

**June 2023**

***The Saskatchewan Reports***

**Differential Monitoring, Risk Assessment, and Licensing &  
Quality Indicators**

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Regulatory Administration**

# ***The Saskatchewan Reports***

The following reports document the past five-year project conducted in the Province of Saskatchewan, Ministry of Education in designing and implementing a differential monitoring approach to child care licensing. These reports provide the results for licensing key indicators, risk assessment rules, their validation, and finally the development and pilot testing of a new program quality indicators scale.

Saskatchewan is the first jurisdiction to accomplish this in fully validating a differential monitoring approach from licensing to quality dimensions. This report can act as a template for others to follow who are interested in the differential monitoring approach.

## ***Contents:***

### ***Licensing Key Indicator Report***

### ***Risk Assessment Rule Report***

### ***Validation of the Licensing Indicator and Risk Assessment Rules***

### ***Program Quality Indicators Scale Development and Validation***

# **Saskatchewan Differential Monitoring, Key Indicator and Risk Assessment Pilot Study**

**Richard Fiene, Ph.D.**

**National Association for Regulatory Administration (NARA)**

**June 2021**

This report will provide the results of a pilot study to determine the validity and efficacy of Saskatchewan's Differential Monitoring, Key Indicator, and Risk Assessment Regulatory Compliance/Licensing System. This is the most comprehensive validation study to date which incorporates key indicators and risk assessment in tandem within a differential monitoring approach. Other validation studies have validated key indicators or risk assessment but in separate studies. Also, this validation study incorporates eligibility criteria as well as random rules in order to fully implement Saskatchewan's Differential Monitoring system.

The Province of Saskatchewan's Ministry of Education followed the full development of a differential monitoring approach by instituting a comprehensive review of their rules and standards for child care centres and homes. They then developed and instituted a key indicator tool, followed by a risk assessment set of rules. Once these were developed a series of eligibility criteria were designed to determine which programs were eligible for abbreviated reviews. Focus groups and training occurred to fully explain and obtain feedback related to the new differential monitoring approach. Based upon these criteria, a Policies and Procedures Manual was developed. Both the key indicator and risk assessment methodologies were individually validated. While the pilot study was being planned, the Province developed a Quality Indicator Tool, the Saskatchewan Early Care and Education Program Quality Indicators Tool which can be used in a tandem fashion with the licensing key indicator tool and the risk assessment rules. Now that the pilot study is completed, full implementation of the differential monitoring system should occur. All of the above referenced studies, manuals, etc. are contained within this report after this introduction, methodology, results, and conclusion sections.

## **Methodology**

The pilot study (data were collected basically during the Winter 2020-21 (late 2020 - early 2021)) employed 100 child care centres and 70 child care homes in the study. Independent licensing staff observations were made at sites utilizing the comprehensive checklist/tool in which all rules were evaluated or the key indicator and risk assessment rules were evaluated. The results which follow were compared from the comprehensive review and the abbreviated review. These inspection reviews went through a series of pre-defined eligibility criteria to make certain that the specific program was eligible for an abbreviated inspection. Once that was determined, random rules were added to the key indicator and risk assessment rules.

The eligibility criteria were applied so that the full differential monitoring protocol could be utilized for the pilot study. These criteria were evaluated with the results from the abbreviated and comprehensive inspection reviews.

## Results

The results are broken out into Centres and then Homes.

### Centres:

There were 100 centres that were evaluated. Out of the 100 centres, 13 were determined to be eligible for an abbreviated review. After the random rule review process, this number was reduced to 8. Usually abbreviated reviews can be done after eligibility criteria are applied to approximately 10 - 20% of the overall programs. Saskatchewan's results were definitely in line with this national/international average. Always keep in mind that abbreviated reviews are only for those programs that provide a high standard of care. They are not intended for all programs or for programs that are struggling.

The average non-compliance or violations for the comprehensive review was 4.93 with a range of 0 - 29 while the average non-compliance or violations for the abbreviated review was 2.82 with a range of 0 - 12. A correlation coefficient was run between the results of the comprehensive reviews and the abbreviated reviews and an  $r = .91$ ;  $p < .0001$  was determined. This result clearly demonstrates that abbreviated reviews are very effective when compared to comprehensive reviews. This very high correlation is similar to previous studies conducted in Saskatchewan, Ontario, and the states of Washington & Georgia, and the national Head Start program in the USA.

For those programs that were determined to be eligible for an abbreviated review the average non-compliance was zero (0) for both the abbreviated rules as well as the comprehensive set of rules as versus the average non-compliance for those programs that were determined to not be eligible for an abbreviated review. For non-eligible programs, the respective non-compliances for abbreviated rules and the comprehensive set of rules were 3.07 and 5.36 each being statistically significant with an ANOVA:  $F = 7.47$ ;  $p < .007$  and  $F = 6.07$ ;  $p < .02$  when compared to the eligible programs.

### Homes:

There were 70 homes that were evaluated. Out of the 70 homes, 17 were determined to be eligible for an abbreviated review. After the random review process, this number was reduced to 13. Saskatchewan's results continued to be in line with national/international averages.

The average non-compliance or violations for the comprehensive review was 4.16 with a range of 0 - 27 while the average non-compliance or violations for the abbreviated review was 2.09 with a range of 0 - 11. A correlation coefficient was run between the results of the comprehensive reviews and the abbreviated reviews and an  $r = .95$ ;  $p < .0001$  was determined. This result clearly demonstrates that abbreviated reviews are very effective when compared to comprehensive reviews for homes as well as for centres.

For those programs that were determined to be eligible for an abbreviated review the average non-compliance was 0.31 for the abbreviated rules and 0.54 for the comprehensive set of rules as versus the average non-compliance for those programs that were determined to not be eligible for an abbreviated review. For non-eligible programs, the respective non-compliances for abbreviated rules and the comprehensive set of rules were 2.49 and 4.98 each being statistically significant with an ANOVA:  $F = 7.89$ ;  $p < .006$  and  $F = 7.71$ ;  $p < .007$  when compared to the eligible programs.

## Conclusions

It is clear from the pilot study results that for both centres and homes, the Saskatchewan Differential

Monitoring System works very well by the relationship between the abbreviated and comprehensive review inspections. There were statistically significant results when comparing both independently collected data and there were statistically significant differences between the eligible and non-eligible programs. This study clearly demonstrates the efficacy of utilizing abbreviated inspection reviews within a differential monitoring approach (key indicator + risk assessment rules) in that it is as reliable as having completed a comprehensive inspection review.

The next step for the Province of Saskatchewan's Ministry of Education is to see about incorporating the Quality Indicators into the Differential Monitoring approach. By doing this, Saskatchewan would have a fully functional compliance + quality monitoring system providing a balance between regulatory compliance and performance which has always been the goal of differential monitoring.

Please see the following documents and reports which provide additional details for the differential monitoring approach:

- 1) Policies and Procedures Manual;
- 2) Key Indicator Report;
- 3) Risk Assessment Report;
- 4) Validation of Key Indicators and Risk Assessment Rules;
- 5 & 6) Abbreviated Checklists for Centres and Homes; and
- 7) Early Care and Education Quality Indicators.

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## **Policy and Procedures for Key Indicator System Use**

**Version 8.0**

**December 17, 2019**

### **I. Purpose**

The purpose of this document is to establish policy and procedures for the application and administration of the Saskatchewan Ministry of Education, Early Learning and Child Care's Key Indicator System (KIS).

### **II. Legal Authority**

Chapter C-7.31-20(1),(2)

The minister, or a person appointed by the minister for the purpose, may enter any place or premises and conduct an inspection or inquiry for the purpose of:

(a) ensuring the safety and well-being of children receiving childcare services;

or

(b) administering this Act and the regulations.

Every licensee shall, at all reasonable times during the hours of operation of the facility:

(a) cause the facility to be open for inspection by the minister or person appointed by the minister; and

(b) cause all records relating to the operation of the facility to be available for inspection by the minister or person appointed by the minister.

### **III. Definitions**

For purposes of this document<sup>1</sup>, the following words and terms have the following meanings, unless the context clearly indicates otherwise:

*Applicant* – A corporation, co-operative, municipality, partnership or individual who seeks to obtain a license to operate a child care facility.

*Inspection* - The process of measuring compliance with requirements for licensure by an applicant or facility.

- a. *Initial Inspection* – An inspection conducted for purposes of determining whether to license an applicant.
- b. *Full Inspection* – An inspection where compliance with all applicable rules are measured.
- c. *Partial Inspection* – An inspection where compliance with a subset of rules are measured.

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<sup>1</sup> The definitions used here are for purposes of these policies and procedures only and do not supersede, replace, or modify any statutory or rule definition.

- d. *Indicator Inspection* – A type of Partial Inspection where compliance with Key Indicators, Weighted-Risk rules and Random Rules are measured that is conducted in lieu of a Full Inspection.

*Key Indicators (KI)* – A subset of rules that predict compliance with all of the rules.

*Key Indicator System (KIS)* – A type of targeted measurement where compliance with Key Indicators is measured for purposes of determining total compliance without the need for a Full Inspection<sup>2</sup>.

*ELCCP* – Early Learning and Child Care Program in the Saskatchewan Ministry of Education.

*Licensee or facility* - The corporation, co-operative, municipality, partnership or individual responsible for compliance with statutes and rules required for licensure.

*Consultant* – An agent of the ELCCP authorized to complete inspections.

*Regulated Setting* – The building and grounds operated by a licensee subject to compliance with applicable rules.

*Rules* – The requirements for licensure with which Child Care Centres, Group Family Child Care Homes, and Family Child Care Homes must comply.

*Sanction* – A formal penalty for noncompliance with applicable rules, including but not limited to a provisional license, amendment, suspension, emergency closure, or fined offense for contravention of any provision of the Act or regulations.

#### **IV. Eligibility for Indicator Inspections**

In order to be eligible for an Indicator Inspection, a facility must meet all of the following criteria:

1. The facility must be operating and licensed for a period of no less than two (2) consecutive years.
2. The facility must have received at least one Full Inspection following the Initial Inspection.
3. For child care centres, the same Director must have been employed at the facility for a period of no less than two (2) consecutive years.
4. A facility that has relocated, must have been in operation for a period of no less than one (1) year in the new location.
5. A family child care home that converts to a group family child care home must have been in operation for a period of no less than (1) year under the new licence category.
6. The facility may not have been subject to sanctions within the past two (2) years.
7. The facility may not have been cited for violating any of the applicable Key Indicators within the past year or since the most recent full inspection, whichever is greater, even if the facility subsequently corrected the violation(s). Key Indicator rules are listed at Appendix B.

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<sup>2</sup> Please see Appendix A for additional information about Key Indicator Systems.

8. None of the Weighted-Risk rules listed at Appendix C were cited within the past year or since the most recent full inspection, whichever is greater, even if the facility subsequently corrected the violation(s).
9. The facility is not currently under investigation by the Early Learning and Child Care Program (ELCCP) or any other oversight agency (Child and Family Services, RCMP, or Police).

## **V. Procedures for Conducting Indicator Inspections**

1. Determine if the facility is eligible for an Indicator Inspection based on the criteria in Section IV above.
  - a. The facility will not be notified in advance that an Indicator Inspection will be conducted in lieu of a Full Inspection.
2. Prior to conducting the inspection, the consultant responsible for conducting the Indicator Inspection will select three (3) rules to be measured in addition to the KIS and Weighted-Risk rules. The additional rules are to be selected randomly using a consistent selection process; consultants shall not select rules based on personal preference, ease of compliance measurement, or similar standard. The process for selecting the three rules is listed at Appendix D.
3. Upon arrival at the regulated setting, the consultant will:
  - a. Perform all standard activities for arrival based on the type of regulated setting.
  - b. Conduct a brief walkthrough of the setting to identify any immediate health and safety risk or blatant rule violations.
    - i. If an immediate health and safety risk is identified, the facility will no longer be eligible for an Indicator Inspection and will be subject to a Full Inspection.
    - ii. If one or more blatant rule violations are identified, the facility will no longer be eligible for an Indicator Inspection and will be subject to a Full Inspection.
4. If following the walkthrough at Section 3-b above, the facility is eligible for an Indicator Inspection, the consultant will:
  - a. Briefly describe the ELCCP's KIS, including the circumstances where an Indicator Inspection may cease and a Full Inspection will be conducted.
  - b. Inform the facility that the facility is provisionally eligible for an Indicator Inspection, but that a Full Inspection may occur based on inspection findings;
  - c. Proceed with the Indicator Inspection as described below.
5. During the course of the inspection, the consultant will measure compliance with all of the following:
  - a. The KI rules;
  - b. The Weighted-Risk rules; and
  - c. The three (3) rules identified at Section 2 above.



If no violations of the above rules are identified, the regulated setting will be determined to be in full compliance with all rules, and the inspection will end.

If one or more violations of the above rules are identified, the Indicator Inspection will cease, and a Full Inspection will be conducted in accordance with ELCCP policy.

## **VI. Ongoing Activities**

1. No facility may receive more than two (2) consecutive Indicator Inspections.
2. KIs will be recalculated at least every five (5) years.
3. Weighted-Risk rules will be recalculated as needed.
4. If there are amendments to the regulations and if they are deemed to be significant (KIs or Weighted-Risk Rules are eliminated or altered) by the ELCCP, recalculation of KIs and Weighted-Risk rules may occur.

