Understanding parental attitudes towards early screening for autism spectrum disorders

Marina Loucaides, M.Sc., [1] , Judith Lunn, P.hd., [1] , Vincent Reid, P.hd., [1] , Emma Bruce, M.Sc, [1] , Husan Hassan Basri, M.Sc, [1] , & Megan R Thomas, P.hd. [2]

[1] Lancaster University, UK [2] Child Health, Blackpool Teaching Hospitals NHS Foundation Trust, Blackpool, UK

Lancaster University

The Leverhulme Trust

Abstract

The current study examined what parental factors (demographics and personality) may influence parents' reactions towards a potential early screening test for autism and what they would require in order to show a more positive approach. The results showed that age, gender, socioeconomic status, education level, the number of children of a participant and its personality were related to how parents perceived the introduction of early screening (ES) for autism spectrum disorders (ASD).

Introduction

According to previous research, the early detection of ASD is crucial (Holzer et al., 2006) in order to provide to the affected child the appropriate early intervention (EI), which is suggested to be beneficial (Dawson et al., 2012; McEachin, Smith, & Lovaas, 1993) as it enhances social and adaptive behaviour, language, IQ and autism symptoms and guide behavioural and brain development towards the normal pathway (Dawson, 2008). It is important to consider that parents are also affected if their child has ASD (Abbott, Bernard, & Forge, 2012) and they have a significant role in the success of EI (Remington et al., 2007).

Thus, it is important to investigate what would encourage parents to allow ES of ASD for their child if it was available.

This study focused on how personality and demographic parental factors could influence parents' approach towards a potential ES for ASD and what would reinforce parents to agree for their child to take it.

Research Hypotheses:
1) Demographic variables, such as gender and education level were considered to determine if they have any effect on parents' answers about a potential ES for ASD.
2) It was hypothesized that parents with high positive affect (PA) would be positive towards ES due to their optimistic nature and parents with high negative affect (NA) would be more reluctant due to their pessimistic nature.

Methods

1) Demographic Questionnaire
A detailed demographic questionnaire was used to collect personal information (age, gender, etc.) about parent participants.

2) PANAS (Watson et al., 1988)
PANAS is a personality measure with two different mood scales (10 single-words each), PA and NA.

3) Early Screening Questionnaire for ASD
A structured interview questionnaire about a potential ES (ESQ) for ASD was developed and contained a likert scale section and a categorical question.

Participants
64 (14 males, 50 females) parent participants between the ages 18 to 54 (M = 32.81, SD = 6.99) with no autistic children completed the questionnaires.

Results

1) Demographic Questionnaire (Sample Characteristics)

	N (%)
Age	
18-24 years	8 (12.5)
25-34 years	30 (46.9)
35 years and over	26 (40.6)
Gender	
Females	50 (78.1)
Males	14 (21.9)
Socioeconomic Status (SES)	
Low SES	6 (9.4)
Middle SES	32 (50)
High SES	26 (40.6)
Education	
High education	45 (70.3)
Low education	19 (29.7)
Number of children	
One child	40 (62.5)
More than one child	24 (37.5)

