (1969). *Attachment and loss*. Vol. 1. London: Hogarth Press. (trad. it. *Attaccamento e perdita* Vol. 1: *L'attaccamento alla madre*, Bollati Boringhieri, Torino, 1972)
- Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*. London: Routledge. (trad. it. *Una base sicura: applicazioni cliniche della teoria dell'attaccamento*, Raffaello Cortina Editore, Milano, 1989)
- Bukowski, W. M., Hoza, B., Boivin, M. (1994). Measuring friendship quality during pre- and early adolescence: The development and psychometric properties of the Friendship Qualities Scale. *Journal of Social and Personal Relationships*, 11, 471-484.
- A.Fonzi, F. Tani e Schneider B. H. (1996), "Adattamento e validazione su un campione italiano della scala sulla Qualità dell'amicizia (FQS) di Bukowski, Hoza e Boivin". In *Giornale italiano di Psicologia*, XXIII, 1, 107-122
- Green, J., Stanley C., Goldwin R., Smith V. (2000). A New Method of Evaluation Attachment Representations in Young School-Age Children: The Manchester Child Attachment Story Task. *Attachment and Human Development*, 2(1), 42-64.
- Oliverio Ferraris, A. (1980). *Psicologia della paura*. Torino: Bollati Boringhieri
- Quaglia, R. (1994). *Il disegno del bambino cattivo*. Torino: Bollati Boringhieri.
- Sharabany, R. (1994). Intimate Friendship Scale: Conceptual underpinnings, psychometric properties and construct validity. *Journal of Social and Personal Relationships*, 11, 449-469
- Tani, F. & Maggino, F. (2003). Le dimensioni dell'amicizia intima: uno strumento di analisi per l'arco di vita. *Età Evolutiva*, 104-113.

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