## **VII. ELCCP Discretion**

1. ELCCP is under no obligation to conduct an Indicator Inspection even if the facility meets all of the eligibility criteria at Section IV above.
2. Indicator Inspections are a privilege, not an entitlement; the decision not to complete an Indicator Inspection even if the facility meets all of the eligibility criteria at Section IV above is not subject to appeal.
3. These policies and procedures shall not be construed to reduce, limit or restrict ELCCP's authority to enforce applicable statutes and rules, and does not establish a precedent or otherwise bind ELCCP in any other action and shall not be construed as evidence of ELCCP practice, policy or interpretation with respect to any dispute or issue not addressed herein.

## Appendix A

### Key Indicator Systems: How they Work, why they Work, and the Benefits of Using Them

**Targeted measurement tools** are licensing inspection methods that increase the effectiveness and efficiency of a consultant y oversight agency without producing recurring operational costs. In other words, targeted measurement tools maximize performance while minimizing costs.

Consultant y oversight agencies nationwide are moving towards targeted measurement as an effective alternative to traditional licensing methods. Instead of measuring every rule during every inspection in every licensed setting every year, targeted measurement allows agencies to devote more resources to struggling licensees by shifting resources away from high-performing providers while still ensuring that safe, high-quality care is provided in all settings. **Key Indicator Systems**, or KIS, are a kind of targeted measurement tool.

Many people mistakenly believe that KIS identify the most “serious” rules (that is, the rules which, if violated, pose the greatest risk to children in care, e.g. leaving children unattended or water temperatures that are too hot). In actuality, KIS identify a subset of licensing rules that statistically predict compliance with the entire set of rules.

#### How Key Indicator Systems Work

Research has shown that some violations are usually identified during the licensing inspections, even at the most highly-compliant settings. Highly-compliant settings and settings with low compliance share some consultant y violations, but certain violations tend to appear more frequently in settings with low compliance. KIS development includes establishing what it means for a setting to be “high compliance” (few total violations during inspections) or “low compliance” (many violations during inspections), testing the statistical relationship between individual violations and overall compliance in historical inspection data, and identifying the violations that have the closest relationship between “individual” compliance and total compliance. Consider the following illustration:

Rule	High Compliance Setting	Low Compliance Setting
x	Compliant	Violation
y	Compliant	Violation
z	Violation	Violation

In this illustration, analysis of rules x and y found that high compliance settings are usually compliant with the rules, while low-compliance settings are usually not compliant with the rule. Moreover, rule z is usually found to be in violation at both high and low compliance settings. This tells us that rule z is probably not a good indicator of overall compliance, but rules x and y may be indicators of overall compliance. Next, we analyze the statistical relationship between the rules and the settings’ levels of compliance to determine if rule compliance really is a good predictor of overall compliance. The results of the testing might look like this:

Rule	High Compliance Setting	Low Compliance Setting	Strength of Relationship
x	Compliant	Violation	Close relationship (Good predictor)
y	Compliant	Violation	Moderate relationship (Poor predictor)
z	Violation	Violation	No relationship (Terrible predictor)

What this means is, if a setting is in compliance with rule x, **then we can be very confident that the setting is in compliance with all the other rules as well**, whereas compliance with rules y and z tell us nothing about overall compliance. Knowing this, we can conduct an abbreviated inspection where only rule x is measured to determine overall compliance.

The above illustration is a simplified example. KIS usually identify between 20-30 rules that are good predictors of overall compliance, but the principle is the same: if there are, say, 500 rules, we can predict overall compliance by measuring compliance with only 30 of those rules.

Additionally, there are safeguards in place to ensure that KIS do not inadvertently result in harm to children in care. One such safeguard is the development of eligibility criteria for participation in an indicator (i.e. abbreviated) inspection. Not all licensed settings are eligible for KIS inspections. Factors that generally preclude indicator

inspection eligibility include a recent history of licensing enforcement action, the identification of a “serious” violation during the most recent inspection, operation of a setting by an owner for less than 2-3 years, or an open complaint of noncompliance during the scheduled inspection period. Another safeguard is expanding the inspection to include all rules in the event that a key indicator rule is found to be noncompliant during an inspection. Using the example above, if a setting was found to be out of compliance with rule x during an indicator inspection, the surveyor would then measure compliance with all rules to determine the full scope of noncompliance. A third safeguard is the identification of rules that will always be measured during every inspection, even if the rule is not a key indicator. For example, research has found that noncompliance with swimming or water-related rules frequently leads to harm or even death. As a result, it is recommended that such rules be measured during all inspections.

### **Why we know Key Indicator Systems Work**

The National Association for Consultant y Administration (NARA) has been developing and refining qualitative and qualitative targeted measurement tools, especially KIS, for over 30 years. NARA’s professional services and educational curricula have been used by dozens of states and provinces for program-specific research, training, and customized technical assistance for child day and residential care settings, care settings for older adults, and care settings for persons with mental illness and intellectual disabilities. NARA’s methods are time-tested and proven to maximize agency performance without sacrificing the health and safety of persons in care. Additionally, although each state’s key indicator rules are different, independent research conducted by Dr. Richard Fiene, an early-child education professional and NARA consultant, has found patterns in key indicators of compliance/quality in childcare programs, suggesting that certain areas of consultant y oversight function as key indicators nationwide (these include: child abuse reporting and clearances, proper immunizations, staff-to-child ratio and group size, director and teacher qualifications, staff training, supervision/discipline, fire drills, administration of medication, emergency contact/plan, outdoor playground safety, inaccessibility of toxic substances, and handwashing/diapering).

### **The Benefits of Key Indicator Systems**

Key Indicator Systems do not just benefit the licensing agency; in fact, their use benefits *all* stakeholders.

- **The consultant y oversight agency** is able to spend more time monitoring and providing technical assistance to noncompliant providers by spending less time in compliant programs.
- **Providers** benefit from shorter inspections by maintaining compliance.
- **Persons in care** enjoy a higher degree of health and safety protection.
- **The public** is assured that strong licensing continues even if resources are reduced.

## **Appendix B Key Indicator Rules**

### **Child Care Centre Key Indicator Rules**

#### **R24. Nutrition**

- 24(2)(a) Meals and snacks meet nutritional needs

#### **R37. Attendance Records**

- 37(b)(i) Obtain signature of the parent monthly to verify hours/days of the child's attendance
- 37(b)(ii) Obtain signature of the parent monthly to verify the fees charged

#### **R41. Centre Director and Supervisor**

- 41(1)(b) Supervisor to act in place of the centre director in the centre director's absence

#### **R42. Child Care Workers**

- 42(2)(b) If working for 65 hours or more per month meets or exceeds qualifications of an ECE I
- 42(2)(c) 30% of persons employed in the centre as child care workers for 65 hours or more meet or exceed the qualifications of ECE II
- 42(2)(d) A further 20% of persons employed in the centre as child care workers for 65 hours or more meet or exceed the qualifications of ECE IR43.

#### **R43. Exemption**

- 43(1) May apply for exemption if unable to hire a director or supervisor whose qualifications meet requirements or child care workers whose qualifications meet the requirements

#### **R44. First Aid and CPR**

- 44(2)(a)(i) Each individual employed in the centre for 65 hours or more per month as a centre, director, supervisor or child care worker has completed a first aid course
- 44(2)(a)(ii) Each individual employed in the centre for 65 hours or more per month as a centre, director, supervisor or child care worker has completed a course in cardiopulmonary resuscitation

#### **R45. Criminal Record Searches**

- 45(1) Criminal record check for each centre employee

#### **R47. Employee Records**

- 47(b) Proof of first aid/CPR training
- 47(c) Results of criminal record check

### **Family Child Care Home Key Indicator Rules**

#### **R28. Hazardous Items**

- 28(b) Poisonous substances locked

#### **R31. First Aid Supplies**

- 31 Appropriate and sufficient first aid supplies and inaccessible to children

#### **R32. Portable Emergency Information**

- 32 Portable record of emergency information for each child attending

**R33. Taking Certain Supplies**

- 33(b) Appropriate and sufficient first aid supplies

**R36. Children's Records**

- 36(2)(b)(ii) Names, addresses and phone numbers of person to contact in an emergency
- 36(2)(b)(iii) Names, addresses and phone numbers of the child's medical practitioner
- 36(2)(d) The child's immunization status
- 36(2)(f)(ii) Any authorization by the child's parent for an excursion involving transportation
- 36(2)(h) The agreement for services

**R37. Attendance Records**

- 37(b)(i) Obtain signature of the parent monthly to verify hours/days of the child's attendance
- 37(b)(ii) Obtain signature of the parent monthly to verify the fees charged

**R38. Insurance**

- 38(b) Insurance policy - liability coverage with respect to the transportation of children

## **Appendix C Weighted Risk Rules**

### **Child Care Centre Weighted Risk Rules**

#### **R08. Application for Licence, Renewal**

- 8(1)(a) Health Inspection
- 8(1)(b) Fire Inspection

#### **R27. Medication**

- 27(1)(a) Authorization is acquired
- 27(1)(b) Written record of each dose of medication administered
- 27(1)(c) All non-emergency medications are stored in a locked enclosure
- 27(2) Oral authorization in exceptional circumstances for administering non-prescription

#### **R28. Hazardous Items**

- 28(a) Unsafe items inaccessible
- 28(b) Poisonous substances locked
- 28(c) Cover radiator
- 28(d) Cap electrical outlets

#### **R49. Duty to Supervise**

- 49 Children must be adequately supervised at all times

#### **R52. Supervision at Centre**

- 52(3) Number of child care workers present is not less than the number required by applicable staff-to-child ratio set out in (4) and (5)

### **Family / Group Child Care Home Weighted Risk Rules**

#### **R10. Application for Licence, Renewal – Home**

- 10(e) Criminal Record Check(s)

#### **R21. Hygiene**

- 21(a) Equipment and furnishings – sanitary
- 21(b) Hygienic procedures are followed

#### **R27. Medication**

- 27(1)(a) Authorization is acquired
- 27(1)(b) Written record of each dose of medication administered
- 27(1)(c) All non-emergency medications are stored in a locked enclosure

- 27(2) Oral authorization in exceptional circumstances for administering non-prescription

**R28. Hazardous Items**

- 28(a) Unsafe items inaccessible
- 28(c) Cover radiator
- 28(d) Cap electrical outlets

**R61. Qualifications Licensees**

- 61(1) First aid (Type expiry date of certificate):
- 61(2) CPR (Type expiry date of certificate):

**R64. Assistant Records**

A licensee of a GFCCH - maintain records for each assistant that includes:

- 64(a) A copy of proof of training in first aid and CPR
- 64(b) The results of a criminal record check
- 64(c) Any emergency medical information
- 64(d) A copy of the proof of participation in continuing education

## **Appendix D**

### **Process to Identify Random Rules**

1. If it is determined that a facility is eligible for an Indicator Inspection, based on the criteria in Section IV, prior to conducting the inspection, the consultant responsible for conducting the Indicator Inspection will select three (3) rules to be measured in addition to the KIS and Weighted-Risk rules in accordance with Section V paragraph 2.
2. An “easy to use” Excel random number generator will be used to select three unique random rules.
3. The Consultant will open the Excel Random Rules Generator and select one of five tabs at the bottom for the facility type of the current Indicator Inspection which include:
  - a. Child Care Centre
  - b. Teen Student Support Child Care Centre
  - c. Family Child Care Home
  - d. Group Family Child Care Home
  - e. Teen Student Support Family Child Care Home.
4. The Consultant will follow the instructions in the text box provided to generate the random rules. Clicking the button “Press Here” will generate three (3) random rules.
5. The Consultant will only click the random rule generator button once.
6. Using the appropriate Checklist for facility type (centre or home), the consultant will place an R in the column provided next to the corresponding number on the checklist to indicate that this rule must be checked during the inspection.
7. Additional rules are selected using the Excel Random Rules Generator. Consultants should not select rules based on personal preference, ease of compliance measurement, or similar standard.
8. Consultants should contact their respective Program Manager, if any issues arise in the generation of the random rules.



# The Saskatchewan Key Indicator System: The First Step in Developing a Differential Monitoring Approach

Richard Fiene, Ph.D.

August 2019

The purpose of this report is to provide the Ministry of Education in the Province of Saskatchewan with the results of their key indicator study as well as trends in regulatory compliance in the Province as compared to the ECPQIM International Data Base Project. This report will provide a brief introduction and overview to licensing key indicators, overview data, licensing key indicator methodology, and the results from the study depicting the statistics as well as the key indicator rules.

The use of Licensing Key Indicator Rules is to help make an overall monitoring system more efficient and effective through a use of predictive rules/regulations. It is a component system within a differential monitoring approach which targets the types of monitoring visits to programs based upon regulatory compliance history. The other component system deals with weighted risk assessment but this system will not be addressed in this report. The following section of definitions will assist in distinguishing amongst the various systems and methodologies.

## **Definitions:**

***Risk Assessment (RA)*** - a differential monitoring approach that employs using only those rules, standards, or regulations that place children at greatest risk of mortality or morbidity if violations/citations occur with the specific rule, standard, or regulation.