2) PANAS (Watson et al., 1988) (Sample Characteristics)
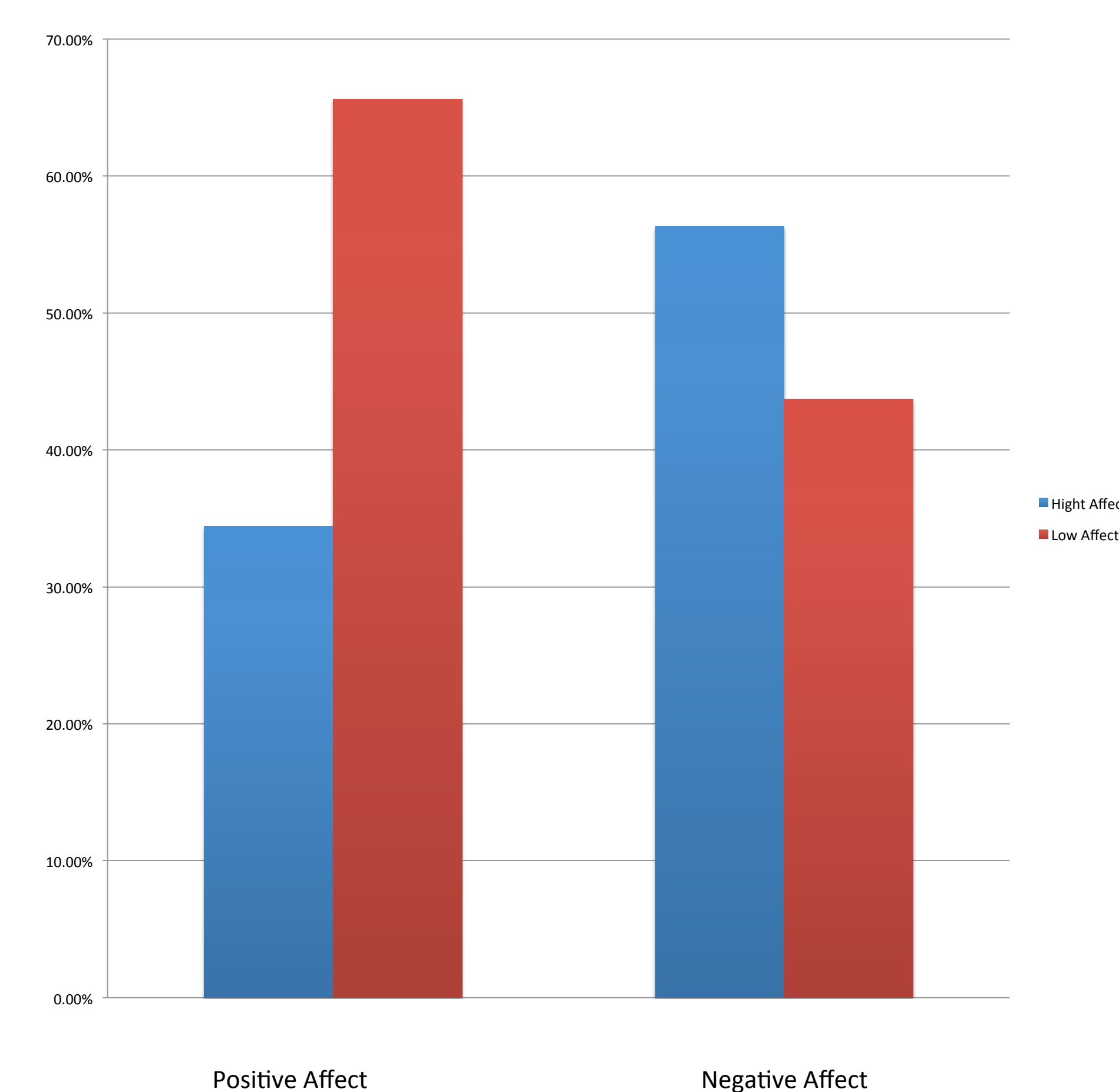
3) Early Screening Questionnaire for ASD Frequencies

