

# The Level of Agreement When Scoring the ASQ-3 Between Guardians who Viewed an Instructional Video, Childcare Providers, and Student Physical Therapists



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#### Introduction

#### **Background:**

- Guardians, healthcare providers, and childcare provider(s) (CCP) are groups that could primarily identify developmental delay.<sup>1</sup>
- The Ages and Stages Questionnaire Third Edition (ASQ-3) is a screening assessment used to monitor developmental progress in children.<sup>1,2</sup>
- However, the ASQ-3 has limited evidence of scoring concurrence between groups due to lack of formal training for guardians.<sup>3</sup>

#### Purpose:

 To determine the level of agreement between guardians viewing an instructional training video (ITV), CCPs, and Student Physical Therapists (SPTs) serving as proxy for healthcare professionals.

#### **Hypothesis:**

 Showing an ITV to guardians on how to administer the ASQ-3 will yield statistically similar scoring when compared with CCPs and SPTs of the same child.

#### **Methods**

#### **Participants:**

- 16 guardians with children enrolled at Hand in Hand Child Care Center (HIH)
- 4 CCPs who work at HIH
- 8 SPTs who were all enrolled at CSP DPT program

#### **Outcome Measure: ASQ-3**

- Standardized developmental screening tool used to assess children aged 1-66 months on 5 developmental domains: Communication, Gross Motor, Fine Motor, Problem Solving, and Personal-Social.
- The ASQ-3 was selected due to its extensive psychometric properties.<sup>2</sup>
- Utilized age appropriate ASQ-3 Questionnaires ranging from 24-month to 60-month assessments.

#### **Data Collection:**

- Training was conducted in all 3 groups prior to data collection. SPTs and CCPs reviewed ASQ-3 ™ User's Guide and Guardians watched an ITV.
- Data collection conducted across 2 session within 7-14 days.

#### **Results**

- Spearman's Rho Correlation Coefficient was used to analyze the level of agreement between groups.
- The Problem Solving category demonstrated clinically significant level of agreement among all three groups.
- The Fine Motor category did not demonstrate a statistically significant level of agreement among any of the groups.
- Communication, Gross Motor and Personal Social categories demonstrated statistically significant level of agreement between at least two groups.
- The CCP-SPT dyad demonstrated statistically significant level of agreement in all categories except Fine Motor.

	Communication		Gross Motor		Fine Motor		Problem Solving		Personal-Social	
	Rho	Sig	Rho	Sig	Rho	Sig	Rho	Sig	Rho	Sig
Guardian-CCP	0.584	0.017	0.063	0.816	0.10	0.709	0.615	0.011	-0.160	0.696
Guardian-SPT	0.338	0.200	0.210	0.435	0.45 4	0.077*	0.624	0.010	-0.072	0.791
CCP-SPT	0.560	0.024	0.877	<0.001	0.48 4	0.058*	0.870	<0.001	0.940	<0.001

Significant values are highlighted in pale orange (alpha = 0.05). An asterisk (\*) denotes a value that narrowly missed statistical significance.

## **Session 1**







2. Parent completes SPT available for ASQ-3 for their child questions

### **Session 2**



Childcare provider administers ASQ-3 while SPT observes and scores child's performance

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#### Conclusion

- It was hypothesized that an ITV would increase the scoring agreement between all three groups.
  However, our results only gave rise to partial scoring agreement with varied results across all categories.
- Further research is needed to assess the impact of a comprehensive ITV or other training program for guardians on increasing the level of agreement with CCPs and SPTs on formally assessing child development.

#### **Clinical Relevance**

- Guardians may benefit from the use of an ITV or other training program to gain formal knowledge on how to assess child development.
- Utilization of ITVs may empower guardians to contribute more during the developmental screening process.

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#### References

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