***Key Indicators (KI)*** - a differential monitoring approach that employs using only those rules, standards, or regulations that statistically predict overall compliance with all the rules, standards, or regulations. In other words, if a program is 100% in compliance with the Key Indicators the program will also be in substantial to full compliance with all rules, standards, or regulations. The reverse is also true in that if a program is not 100% in compliance with the Key Indicators the program will also have other areas of non-compliance with all the rules, standards, or regulations.

***Differential Monitoring (DM)*** - this is a relatively new approach to determining the number of visits made to programs and what rules, standards, or regulations are reviewed during these visits. There are two measurement tools that drive differential monitoring, one is Weighted Risk Assessment tools and the other is Key Indicator checklists. Weighted Risk Assessments determine how often a program will be visited while Key Indicator checklists determine what rules, standards, or regulations will be reviewed in the program. Differential monitoring is a very powerful approach when Risk Assessment is combined with Key Indicators because a program is reviewed by the most critical rules, standards, or regulations and the most predictive rules, standards, or regulations. See Appendix which presents a ***Logic Model & Algorithm for Differential Monitoring (DMLMA®)***(Fiene, 2012).

***Early Childhood Program Quality Indicator Model (ECPQIM)*** – these are models that employ a key indicator or dashboard approach to program monitoring. Major program monitoring systems in early care and education are integrated conceptually so that the overall early care and education system can be assessed and validated. With these models, it is possible to compare results obtained from licensing

systems, quality rating and improvement systems (QRIS), risk assessment systems, key indicator systems, technical assistance, and child development/early learning outcome systems. The various approaches to validation are interposed within this model and the specific expected correlational thresholds that should be observed amongst the key elements of the model are suggested. Key Elements of the model are the following (see Appendix for details): CI = state or federal standards, usually rules or regulations that measure health and safety - ***Caring for Our Children or Head Start Performance Standards*** will be applicable here. PQ = Quality Rating and Improvement Systems (QRIS) standards at the state level; ***ERS (ECERS, ITERS, FDCRS), CLASS, or CDPES*** (Fiene & Nixon, 1985). RA = risk assessment tools/systems in which only the most critical rules/standards are measured. Stepping Stones is an example of this approach. KI = key indicators in which only predictor rules/standards are measured. The ***Thirteen Indicators of Quality Child Care*** is an example of this approach. DM = differential monitoring decision making in which it is determined if a program is in compliance or not and the number of visits/the number of rules/standards are ascertained from a scoring protocol. PD = technical assistance/training and/or professional development system which provides targeted assistance to the program based upon the DM results. CO = child outcomes which assesses how well the children are developing which is the ultimate goal of the system. Please see the Appendices for the ***Logic Model and Algorithm***.

#### **Overview Regulatory Compliance Data (Please see the Appendices for a graphic display)**

There were 152 child care centers (CCC) used in the analyses and 82 family child care (FDC) homes. There were also 137 CCC rules and 112 FDC rules used in the analyses. The cutoff scores for the high group was 0-1 violations and 7 or more violations for the low group (CCC). The cutoff scores for the high group with FDC was no violations and 6 or more violations for the low group.

The range in rule violations for specific licensing key indicators ranged from 10% to 25% for CCC. For FDC is was from 7% to 19%.

#### **Licensing Key Indicators**

The cutoff score for the phi coefficient for CCC and FDC was .40 or greater,  $p < .0001$ . The reason for using these thresholds is that it increases predictability and decreases the chances of false negatives. Please see the following expanded checklist for additional details and placement within the tool.

<b><i>CCC Rule</i></b>	<b><i>Brief Content</i></b>	<b><i>Phi Coefficient:</i></b>
<b>242a</b>	<b>Meals</b>	<b>.44</b>
<b>37bi</b>	<b>Attendance</b>	<b>.64</b>
<b>37bii</b>	<b>Fees</b>	<b>.63</b>
<b>412b</b>	<b>Supervisor/Director</b>	<b>.45</b>
<b>422b</b>	<b>ECE I</b>	<b>.49</b>
<b>422c</b>	<b>ECE II</b>	<b>.59</b>
<b>422d</b>	<b>ECE III</b>	<b>.51</b>
<b>431</b>	<b>Staff exempt</b>	<b>.62</b>
<b>442ai</b>	<b>First aid</b>	<b>.48</b>
<b>442aii</b>	<b>CPR</b>	<b>.48</b>
<b>451</b>	<b>Criminal Records</b>	<b>.42</b>
<b>47b</b>	<b>First aid/CPR</b>	<b>.44</b>
<b>47c</b>	<b>Criminal Records</b>	<b>.49</b>

<i>FDC Rule</i>	<i>Brief Content</i>	<i>Phi Coefficient:</i>
<b>28b</b>	<b>Poison Substances</b>	<b>.55</b>
<b>31</b>	<b>First aid supplies</b>	<b>.46</b>
<b>32</b>	<b>Emergency information</b>	<b>.50</b>
<b>33b</b>	<b>First Aid supplies</b>	<b>.41</b>
<b>362bii</b>	<b>Emergency contact</b>	<b>.41</b>
<b>362biii</b>	<b>Medical Personnel</b>	<b>.46</b>
<b>362d</b>	<b>Immunizations</b>	<b>.41</b>
<b>362fii</b>	<b>Excursions</b>	<b>.50</b>
<b>362h</b>	<b>Agreement</b>	<b>.41</b>
<b>37bi</b>	<b>Attendance</b>	<b>.50</b>
<b>37bii</b>	<b>Fees</b>	<b>.50</b>
<b>38b</b>	<b>Insurances</b>	<b>.59</b>

**CCC detail from Expanded Checklist – Key Indicators Bold Faced and Highlighted. The full Expanded Checklist is not provided since the Licensing Key Indicators were within a truncated portion of the Checklist:**

#### **R24. Nutrition**

- 24(1) Provide meals and snacks (include menu posted, children are fed every 3 hours)

Comments:

- 24(2)(a) Meals and snacks meet nutritional needs**

Comments:

- 24(2)(b) Children are fed in appropriate manner for age and development

Comments:

#### **R25. Food Services**

- 25(a) Adequate and safe procedures - food handling, preparation, serving and storage

Comments:

- 25(b) Adequate and safe procedures - cleansing utensils

Comments:

#### **R26. Child with Communicable Disease**

- 26(a) Contact public health officer

Comments:

- 26(b) Recommendations or instructions from public health officer are followed

Comments:

#### **R27. Medication**

- 27(1)(a) Authorization is acquired

Comments:

- 27(1)(b) Written record of each dose of medication administered

Comments:

- 27(1)(c) All non-emergency medications are stored in a locked enclosure

Comments:

- 27(2) Oral authorization in exceptional circumstances for administering non-prescription (with written confirmation of authorization after)

Comments:

**R28. Hazardous Items**

- 28(a) Unsafe items inaccessible

Comments:

- 28(b) Poisonous substances locked

Comments:

- 28(c) Cover radiator

Comments:

- 28(d) Cap electrical outlets

Comments:

**R29. Telephone, Emergency Numbers**

- 29(a) Telephone in working order

Comments:

- 29(b) Emergency numbers posted

Comments:

**R30. Emergency Evacuation**

- 30 Develop an emergency evacuation plan and practice it monthly

Comments:

**R31. First Aid Supplies**

- 31 Appropriate and sufficient first aid supplies and inaccessible to children

Comments:

**R32. Portable Emergency Information**

- 32 Portable record of emergency information for each child attending

Comments:

**R33. Taking Certain Supplies**

- 33(a) Portable record of emergency information

Comments:

- 33(b) Appropriate and sufficient first aid supplies

Comments:

**R34. Injuries, Unusual Occurrences** *(also discuss child abuse protocol and ensure there is a copy and policies, procedures)*

- 34(a) Immediately notify parent  
Comments:
- 34(b) Within 24 hours notify consultant  
Comments:
- 34(c) Within seven days complete/submit report  
Comments:

### **R35. Volunteers**

- 35(1) Child care worker is present at all times when a volunteer is in attendance  
Comments:

### **R36. Children's Records**

- 36(1)(a) Keep a record for each child  
Comments:
- 36(1)(b) Retain the record for a period of six years.  
Comments:
- 36(2)(a) Child's name and date of birth (Child's Health Resume & Child's Emergency Information)  
Comments:
- 36(2)(b)(i) Names, addresses and phone numbers of the child's parents (Child's Health Resume & Child's Emergency Information)  
Comments:
- 36(2)(b)(ii) Names, addresses and phone numbers of person to contact in an emergency (Child's Health Resume & Child's Emergency Information)  
Comments:
- 36(2)(b)(iii) Names, addresses and phone numbers of the child's medical practitioner (Child's Health Resume & Child's Emergency Information)  
Comments:
- 36(2)(c) Any allergy, illness or other medical condition (Child's Health Resume & Child's Emergency Information)  
Comments:
- 36(2)(d) The child's immunization status (Child's Health Resume & Child's Emergency Information)  
Comments:
- 36(2)(e) Any medication authorization provided/any record of medication administered (Medication form)  
Comments:
- 36(2)(f)(i) Any authorization by the child's parent for an excursion not involving transportation (Excursion form)  
Comments:
- 36(2)(f)(ii) Any authorization by the child's parent for an excursion involving transportation (Excursion form)  
Comments:
- 36(2)(g) Any report regarding an injury or unusual occurrence (Injury/Unusual Occurrence form & Minor Injury Report)  
Comments:

- 36(2)(h) The agreement for services  
Comments:

**R37. Attendance Records** (review records for past 12 months)

- 37(a) Complete and accurate monthly child attendance records  
Comments:

37(b)(i) Obtain signature of the parent monthly to verify hours/days of the child's attendance

Comments:

37(b)(ii) Obtain signature of the parent monthly to verify the fees charged

Comments:

- 37(c) Forward the records to the ministry (Social Service Subsidy) each month  
Comments:

**R38. Insurance**

- 38(a) Insurance policy - comprehensive general liability coverage and personal injury coverage

Insurer: [Click or tap here to enter text.](#)

Policy Number: [Click or tap here to enter text.](#)      Expiry date: [Click or tap to enter a date.](#)

Comments:

- 38(b) Insurance policy - liability coverage with respect to the transportation of children  
If do not transport children, N/A

Insurer: [Click or tap here to enter text.](#)

Policy Number: [Click or tap here to enter text.](#)      Expiry date: [Click or tap to enter a date.](#)

Comments:

**R39. Materials to be Made Available**

- 39(a) The Act

Comments:

- 39(b) The regulations

Comments:

- 39(c) Philosophy and program

Comments:

- 39(d) Child management policy

Comments:

- 39(e) Operational policies

Comments:

- 39(f) Fee schedule

Comments:

- 39(g) Any other materials that the Director may require

Identify any other information requested (If none, check N/A ):

Comments:

#### **R40. Confidentiality**

- 40(1)(a)(i) Personal information  
Comments:
- 40(1)(a)(ii) Any record with respect to a child or a child's parent  
Comments:
- 40(1)(b)(i) Not disclose without parent permission as required for health or safety of the child  
Comments:
- 40(1)(b)(i) Not disclose without parent permission as required by law  
Comments:
- 40(3)(a) May disclose to a collection agency the name and address of the child's parent
- 40(3)(b) May disclose to a collection agency the amount of fees owing by the parent
- 40(3)(c) May disclose to a collection agency the nature of the fees owing by the parent  
Comments:

#### **Regulations Part IV – Standards for Centres Section**

##### **R41. Centre Director and Supervisor**

- 41(1)(a) Centre director is appointed and  
Comments:
- 41(1)(b) Supervisor to act in place of the centre director in the centre director's absence**  
Comments:
- 41(2)(a) Centre director must be at least 18 years of age  
Comments:
- 41(2)(b) Meets or exceeds the qualifications of an ECE III or 41(4)  
Comments:
- 41(3)(a) Supervisor must be at least 18 years of age  
Comments:
- 41(3)(b) Meets or exceeds qualifications of an ECE I  
Comments:

##### **R42. Child Care Workers**

- 42(1) Child care worker must be at least 16 years of age  
Comments:
- 42(2)(b) If working for 65 hours or more per month meets or exceeds qualifications of an ECE I**  
Comments:
- 42(2)(c) 30% of persons employed in the centre as child care workers for 65 hours or more meet or exceed the qualifications of ECE II**  
Comments:
- 42(2)(d) A further 20% of persons employed in the centre as child care workers for 65 hours or more meet or exceed the qualifications of ECE III**  
Comments:

#### R43. Exemption

- 43(1) May apply for exemption if unable to hire a director or supervisor whose qualifications meet requirements or child care workers whose qualifications meet the requirements

Comments:

#### R44. First Aid and CPR

- 44(1) At least one person is on the premises who has first aid/CPR during hours of operation

- 44(2)(a)(i) Each individual employed in the centre for 65 hours or more per month as a centre, director, supervisor or child care worker has completed a first aid course

Comments:

- 44(2)(a)(ii) Each individual employed in the centre for 65 hours or more per month as a centre, director, supervisor or child care worker has completed a course in cardiopulmonary resuscitation

Comments:

- 44(2)(b) When required to do so by the director, retakes a course in (a)

Comments:

#### R45. Criminal Record Searches

- 45(1) Criminal record check for each centre employee

Comments:

- 45(2)(a) Establish written policies with respect to criminal record checks

Comments:

- 45(2)(b) Make policies with respect to criminal record checks known to employees/potential employees

Comments:

#### R46. Health of Employees

- 46(4)(a) If employee may have category I or category II communicable disease, the licensee must notify public health

(b) Ensure recommendations/instructions followed.