	Mean	SD	Agree (%)
Q1. I know about autism.	2.28	0.97	62.5
Q2. I know a lot of information about autism.	3.11	1.06	25
Q3. I would appreciate the opportunity to receive a screening of autism for my child prior to their second birthday.	2.42	0.92	59.4
Q4. I believe that early screening of autism is worthwhile.	1.83	0.77	86
Q5. If I had the opportunity to check my child with an early screening test for autism I would have done it	2.14	0.96	71.9
Q6. Further social/educational support would encourage me to have my child screened for autism.	2.38	0.95	59.4
Q7. I believe that early screening of autism is not worthwhile.	4.19	0.83	3.2
Q8. I believe that is good to know as early as possible whether my child has autism.	1.78	0.75	87.5
Q9. An early screening test for autism makes me feel anxious.	3.33	1.02	25
Q10. Knowing the results of the early screening test for autism makes me feel anxious.	3.08	0.97	28.1
Q11. Having friends and family with knowledge of autism would make me more likely to have the early screening test.	2.42	0.89	62.5
Q12. If the screening test is not easy to implement I would not want my child to take part.	2.8	1.01	43.7
Q13. If the screening test is not distressing I would want my child to take part.	1.88	0.81	82.8
Q14. If the screening test is mildly distressing I would still want my child to take part.	3.2	1.03	26.6
Q15. I would like to have the option to choose whether my child had the screening test.	1.52	0.69	92.2

	N (%)
Q16. Which would be an appropriate age for using the screening test for a child?	
4-5 months	1 (1.6)
8-9 months	4 (6.3)
12-18 months	15 (23.4)
20-24 months	40 (62.5)
24 months and over	4 (6.3)

Conclusion & Discussion

- Age and Q1, $F(2, 62)$ = 3.39, p = .040, η_p^2 = .10. The 35-and-over group differ significantly (p = .048) from 18-to-24 age group.
- Gender and Q13, $F(2, 62)$ = 4.94, p = .030, η_p^2 = .074. Females were more likely to strongly agree compared to males.
- SES and Q2, $F(2, 62)$ = 5.49, p = .006, η_p^2 = .152. Middle SES and high SES differ significantly (p = .007); low SES did not differ significantly from middle (p= 1) and high (p = .158) SES.
- Number of children and Q4, $F(2, 62)$ = 4.10, p = .047, η_p^2 = .062.
- PA had no significant relationship with ESQ's questions, Wilks' λ = .739, $F(15, 48)$ = 1.13, p = .359, η_p^2 = .261.
  - High PA (83%, n = 30/36) and low PA (89%, n = 25/28) agreed that ES is worthwhile.
- NA had significant relationship with ESQ's questions Wilks' λ = .571, $F(15, 48)$ = 2.4, p = .011, η_p^2 = .429.
  - Q4, $F(2, 62)$ = 5.82, p = .019, η_p^2 = .086. High NA participants were more likely to agree compared to low NA participants.
  - Q13, $F(2, 62)$ = 5.17, p = .026, η_p^2 = .077. Low NA participants strongly agreed compared to high NA participants that only agreed.
  - Q15, $F(2, 62)$ = 12.98, p = .001, η_p^2 = .173. Low NA participants had a stronger tendency (MD = -.6) to strongly agree (M = 1.31, SD = .52) compared to high NA (M = 1.91, SD = .81).

To conclude, the results of the current study add information to the limited literature of parents' approaches towards ES for ASD. Participants' age, gender, education level, SES and number of children were found to be factors that affected how parents viewed the introduction of an ES. Interestingly, personality was indeed able to influence parents' opinions about ES of ASD. The findings showed that parents require social and educational support and a non-distressing ES and their majority supported that they would like to choose whether their child is going to have the ES. This finding is important, as it is crucial for the development of an autistic child to have parental participation in the procedure and in respect to EIs, as this is a significant factor if the intervention is to be successful. The results for the acceptance of ES are encouraging, as parents agreed (86%) that ES for ASD is worthwhile and gaining the acceptance of parents provides better life outcomes for autistic children.

Acknowledgements

Contact Information
Marina Loucaides: m.loucaides@lancaster.ac.uk
Judith Lunn: j.lunn1@lancaster.ac.uk
Vincent Reid: v.reid@lancaster.ac.uk
Emma Bruce: emmabruce@gmail.com
Husan Hassan Basri: husnahb@yahoo.com
Megan Thomas: dr.Thomas@bfwhospitals.nhs.uk

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