Comments:

#### R47. Employee Records

- 47(a) Copy of employee's ECE certificates

Comments:

- 47(b) Proof of first aid/CPR training

Comments:

- 47(c) Results of criminal record check (Note to File completed)



Comments:

- 47(e) Copy of all medical reports for employee

Comments:

**FDC Detail from Expanded Checklist - Key Indicators Bold Faced and Highlighted. The full Expanded Checklist is not provided since the Licensing Key Indicators were within a truncated portion of the Checklist:**

**R28. Hazardous Items**

- 28(a) Unsafe items inaccessible

Comments:

- 28(b) Poisonous substances locked**

Comments:

- 28(c) Cover radiator

Comments:

- 28(d) Cap electrical outlets

Comments:

**R29. Telephone, Emergency Numbers**

- 29(a) Telephone in working order

Comments:

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Comments:

**R33. Taking Certain Supplies**

- 33(a) Portable record of emergency information

Comments:

- 33(b) Appropriate and sufficient first aid supplies**

Comments:

**R34. Injuries, Unusual Occurrences** *(also discuss child abuse protocol and ensure there is a copy and policies, procedures)*

- 34(a) Immediately notify parent  
Comments:
- 34(b) Within 24 hours notify consultant  
Comments:
- 34(c) Within seven days complete/submit report  
Comments:

### R35. Volunteers

- 35(2) The licensee, alternate or, assistant (GF) is present when a volunteer is in attendance  
Comments:

### R36. Children's Records

- 36(1)(a) Keep a record for each child  
Comments:
- 36(1)(b) Retain the record for a period of six years.  
Comments:
- 36(2)(a) Child's name and date of birth (Child's Health Resume & Child's Emergency Information)  
Comments:
- 36(2)(b)(i) Names, addresses and phone numbers of the child's parents (Child's Health Resume & Child's Emergency Information)  
Comments:
- 36(2)(b)(ii) Names, addresses and phone numbers of person to contact in an emergency (Child's Health Resume & Child's Emergency Information)**  
Comments:
- 36(2)(b)(iii) Names, addresses and phone numbers of the child's medical practitioner (Child's Health Resume & Child's Emergency Information)**  
Comments:
- 36(2)(c) Any allergy, illness or other medical condition (Child's Health Resume & Child's Emergency Information)  
Comments:
- 36(2)(d) The child's immunization status (Child's Health Resume & Child's Emergency Information)**  
Comments:
- 36(2)(e) Any medication authorization provided/any record of medication administered (Medication form)  
Comments:
- 36(2)(f)(i) Any authorization by the child's parent for an excursion not involving transportation (Excursion form)  
Comments:
- 36(2)(f)(ii) Any authorization by the child's parent for an excursion involving transportation (Excursion form)**  
Comments:
- 36(2)(g) Any report regarding an injury or unusual occurrence (Injury/Unusual Occurrence form & Minor Injury Report)

Comments:

**36(2)(h) The agreement for services**

Comments:

**R37. Attendance Records** (review records for past 12 months)

- 37(a) Complete and accurate monthly child attendance records

Comments:

**37(b)(i) Obtain signature of the parent monthly to verify hours/days of the child's attendance**

Comments:

**37(b)(ii) Obtain signature of the parent monthly to verify the fees charged**

Comments:

- 37(c) Forward the records to the ministry (Social Service Subsidy) each month

Comments:

**R38. Insurance**

- 38(a) Insurance policy - comprehensive general liability coverage and personal injury coverage

Insurer: Click or tap here to enter text.

Policy Number: Click or tap here to enter text.      Expiry date: Click or tap to enter a date.

Comments:

**38(b) Insurance policy - liability coverage with respect to the transportation of children  
If do not transport children, N/A**

Insurer: Click or tap here to enter text.

Policy Number: Click or tap here to enter text.      Expiry date: Click or tap to enter a date.

Comments:

**Conclusion:**

The CCC and FDC key indicators represent approximately 10% of all the rules and regulations for their respective service type which is typical of the percentage of rules selected as key indicators. With these particular rules, they are not based upon risk but upon predictability in that these licensing rules statistically predict overall regulatory compliance. There is some overlap with the ***Fiene Thirteen Key Indicators*** and the ***International ECPQIM data base***, such as with Immunizations, First Aid, CPR, Criminal Records Check, and Staff Qualifications.

## APPENDICES

### Theory of Regulatory Compliance Algorithm (Fiene KIS Algorithm)

- 1)  $\Sigma R = C$
- 2) Review C history x 3 yrs
- 3)  $NC + C = CI$
- 4) If  $CI = 100 \rightarrow KI$
- 5) If  $KI > 0 \rightarrow CI$  or if  $C < 100 \rightarrow CI$
- 6) If  $RA (NC\% > 0) \rightarrow CI$
- 7)  $KI + RA = DM$
- 8)  $KI = ((A)(D)) - ((B)(E)) / \text{sqrt} ((W)(X)(Y)(Z))$
- 9)  $RA = \Sigma R1 + \Sigma R2 + \Sigma R3 + \dots \Sigma Rn / N$
- 10)  $(TRC = 99\%) + (\phi = 100\%)$
- 11)  $(CI < 100) + (CIPQ = 100) \rightarrow KI (10\% CI) + RA (10-20\% CI) + KIQP (5-10\% \text{ of } CIPQ) \rightarrow OU$

#### **Legend:**

R = Rules/Regulations/Standards

C = Compliance with Rules/Regulations/Standards

NC = Non-Compliance with Rules/Regulations/Standards

CI = Comprehensive Instrument for determining Compliance

$\phi$  = Null

KI = Key Indicators;  $KI \geq .26+$  Include;  $KI \leq .25$  Null, do not include

RA = Risk Assessment

$\Sigma R1$  = Specific Rule on Likert Risk Assessment Scale (1-8; 1 = low risk, 8 = high risk)

N = Number of Stakeholders

DM = Differential Monitoring

TRC = Theory of Regulatory Compliance

CIPQ = Comprehensive Instrument Program Quality

KIQP = Key Indicators Program Quality

OU = Outcomes

A = High Group + Programs in Compliance on Specific Compliance Measure (R1...Rn).

B = High Group + Programs out of Compliance on Specific Compliance Measure (R1...Rn).

E = Low Group + Programs in Compliance on Specific Compliance Measure (R1...Rn).

D = Low Group + Programs out of Compliance on Specific Compliance Measure (R1...Rn).

W = Total Number of Programs in Compliance on Specific Compliance Measure (R1...Rn).

X = Total Number of Programs out of Compliance on Specific Compliance Measure (R1...Rn).

Y = Total Number of Programs in High Group ( $\Sigma R = 98+$ ).

Z = Total Number of Programs in Low Group ( $\Sigma R \leq 97$ ).

High Group = Top 25% of Programs in Compliance with all Compliance Measures ( $\Sigma R$ ).

Low Group = Bottom 25% of Programs in Compliance with all Compliance Measures ( $\Sigma R$ ).

# DIFFERENTIAL MONITORING LOGIC MODEL & ALGORITHM (DMLMA©) (Fiene, 2012): A 4<sup>th</sup> Generation ECPQIM – Early Childhood Program Quality Indicator Model

$$CI \times PQ \Rightarrow RA + KI \Rightarrow DM + PD \Rightarrow CO$$

Definitions of Key Elements:

CI = Comprehensive Licensing Tool (Health and Safety)(*Caring for Our Children*)

PQ = *ECERS-R, FDCRS-R, CLASS, CDPEs* (Caregiver/Child Interactions/Classroom Environment)

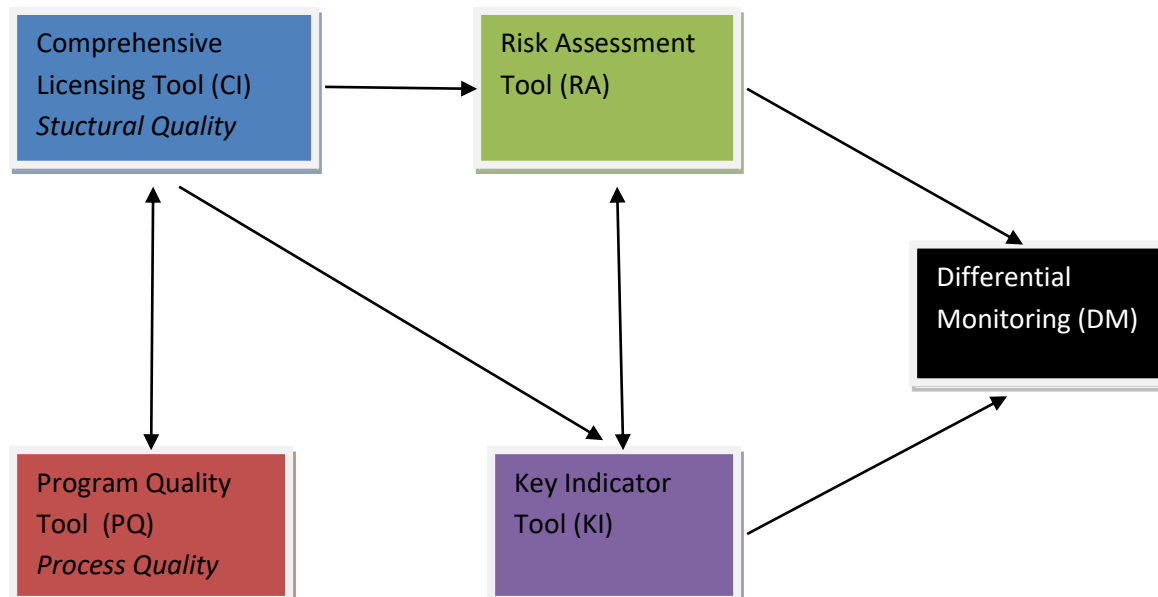
RA = Risk Assessment, (High Risk Rules)(*Stepping Stones*)

KI = Key Indicators (Predictor Rules)(*13 Key Indicators of Quality Child Care*)

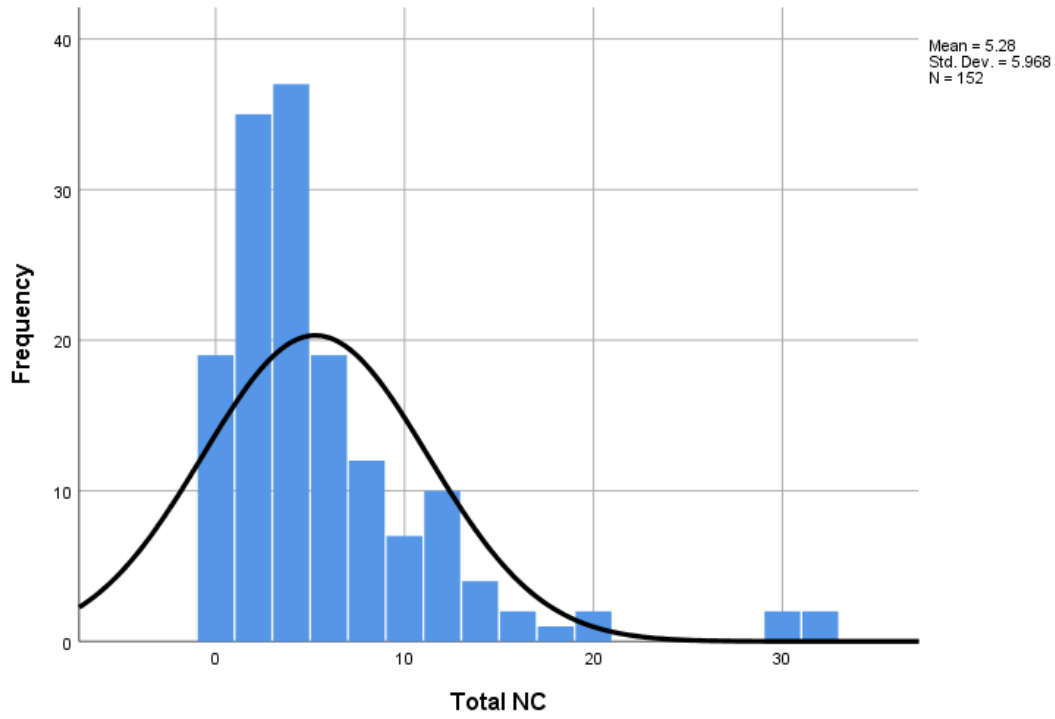
DM = Differential Monitoring, (How often to visit and what to review)

PD = Professional Development/Technical Assistance/Training

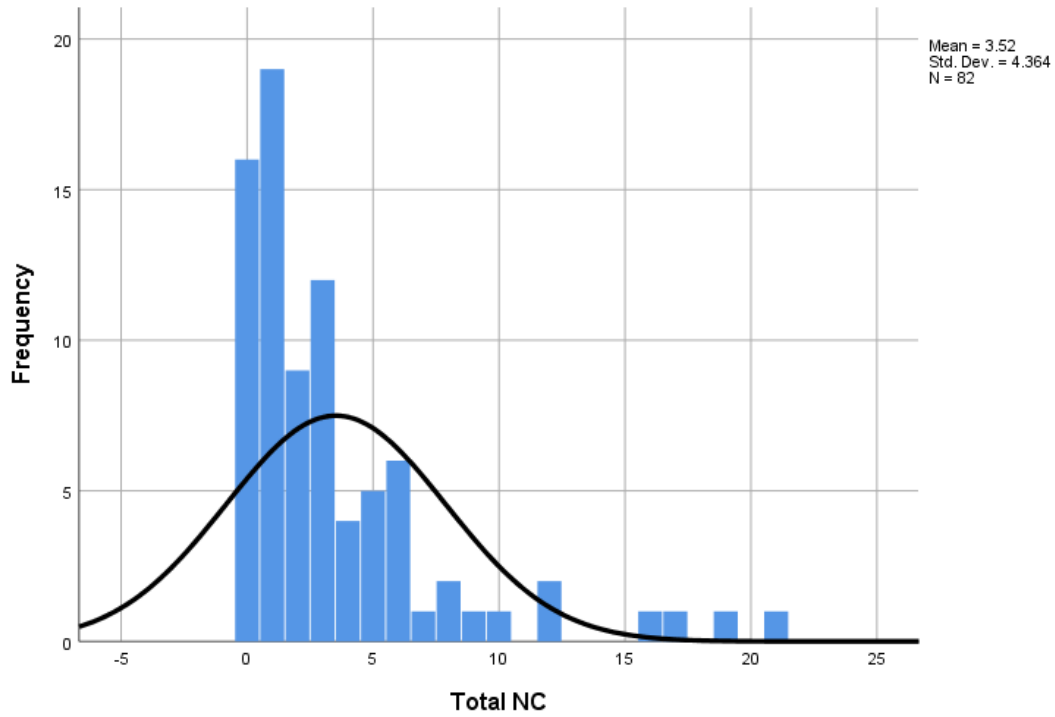
CO = Child Outcomes (See Next Slide for PD and CO Key Elements)



### Centers Total Number of Violations



### Homes Total Number of Violations





# RESEARCH REPORT

## Saskatchewan Weighted Risk Assessment Study

### Abstract

This report provides the results from the Saskatchewan Licensing Weighted Risk Assessment Study which dealt with over 200 centre and home based stakeholders.

Richard Fiene, Ph.D.

# **The Saskatchewan Centre and Home Based Weighted Risk Assessment Study**

**Richard Fiene, Ph.D.**

**National Association for Regulatory Administration**

**Research Institute for Key Indicators and Penn State University**

**October 2019**

## **Abstract**

This report will describe the Saskatchewan Centre and Home Based Weighted Risk Assessment Study providing the detailed weights of each service type. The Weighted Risk Assessment Methodology is the other abbreviated inspection approach in Differential Monitoring. When coupled with the Licensing Key Indicator Methodology it provides a cost effective and efficient monitoring and assessment of early care and education programs.

## **INTRODUCTION**

In licensing and regulatory administration, every regulatory requirement is important. However, anyone can recognize that some regulations pose a greater threat to children's health and safety than others. Weighted Risk Systems allow states, provinces, and other jurisdictions to qualitatively rank regulatory requirements to identify regulations that pose the greatest risk of harm to children.

A key component of Weighted Risk System development is to assign numerical "weights" to each regulatory requirement. These weights are then used to identify the most "serious" regulatory violations. This report presents the regulations that pose the most immediate threat to the health, safety, or well-being of children, and/or present the greatest risk of death or serious physical or emotional injury to children if the compliance with regulations is not met in Child Care Homes and Child Care Centres regulated by the Province.

The Province in conjunction with NARA identified a sample of stakeholders in the regulatory oversight process. Stakeholders identified included but were not limited to Provincial staff and licensees. Using an online measurement instrument, stakeholders were asked to assign a numerical "weight" to each regulation for each type of setting regulated by the Province. Numerical weights ranged from 1 ("No threat to the health, safety, or well-being of residents if the regulation is not met; individuals are not at risk in any way due to violation of regulation") to 8 ("Immediate threat to the health, safety, or well-being of residents if the regulation is not met; individuals would be in danger of death or serious physical or emotional injury if the regulation is in violation").



## **METHOD**

The National Association for Regulatory Administration (NARA) in cooperative agreement with the Research Institute for Key Indicators LLC (RIKI) have developed and enhanced Differential Monitoring and the respective abbreviated inspections methodologies of Weighted Risk Assessment and Licensing Key Indicators.

The risk assessment methodology is very different from the key indicator methodology in that compliance history data are not utilized but rather a best practice ranking according to risk is used to determine which rules become core rules which have the greatest likelihood to place children at significant risk of morbidity or mortality. This is done by having a group of experts rank order all the rules on a Likert Scale from low risk to high risk of mortality or morbidity that non-compliance with the rule places children at. This is generally done on a 1-10 scale with 1 = low risk; 5 = medium risk; and 10 = high risk. The experts selected include but are not limited to licensing staff, policy makers, researchers, providers, advocacy groups, parents, and other significant stakeholders who will be impacted by the weighting of the rules.

Once the data are collected from all the experts, it is averaged for each rule to determine its relative rank in comparison to all the other rules. A significantly high threshold or cut off point is determined so that no more than 5-10% of the rules become core rules. These core rules can then be used in a differential monitoring approach (to be described more fully in the next section) and/or with the key indicators to complete abbreviated reviews of child welfare programs. It is recommended that such a practice of using both core rules and key indicators be used together because then the state has the benefits of both methodologies in measuring risk and being able to statistically predict overall compliance with a very short list of rules.

The remainder of this section describes the process for developing a licensing weighting/risk assessment system for use in the implementation of human care licensing rules and discusses the applicability of weighting/risk assessment system for all types of human service licensing.

A licensing weighting/risk assessment system is a regulatory administration tool designed for use in implementing human care licensing rules. A licensing weighting/risk assessment system assigns a numerical score or weight to each individual licensing rule or section of a rule, based upon the relative health, safety and welfare risk to the consumers if a facility is not in compliance with the rule. The type of license issued is based on the sum of the numerical weights for each rule that is not in compliance.

The specific objectives of a licensing weighting/risk assessment system are:

- a) To standardize decision-making about the type of license to be issued
- b) To take into account the relative importance of each individual rule
- c) To ensure that rules are enforced consistently
- d) To improve the protection of consumers through more equitable and efficient application and enforcement of the licensing rules

A licensing weighting/risk assessment system can and should be developed and implemented only if:

- 1) Regular or full licenses are issued with less than 100% compliance with all rules. If a regular license is not issued unless all violations are corrected at the time of license issuance, a weighting/risk assessment system is not necessary. A weighting/risk assessment system is useful if a facility is issued a license with outstanding violations (and a plan to correct the non-compliance areas) at the time of license issuance.
- 2) There is a large number of licensing rules with a variation of degrees of risk associated with various rules. If there are only a few rules with equal or similar risk associated with each rule, a weighting/risk assessment system is not necessary. A weighting/risk assessment system is useful if there are many rules with varying degrees of risk.
- 3) A standardized measurement system or inspection instrument is used to measure compliance with licensing rules. Before developing a weighting/risk assessment system, a standardized measurement instrument or tool should be developed and implemented.

#### *Development of a Weighting/Risk Assessment System*

This section will provide a step-by-step process in the development of a weighting/risk assessment system for licensing agency use.

- 1) The first step in developing a licensing weighting/risk assessment system is the development of a survey instrument. A licensing inspection instrument or measurement tool can be adapted into a survey tool. The survey should contain each rule or section of a rule, according to how it is measured in the inspection instrument. Survey instructions should explain the purpose of the survey and instructions for completing the survey instrument. It is suggested that survey participants rate each rule section from 1-8 based on risk to the health, safety and welfare of the clients if the rule is not met (1 = least risk; 8 = most risk).
- 2) Surveys should be disseminated to at least 100 individuals. If a state has more than 3,000 licensed facilities in the type of service being surveyed, consideration for surveying more than 100 individuals should be given. Individuals surveyed should include providers of service; provider, consumer and advocacy associations; health, sanitation, fire safety, medical, nutrition and program area professionals; licensing agency staff including policy/administrative staff and inspectors; consumers of service; parents; and funding agency staff. In order to assure a higher survey return rate, persons selected as survey participants should be contacted prior to the survey to explain the weighting/risk assessment system and request their willingness to complete the survey.
- 3) Survey results from each survey should be collected and entered into a computer data base spreadsheet software package or an online survey software. After all survey data

are recorded, means or average weights for each rule or section of a rule should be calculated. If there is sufficient variation in the means for each rule, the individual rule means can be rounded to the nearest whole number. Generally when comparing mean weights among the various groups surveyed there should be a similarity in rating among the groups, supporting the use of the weights as a reliable measure of risk.

## RESULTS

The following contains the *Rule, Brief description of the Rule, and its corresponding weight*.

### **Centres (n = 144):**

- R49. Children must be adequately supervised at all times. 7.77
- R44. At least one person is on the premises who has first aid/CPR during hours of operation. 7.68
- 15(b). A licensee must ensure all employees and volunteers who provide child care services at the facility comply with the policy on child management. 7.64
- 36(2)(c). Any allergy, illness or other medical condition (Child's Health Resume & Child's Emergency Information) 7.63
- 28(b). Store any poisonous substances at the facility in a locked enclosure. 7.59
- R55. No person will smoke in a centre (includes outdoor play areas and facility excursions). 7.54
- R15. A licensee must develop a written policy with respect to child management that does not permit: corporal punishment; physical, emotional or verbal abuse; denial of necessities; isolation; or inappropriate physical or mechanical restraint. 7.51
- R34. If a child attending the facility sustains an injury requiring medical treatment or is involved in an unusual or unexpected occurrence, the licensee must: immediately notify the parent; 7.50
- R45. Before an individual is hired as an employee in a centre, the licensee must obtain from the individual the results of a criminal record check with respect to that individual. 7.49
- R28. A licensee must: Store any unsafe items at the facility in a place that is inaccessible to children. 7.48
- R53. The licensee must ensure that there is at least one child care worker present to care for a group of children on a walk in the neighbourhood of the centre. 7.48
- 27(1)(b) ensure that a written record of each dose of medication administered is made. 7.42
- R27. A licensee who agrees to administer a medication to a child attending the facility must: obtain written authorization from the parent of the child before the medication is administered to the child. 7.41
- 25(b) Adequate and safe procedures are followed in the facility for cleansing utensils used for eating and drinking. 7.41

R25. Adequate and safe procedures are followed in the facility for handling, preparation, serving and storing food. 7.40

21(b) Ensure that hygienic procedures are followed by all persons in the facility. 7.38

53(2) The licensee must ensure that the number of child care workers present is not less than the number required by applicable staff-to-child ratio set out in (3) and (4). 7.37

28(c) Cover all radiators and hot pipes with non-combustible materials. 7.36

R35. Child care worker is present at all times when a volunteer is in attendance. 7.36

27(1)(c) ensure all non-emergency medications are stored in a locked enclosure. 7.36

52(3) Number of child care workers present is not less than the number required by applicable staff-to-child ratio set out in (4) and (5). 7.33

26(b) ensure that any recommendations or instructions from the public health officer with respect to that communicable disease that may affect the health or well-being of a child attending the facility are carried out. 7.31

47(c) Results of criminal record check. 7.30

54(3)(a) On an excursion, the number of child care workers present meets the staff-to-child ratio set out in subsection (4) or (6); or 54(3)(b) On an excursion the number of child care workers present meets the staff-to-child ratio set out in subsection (5) or (7). 7.27

54(8)(a) Consider the location and activities involved in the excursion and assess risks to the children. 7.25

36(2)(b)(ii) Names, addresses and phone numbers of person to contact in an emergency (Child's Health Resume & Child's Emergency Information) 7.24

R47. A licensee must maintain accurate and up-to-date records with respect to each employee that include: Proof of first aid/CPR training. 7.21

44(2)(a)(i) Each individual employed in the centre for 65 hours or more per month as a centre, director, supervisor or child care worker has completed a first aid course. 7.19

33(b) appropriate and sufficient first aid supplies. 7.19

R21. Ensure that the facility and its equipment and furnishings are maintained in a sanitary condition. 7.19

36(2)(b)(i) Names, addresses and phone numbers of the child's parents (Child's Health Resume & Child's Emergency Information). 7.19

R54. If on an excursion away from the centre, at least one child care worker and one adult, or two child care workers are present to care for the children 7.17

R32. A licensee must maintain a portable record of emergency information for each child attending. 7.17

R33. If children attending a facility are taken on an excursion from the facility, the licensee must take on the excursion: a portable record of emergency information for each child. 7.16

R31. Keep appropriate and sufficient first aid supplies at the facility at a place that is inaccessible to children 7.15

44(2)(b) When required to do so by the director, retakes a course in first aid and cardiopulmonary resuscitation. 7.15

R29. Ensure that the facility is equipped with a telephone in working order. 7.14

36(2)(e) Any medication authorization provided/any record of medication administered (Medication form) 7.13

28(d) If infants, toddlers or preschool children attend the facility, cap electrical outlets. 7.12

R58. Ensure the centre has access to sufficient kitchen and dining facilities to provide food for children attending the centre. 7.10

R36. A licensee must: (a) keep a record with respect to each child attending the facility; and (b) retain the record for a period of six years after the child ceases to attend the facility. The children's record must include: Child's name and date of birth (Child's Health Resume & Child's Emergency Information). 7.09

29(b) Ensure emergency telephone numbers are posted in a convenient location. 7.08

8(1)(b) Fire Inspection - A report from the Fire Commissioner's local assistant respecting the fire safety standards of the centre. 7.06

8(1)(a) Health Inspection - A report from the public health officer respecting the sanitation and general health and safety standards of the centre must be submitted with the application. 7.04

24(2)(b) Children are fed in appropriate manner for age and level of development. 7.04

44(2)(a)(i) Each individual employed in the centre for 65 hours or more per month as a centre, director, supervisor or child care worker has completed a course in cardiopulmonary resuscitation. 7.01

45(2)(a) A licensee of a centre must establish written policies with respect to criminal record checks. 7.00

R30. Develop an emergency evacuation plan and practice it monthly. 6.97

47(f) Any emergency medical information for employee. 6.97

52(2)(b) the licensee has made arrangements for the provision of an additional individual in the event of an emergency. 6.94

45(2)(b) A licensee of a centre must make policies with respect to criminal record checks known to employees/potential employees. 6.87

24(2)(a) Meals and snacks provided meet the nutritional needs of the children attending the facility 6.81

R26. If a licensee has reason to suspect that a child attending the facility has a category 1 or category II communicable disease, the licensee must: immediately notify the public health officer. 6.76

R59. The licensee of a centre must provide a safe outdoor play area of seven square metres per space; or At least half of the outdoor play area must be adjacent to the centre and the remainder must be within walking distance. 6.76

52(2) If there are less than nine children in attendance and there are not more than three infants/toddlers, there may be only one child care worker present at the centre if: the staff-to-child ratio does not exceed the ratio set out in subsection (5). 6.74

R46. If a licensee of a centre has reason to suspect that an employee of the centre has a category I or category II communicable disease, the licensee must: notify the public health officer; and ensure recommendations/instructions from the public health office are followed. 6.72

20(2) Provide equipment and materials that are developmentally appropriate and adequate in quality, non-toxic, washable, sturdy and safe. 6.71

R19. Provide developmentally appropriate equipment and furnishings for resting, eating, diapering, toileting and storage. 6.70

R52. The licensee must ensure that there are two persons present at centre at all times including one child care worker and one other person at least 16 years of age while children are in attendance. 6.68

R24. Provide meals and snacks for the children attending the facility who are six months of age or older. 6.60

34(b) Within 24 hours after the occurrence, the licensee must notify the consultant. 6.56

27(2) In exceptional circumstances, a licensee may administer a non-prescription medication to a child on the oral authorization of the parent of the child (with written confirmation of authorization after). 6.56

34(c) Within seven days after the occurrence, complete/submit report to the ministry. 6.45

8(1)(c) Heating Inspection - A report from a person acceptable to the Director respecting the heating system in the premises in which the centre will be operated. 6.21

R20. Provide sufficient quantities of equipment and materials for indoor and outdoor activities. 6.12

R48. Any volunteer must be 16 years of age or older. 6.08

R37. A licensee must keep complete and accurate monthly child attendance records for the facility. 5.83

36(2)(b)(iii) Names, addresses and phone numbers of the child's medical practitioner (Child's Health Resume & Child's Emergency Information) 5.47

R23. No maintenance or repair to any area of the facility will be carried out while child care services are being provided. 5.40

36(2)(d) The child's immunization status (Child's Health Resume & Child's Emergency Information) 5.35

**Homes (n = 76):**

10(e) The results of a criminal record check with respect to the applicant and each adult who resides in the premises in which the home will be operated. 7.29

36(2)(c) Any allergy, illness or other medical condition (Child's Health Resume & Child's Emergency Information) 7.15

R61. A licensee of a home must have successfully completed a first aid course. 7.14

15(b) A licensee must ensure all employees and volunteers who provide child care services at the facility comply with the policy on child management. 7.10

R28. Store any unsafe items at the facility in a place that is inaccessible to children. 7.10

28(b) Store any poisonous substances at the facility in a locked enclosure. 7.09

61(2) A licensee of a home must have successfully completed training in cardiopulmonary resuscitation. 7.09

R63. Before an individual is hired as an assistant in a group family child care home, the licensee must obtain from the individual the results of a criminal record check with respect to the individual. 7.05

21(b) Ensure that hygienic procedures are followed by all persons in the facility. 7.04

R68. Children attending the home are adequately supervised at all times. 7.03

R34. If a child attending the facility sustains an injury requiring medical treatment or is involved in an unusual or unexpected occurrence, the licensee must: immediately notify the parent. 7.01

R70. Ensure that the social environment promotes the safety and well-being of the children. 6.97

64(b) The results of a criminal record check. 6.89

63(2) A licensee of a group family child care home must ensure that each person employed as an assistant in the home: (b) successfully completes a first aid course within six months; Comments: (c) successfully completes training in cardiopulmonary resuscitation within six months of commencing employment if not covered under (b). 6.88

28(c) Cover all radiators and hot pipes with non-combustible materials. 6.87

27(1)(c) ensure all non-emergency medications are stored in a locked enclosure. 6.86

25(b) Adequate and safe procedures are followed in the facility for cleansing utensils used for eating and drinking. 6.83

R25. Food Services 25(a) Adequate and safe procedures are followed in the facility for handling, preparation, serving and storing food. 6.83

R21. Ensure that the facility and its equipment and furnishings are maintained in a sanitary condition. 6.78

28(d) If infants, toddlers or preschool children attend the facility, cap electrical outlets. 6.77

R27. A licensee who agrees to administer a medication to a child attending the facility must: obtain written authorization from the parent of the child before the medication is administered to the child. 6.74

33(b) appropriate and sufficient first aid supplies. 6.71

R32. A licensee must maintain a portable record of emergency information for each child attending. 6.70

27(1)(b) ensure that a written record of each dose of medication administered is made. 6.68

26(b) Ensure that any recommendations or instructions from the public health officer with respect to that communicable disease that may affect the health or well-being of a child attending the facility are carried out. 6.68

36(2)(b)(i) Names, addresses and phone numbers of the child's parents (Child's Health Resume & Child's Emergency Information) 6.67

R29. Telephone, Emergency Numbers Ensure that the facility is equipped with a telephone in working order. 6.65

36(2)(b)(ii) Names, addresses and phone numbers of person to contact in an emergency (Child's Health Resume & Child's Emergency Information). 6.65

R64. A licensee of a group family child care home must maintain records for each assistant that includes:  
(a) A copy of proof of training in first aid and CPR. 6.65

R33. Taking Certain Supplies If children attending a facility are taken on an excursion from the facility, the licensee must take on the excursion: a portable record of emergency information for each child. 6.61

R15. A licensee must develop a written policy with respect to child management that does not permit: corporal punishment; physical, emotional or verbal abuse; denial of necessities; isolation; or inappropriate physical or mechanical restraint. 6.61

24(2)(b) Children are fed in appropriate manner for age and level of development. 6.59

R35. Child care worker is present at all times when a volunteer is in attendance. 6.55

R31. Keep appropriate and sufficient first aid supplies at the facility at a place that is inaccessible to children 6.51

24(2)(a) Meals and snacks provided meet the nutritional needs of the children attending the facility. 6.51

65(7) If a licensee has reason to suspect an assistant or alternate has a category I or II communicable disease, the licensee must: (a) Immediately notify the public health officer; and (b) Ensure any recommendations of instructions are followed. 6.50



R24. Provide meals and snacks for the children attending the facility who are six months of age or older. 6.49

R69. No person shall conduct any business or other activity within or from the home that might: (a) Interfere with supervision of the children; or (b) Pose a threat to the health or safety of a child. 6.47

64(d) Any emergency medical information. 6.47

36(2)(e) Any medication authorization provided/any record of medication administered (Medication form). 6.47

10(b) Fire Inspection - A report from the Fire Commissioner's local assistant respecting the fire safety standards of the premises in which the home will be operated. 6.46

27(2) In exceptional circumstances, a licensee may administer a non-prescription medication to a child on the oral authorization of the parent of the child (with written confirmation of authorization after). 6.46

R67. Provide a safe outdoor play area that is sufficient and that is: (a) Adjacent to the home; or (b) Within walking distance. 6.44

R30. Develop an emergency evacuation plan and practice it monthly. 6.41

20(2) Provide equipment and materials that are developmentally appropriate and adequate in quality, non-toxic, washable, sturdy and safe. 6.41

R65. If licensee or person living in the home has a category I or II communicable disease, or suspects he or she has a category I or II communicable disease, the licensee must: (a) Immediately notify the public health officer; and (b) Ensure any recommendations of instructions are followed. 6.39

29(b) Ensure emergency telephone numbers are posted in a convenient location. 6.37

R26. If a licensee has reason to suspect that a child attending the facility has a category 1 or category II communicable disease, the licensee must: immediately notify the public health officer. 6.33

34(b) Within 24 hours after the occurrence, the licensee must notify the consultant. 6.25

R19. Provide developmentally appropriate equipment and furnishings for resting, eating, diapering, toileting and storage. 6.19

R13. A license for a home must specify the maximum number of child care spaces that the licensee is authorized to provide in the home as licensed child care spaces or a license for a teen student support family child care home must specify the maximum number of licensed child care spaces that may be allocated as teen student support child care spaces. 6.16

R36. Children's Records A licensee must: (a) keep a record with respect to each child attending the facility; and (b) retain the record for a period of six years after the child ceases to attend the facility. The children's record must include: Child's name and date of birth (Child's Health Resume & Child's Emergency Information). 6.10

10(c) A report from a person acceptable to the Director respecting the heating system in the premises in which the home will be operated. 6.09

34(c) Within seven days after the occurrence, complete/submit report to the ministry. 5.99

R60. No licensee of a family child care home will provide more than 100 hours of care in one 24-hour period or 60(3) No licensee of a group family child care home shall provide more than 150 hours of care in one 24-hour period or 60(4) No licensee of a teen student support family child care home shall provide more than 75 hours of care in one 24-hour period. 5.83

36(2)(d) The child's immunization status (Child's Health Resume & Child's Emergency Information). 5.78

R20. Provide sufficient quantities of equipment and materials for indoor and outdoor activities. 5.74

36(2)(b)(iii) Names, addresses and phone numbers of the child's medical practitioner (Child's Health Resume & Child's Emergency Information). 5.72

R37. A licensee must keep complete and accurate monthly child attendance records for the facility. 5.47

R23. No maintenance or repair to any area of the facility will be carried out while child care services are being provided. 5.06

10(h) The applicant's health services number if requested by the director. 4.07

## **DISCUSSION**

This report provides the results of the weighted risk assessment study in Saskatchewan conducted during 2019. It is recommended that provincial staff select only those rules that place children at greatest risk to be used along with the licensing key indicator rules as identified in a previous report authored by this researcher.

By using both in tandem, it will provide a very cost effective and efficient approach to differential monitoring.

# **Validation Research Studies of Key Indicator and Risk Assessment Methodologies in the Province of Saskatchewan**

**Richard Fiene, Ph.D.**  
**Research Psychologist & Senior Research Consultant**

**March 2020**

# **Validation Research Studies of Key Indicator and Risk Assessment Methodologies in the Province of Saskatchewan**

**Richard Fiene, Ph.D.**

**National Association for Regulatory Administration**

**Research Institute for Key Indicators and Penn State University**

**March 2020**

## **Introduction**

The purpose of this report is to document the validation process for the Province of Saskatchewan's Licensing Key Indicator Rules and their Risk Assessment Rules. These studies were completed in 2019-2020 and were completed with a sample of child care centres and homes in the province. The purpose of the evaluation was to determine if the measurement protocol inherent in the key indicator and risk assessment methodologies were consistent and produced the desired results. Presently the province has convened a program quality work group which when they have finished their work, it should provide guidance to undertake the other three validations of licensing systems: standards, outputs, and outcome validations (see Zellman & Fiene (2012), *Validation Framework for Quality Rating and Improvement Systems*, ACF Office of Planning, Research and Evaluation).

For the purposes of this report, this validation study will only focus on the abbreviated checklist to be utilized in the province of Saskatchewan which consists of the key indicator and risk assessment rules. Saskatchewan is one of the first jurisdictions to engage in a validation study utilizing both the key indicator and risk assessment methodologies. In the past with validation studies they have been done in validating either the key indicator or the risk assessment methodology. This study is unique and is highly recommended as an approach for other jurisdictions in moving the licensing, regulatory science, program monitoring, and evaluation fields forward.

## **Methodology**

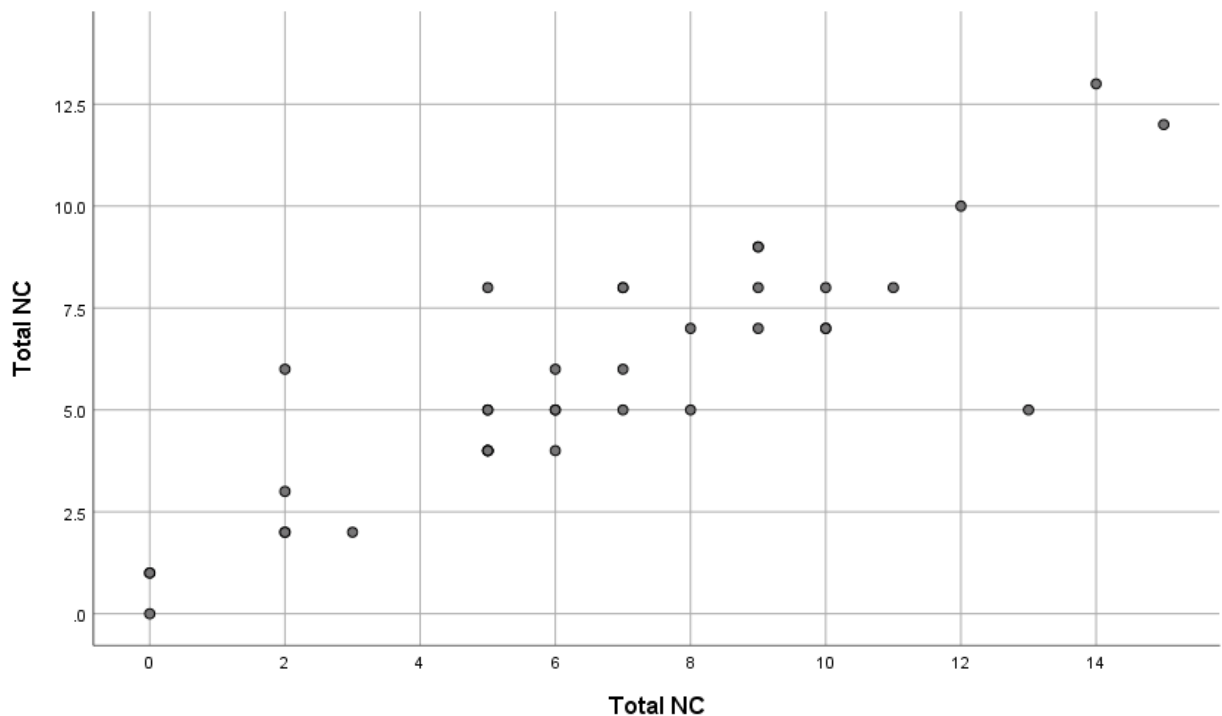
In this study, a sample of 38 child care centres (CCC) and 35 child care homes (FCC) were selected during a three-month time frame (Winter 2019-20). It was a convenience sample based upon when facilities were to be monitored. However, since the monitoring of facilities did not show any biases in their selection protocol, this sample can be dealt with as a valid representation of the Province. Licensing consultants did the reviews and collected the data. Again, licensing consultants who would normally review the programs during this time frame did so. The reviews/inspections were done in tandem independent of each other with two consultants visiting a facility one doing the abbreviated

inspection/review (key indicator and risk assessment rules only), the other consultant doing the comprehensive inspection/review looking at all the rules.

## Results

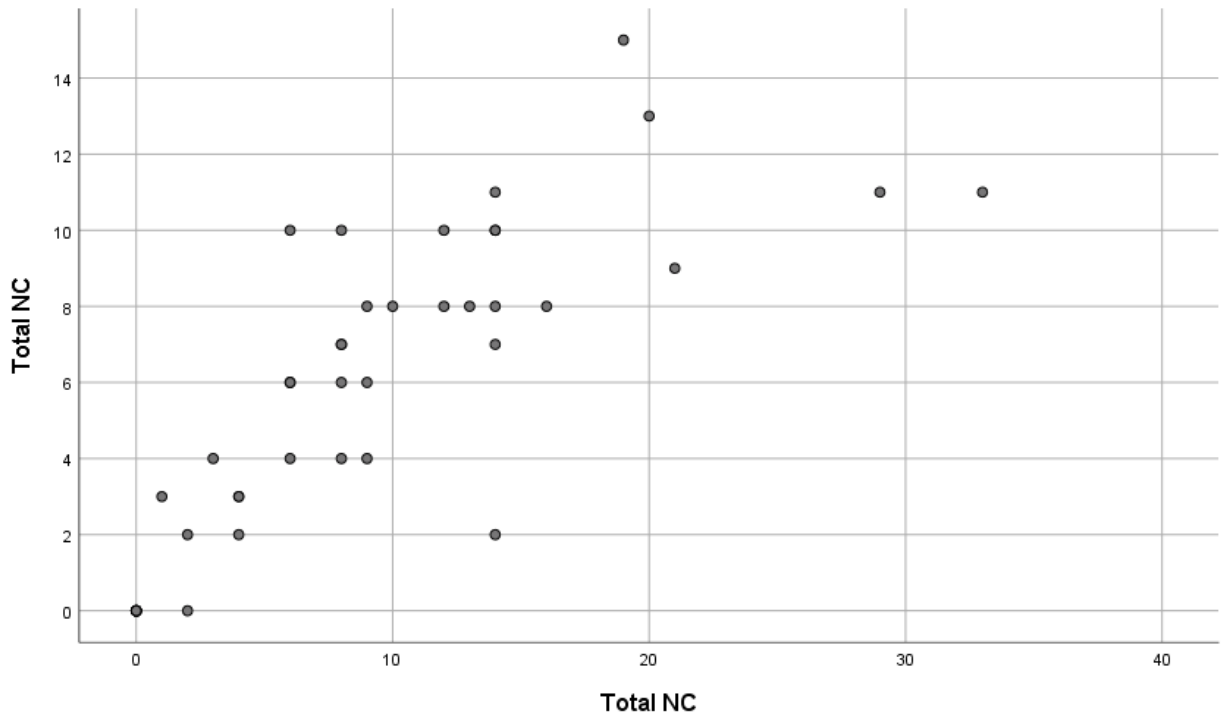
The results clearly validated the key indicator and risk assessment rules and the methodology. All the following results are statistically significant at the  $p < .0001$  level with the exception of a couple of rules which are addressed in the final Discussion section of this report. The correlation between the abbreviated tool and the comprehensive tool for CCC was .86 (see Figure 1 for a graphic depiction of this relationship); while the correlation between the abbreviated tool and the comprehensive tool for FCC was .71 (see Figure 2 for a graphic depiction of this relationship). There was only one false negative in either the CCC or FCC observations in which the abbreviated tool indicated no non-compliances (NC) while 2 non-compliances (NC) were indicated on the comprehensive tool. False negative means that a program gets a perfect score on the abbreviated inspection but violations of regulatory compliance are found on the comprehensive inspection. A false positive is when no violations are found on the comprehensive inspection but violations are found on the abbreviated inspection – two cases were observed to meet this standard. There were no statistically significant differences amongst the licensing consultants scoring. Reliability IRR – Inter-Rater Reliability = .84.

**Figure 1: Total CCC Non-Compliance (NC) Abbreviated Tool (Vertical Axis)/Total Non-Compliance (NC) Comprehensive Tool (Horizontal Axis)**



$r = .86; p < .0001$

**Figure 2: Total FCC NC Abbreviated Tool (Vertical Axis)/Total NC Comprehensive Tool (Horizontal Axis)**



$r = .71; p < .0001$

The following charts (1-4) provide the correlations between the abbreviated tool and the comprehensive tool for each key indicator rule and each risk assessment rule. Chart 1 provides the results for CCC key indicator rules; Chart 2 provides the results for CCC risk assessment rules; Chart 3 provides the results for FCC key indicator rules; & Chart 4 provides the results for FCC risk assessment rules.

**Chart 1: CCC Key Indicator Rules**

Rule	Content of Rules	r
242a	Meals and snacks meet nutritional needs	.86
37bi	Obtain signature of parent monthly to verify hours/days of attendance	.89
37bii	Obtain signature of parent monthly to verify fee charges	.89
412b	Director and supervisor meets or exceeds the qualifications of ECEIII	.85
422b	Child care workers working for 65hrs or more/mo. meets or exceeds ECEI	.93

422c	30% of persons employed in the centre as child care workers for 65 hours or more meet or exceed the qualifications of ECE II	.94
422d	A further 20% of persons employed in the centre as child care workers for 65 hours or more meet or exceed the qualifications of ECE III	.85
431	May apply for exemption if unable to hire a director or supervisor whose qualifications meet requirements or child care workers whose qualifications meet the requirements	.82
442ai	Each individual employed in the centre for 65 hours or more per month as a centre, director, supervisor or child care worker has completed a first aid course	.93
442aii	Each individual employed in the centre for 65 hours or more per month as a centre, director, supervisor or child care worker has completed a course in cardiopulmonary resuscitation	.93
451	Criminal record check for each centre employee	.80
47b	Proof of first aid/CPR training	.85
47c	Results of criminal record check	.81

### **Chart 2: CCC Risk Assessment Rules**

<b>Rule</b>	<b>Content of Rules</b>	<b>r</b>
81a	Health inspection	.93
81b	Fire inspection	.94
271a	Medication authorization is acquired	.81
271b	Written record of each dose of medication administered	1.00
271c	All non-emergency medications are stored in a locked enclosure	.65
272	Oral authorization in exceptional circumstances for administering non-prescription	1.00
28a	Unsafe items inaccessible	.52
28b	Poisonous substances locked	.76
28c	Cover radiator	1.00
28d	Cap electrical outlets	.70
49	Children must be adequately supervised at all times	1.00
523	Number of child care workers present is not less than the number required by applicable staff-to-child ratio	1.00

It is evident from Charts 1 and 2, the very strong relationship between the abbreviated key indicator and risk assessment rules and when these rules were assessed independently by a different licensing consultant during a comprehensive inspection. In moving on to Charts 3 and 4 for FCC, the results are not as quite robust but still statistically significant in all cases.

### **Chart 3: FCC Key Indicator Rules**

<b>Rule</b>	<b>Content of Rule</b>	<b>r</b>
28b	Poisonous substances locked	.71
31	Appropriate and sufficient first aid supplies and inaccessible to children	.89

32	Portable record of emergency information for each child attending	.94
33b	Appropriate and sufficient first aid supplies	.71
362bii	Names, addresses and phone numbers of person to contact in an emergency	.70
362biii	Names, addresses and phone numbers of the child's medical practitioner	.83
362d	The child's immunization status (Child's Health Resume & Child's Emergency Information)	.74
362fii	Any authorization by the child's parent for an excursion involving transportation	.70
362h	The agreement for services	.48
37bi	Obtain signature of the parent monthly to verify hours/days of the child's attendance	.71
37bii	Obtain signature of the parent monthly to verify the fees charged	.83
38b	Insurance policy - liability coverage with respect to the transportation of children	.68

**Chart 4: FCC Risk Assessment Rules**

<b>Rule</b>	<b>Content of Rule</b>	<b>r</b>
10e	Criminal Record Check(s)	.85
21a	Equipment and furnishings – sanitary	.80
21b	Hygienic procedures are followed	.88
271a	Medication authorization is acquired	1.00
271b	Written record of each dose of medication administered	1.00
271c	All non-emergency medications are stored in a locked enclosure	.61
272	Oral authorization in exceptional circumstances for administering non-prescription	1.00
28a	Unsafe items inaccessible	.68
28c	Cover radiator	1.00
28d	Cap electrical outlets	.88
611	First aid certificate	1.00
612	CPR certificate	1.00
64a	A licensee of a GFCCH - maintain records for each assistant that includes: A copy of proof of training in first aid and CPR	.67
64b	The results of a criminal record check	.69
64d	Any emergency medical information	.90
64e	A copy of the proof of participation in continuing education	1.00

The FCC results appear to corroborate other findings in other jurisdictions over the years in which FCC scoring is lower than CCC scoring when it comes to reliability and validity. The results are still statistically significant in both cases but there is more consistency in the CCC scoring. This result is fairly typical. Additional research in this area will need to be done in order to ascertain the differences between CCC and FCC related to these results.

This study in Saskatchewan clearly demonstrates the efficacy of both the risk assessment and key indicator methodologies as effective and efficient approaches to utilizing an abbreviated protocol to



doing licensing inspections and determining substantial regulatory compliance. Other observations in interpreting the data analyses: The CCC key indicator rules were consistently higher in their validation scores than the risk assessment rules. The CCC key indicator rules were consistently higher in their validation scores than the FCC key indicator rules. With the FCC facilities, the risk assessment rules had higher validation scores than the key indicator rules. And finally, the risk assessment rules were consistently higher in their validation scores with FCC over the CCC facilities.

Charts 5 – 8 provide the regulatory compliance data (the number of non-compliances (NC)) with each of the key indicators and risk assessment rules for both CCC and FCC. The differences in NC for the key indicator and risk assessment rules are typical in that the key indicator rules distinguish between the highly compliant programs and those programs that have lower compliance levels. With the risk assessment rules, these are generally very heavily weighted rules where you would not find high levels of non-compliance (NC). So the results in the following charts and figure clearly demonstrate these relationships.

Figure 3 provides the regulatory compliance average number of non-compliances (NC) for both CCC and FCC with key indicator rules and risk assessment rules.

**Chart 5: Non-Compliance (NC) with CCC Key Indicator Rules**

<b>Rule</b>	<b>Content of Rules</b>	<b>NC</b>
242a	Meals and snacks meet nutritional needs	8
37bi	Obtain signature of parent monthly to verify hours/days of attendance	23
37bii	Obtain signature of parent monthly to verify fee charges	24
412b	Director and supervisor meets or exceeds the qualifications of ECEIII	4
422b	Child care workers working for 65hrs or more/mo. meets or exceeds ECEI	9
422c	30% of persons employed in the centre as child care workers for 65 hours or more meet or exceed the qualifications of ECE II	13
422d	A further 20% of persons employed in the centre as child care workers for 65 hours or more meet or exceed the qualifications of ECE III	9
431	May apply for exemption if unable to hire a director or supervisor whose qualifications meet requirements or child care workers whose qualifications meet the requirements	13
442ai	Each individual employed in the centre for 65 hours or more per month as a centre, director, supervisor or child care worker has completed a first aid course	10
442aaii	Each individual employed in the centre for 65 hours or more per month as a centre, director, supervisor or child care worker has completed a course in cardiopulmonary resuscitation	10
451	Criminal record check for each centre employee	6
47b	Proof of first aid/CPR training	3
47c	Results of criminal record check	8

**Chart 6: Non-Compliance (NC) with CCC Risk Assessment Rules**

<b>Rule</b>	<b>Content of Rules</b>	<b>NC</b>
81a	Health inspection	8
81b	Fire inspection	10
271a	Medication authorization is acquired	2
271b	Written record of each dose of medication administered	0
271c	All non-emergency medications are stored in a locked enclosure	5
272	Oral authorization in exceptional circumstances for administering non-prescription	0
28a	Unsafe items inaccessible	8
28b	Poisonous substances locked	13
28c	Cover radiator	0
28d	Cap electrical outlets	5
49	Children must be adequately supervised at all times	0
523	Number of child care workers present is not less than the number required by applicable staff-to-child ratio	0

**Chart 7: Non-Compliance (NC) with FCC Key Indicator Rules**

<b>Rule</b>	<b>Content of Rule</b>	<b>NC</b>
28b	Poisonous substances locked	15
31	Appropriate and sufficient first aid supplies and inaccessible to children	14
32	Portable record of emergency information for each child attending	12
33b	Appropriate and sufficient first aid supplies	15
362bii	Names, addresses and phone numbers of person to contact in an emergency	13
362biii	Names, addresses and phone numbers of the child's medical practitioner	19
362d	The child's immunization status (Child's Health Resume & Child's Emergency Information)	17
362fii	Any authorization by the child's parent for an excursion involving transportation	14
362h	The agreement for services	12
37bi	Obtain signature of the parent monthly to verify hours/days of the child's attendance	18
37bii	Obtain signature of the parent monthly to verify the fees charged	19
38b	Insurance policy - liability coverage with respect to the transportation of children	1

**Chart 8: Non-Compliance (NC) with FCC Risk Assessment Rules**

<b>Rule</b>	<b>Content of Rule</b>	<b>NC</b>
10e	Criminal Record Check(s)	3
21a	Equipment and furnishings – sanitary	2
21b	Hygienic procedures are followed	4
271a	Medication authorization is acquired	5
271b	Written record of each dose of medication administered	3

271c	All non-emergency medications are stored in a locked enclosure	8
272	Oral authorization in exceptional circumstances for administering non-prescription	0
28a	Unsafe items inaccessible	9
28c	Cover radiator	0
28d	Cap electrical outlets	4
611	First aid certificate	0
612	CPR certificate	0
64a	A licensee of a GFCCH - maintain records for each assistant that includes: A copy of proof of training in first aid and CPR	2
64b	The results of a criminal record check	1
64d	Any emergency medical information	7
64e	A copy of the proof of participation in continuing education	6

The following figure 3 summarizes the results from the previous 4 charts into one graph showing the average regulatory non-compliance for CCC and FCC for key indicator and risk assessment rules.

**Figure 3: Regulatory Compliance (Non-Compliance) in CCC & FCC for KIM – Key Indicator Rules and RAM – Risk Assessment Rules**

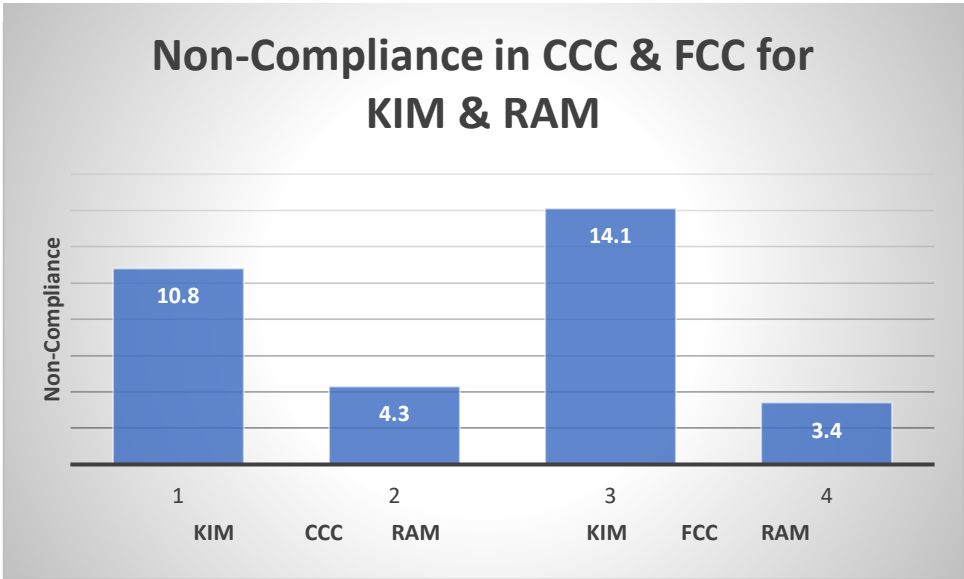


Figure 3 depicts the average differences between key indicator and risk assessment rules for both CCC and FCC facilities as discussed earlier in this report and depicted in Charts 5-8.

## Discussion

There are several takeaways from this validation study in demonstrating that both key indicator rules and risk assessment rules, two abbreviated inspection approaches and examples of differential monitoring, as basically reliable and valid methods for assessing regulatory compliance in early care and education programs (child care centres (CCC) and family child care homes (FCC)). There were a couple of rules which did not reach the specific significance threshold ( $p < .0001$ ) set for these types of validation studies: Rule 442d CCC and rule 362h FCC. But even in these cases the relationship between their presence on the abbreviated inspection tool and the comprehensive inspection tool was still statistically significant ( $p < .01$ ).

Another interesting trend was that the CCC key indicator rules had higher validation scores and the key indicator rules had higher validation scores than the risk assessment rules. This is a result that needs to be replicated in future studies to determine why this is occurring since risk assessment rules as an approach is used approximately 2-3 times more often than the key indicator rule approach.

And lastly, the fact that there were so few false positives and negatives provides support to the validity and reliability of the two approaches. In doing this type of regulatory compliance research, false negatives are always a real concern and in 99% of the cases it was not an issue. In looking at both false positives and negatives, 96% of the cases were not an issue.

This study provides the first empirically based validation of both the key indicator and risk assessment methodologies as used within a differential monitoring or abbreviated inspection approach. It has clearly demonstrated the efficacy of these approaches when used in conjunction with each other. The study should provide guidance for future research in the regulatory science field.

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<http://www.naralicensing.org/key-indicators> or <http://rikinstitute.com>



## CHILD CARE CENTRE – ABBREVIATED CHECKLIST

### *The Child Care Regulations, 2015*

#### **Regulations Part II - Licensing Section**

##### **R08. Application for Licence, Renewal – Centre**

- 8(1)(a) Health Inspection (collect documentation) - Click or tap to enter a date.

Comments:

- 8(1)(b) Fire Inspection (collect documentation) - Click or tap to enter a date.

Comments:

#### **Regulations Part III - Standards for Facilities Section**

##### **R24. Nutrition**

- 24(2)(a) Meals and snacks meet nutritional needs\*

Comments:

##### **R27. Medication**

- 27(1)(a) Authorization is acquired

Comments:

- 27(1)(b) Written record of each dose of medication administered

Comments:

- 27(1)(c) All non-emergency medications are stored in a locked enclosure

Comments:

- 27(2) Oral authorization in exceptional circumstances for administering non-prescription (with written confirmation of authorization after)

Comments:

##### **R28. Hazardous Items**

- 28(a) Unsafe items inaccessible

Comments:

- 28(b) Poisonous substances locked

Comments:

- 28(c) Cover radiator

Comments:

- 28(d) Cap electrical outlets

Comments:

##### **R37. Attendance Records** (review records for past 12 months)

- 37(b)(i) Obtain signature of the parent monthly to verify hours/days of the child's attendance\*

Comments:

- 37(b)(ii) Obtain signature of the parent monthly to verify the fees charged\*

Comments:

## **Regulations Part IV – Standards for Centres Section**

### **R41. Centre Director and Supervisor**

- 41(2)(b) Meets or exceeds the qualifications of an ECE III or 41(4)\*

Comments:

### **R42. Child Care Workers**

- 42(2)(b) If working for 65 hours or more per month meets or exceeds qualifications of an ECE I\*

Comments:

- 42(2)(c) 30% of persons employed in the centre as child care workers for 65 hours or more meet or exceed the qualifications of ECE II\*

Comments:

- 42(2)(d) A further 20% of persons employed in the centre as child care workers for 65 hours or more meet or exceed the qualifications of ECE III\*

Comments:

### **R43. Exemption**

- 43(1) May apply for exemption if unable to hire a director or supervisor whose qualifications meet requirements or child care workers whose qualifications meet the requirements\*

Comments:

### **R44. First Aid and CPR**

- 44(2)(a)(i) Each individual employed in the centre for 65 hours or more per month as a centre, director, supervisor or child care worker has completed a first aid course\*

Comments:

- 44(2)(a)(ii) Each individual employed in the centre for 65 hours or more per month as a centre, director, supervisor or child care worker has completed a course in cardiopulmonary resuscitation\*

Comments:

### **R45. Criminal Record Searches**

- 45(1) Criminal record check for each centre employee\*

Comments:

### **R47. Employee Records**

- 47(b) Proof of first aid/CPR training\*

Comments:

- 47(c) Results of criminal record check (Note to File completed)\*

Comments:

### **R49. Duty to Supervise**

- 49 Children must be adequately supervised at all times

Comments:

**R52. Supervision at Centre**

52(3) Number of child care workers present is not less than the number required by applicable staff-to-child ratio set out in (4) and (5)

Comments:

**ADDITIONAL REQUIREMENTS**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**RECOMMENDATIONS/COMMENTS:**

Click or tap here to enter text.

Early Learning and Child Care Consultant

## CHILD CARE HOME – ABBREVIATED CHECKLIST

### *The Child Care Regulations, 2015*

#### **Regulations Part II - Licensing Section**

##### **R10. Application for Licence, Renewal – Home**

- 10(e) Criminal Record Check(s) (name of household members and date CRC completed for all adults in the home):

Click or tap here to enter text. Click or tap to enter a date.

Click or tap here to enter text. Click or tap to enter a date.

Click or tap here to enter text. Click or tap to enter a date.

Click or tap here to enter text. Click or tap to enter a date.

Comments:

#### **Regulations Part III - Standards for Facilities Section**

##### **R21. Hygiene**

- 21(a) Equipment and furnishings – sanitary

Comments:

- 21(b) Hygienic procedures are followed

Comments:

##### **R27. Medication**

- 27(1)(a) Authorization is acquired

Comments:

- 27(1)(b) Written record of each dose of medication administered

Comments:

- 27(1)(c) All non-emergency medications are stored in a locked enclosure

Comments:

- 27(2) Oral authorization in exceptional circumstances for administering non-prescription (with written confirmation of authorization after)

Comments:

##### **R28. Hazardous Items**

- 28(a) Unsafe items inaccessible

Comments:

- 28(b) Poisonous substances locked\*

Comments:

- 28(c) Cover radiator

Comments:

- 28(d) Cap electrical outlets

Comments:

##### **R31. First Aid Supplies**



- 31 Appropriate and sufficient first aid supplies and inaccessible to children\*  
Comments:

**R32. Portable Emergency Information**

- 32 Portable record of emergency information for each child attending\*  
Comments:

**R33. Taking Certain Supplies**

- 33(b) Appropriate and sufficient first aid supplies\*  
Comments:

**R36. Children's Records**

- 36(2)(b)(ii) Names, addresses and phone numbers of person to contact in an emergency\*  
(Child's Health Resume & Child's Emergency Information)  
Comments:
- 36(2)(b)(iii) Names, addresses and phone numbers of the child's medical practitioner\*  
(Child's Health Resume & Child's Emergency Information)  
Comments:
- 36(2)(d) The child's immunization status (Child's Health Resume & Child's Emergency Information)\*  
Comments:
- 36(2)(f)(ii) Any authorization by the child's parent for an excursion involving transportation (Excursion form)\*  
Comments:
- 36(2)(h) The agreement for services\*  
Comments:

**R37. Attendance Records** (review records for past 12 months)

- 37(b)(i) Obtain signature of the parent monthly to verify hours/days of the child's attendance\*  
Comments:
- 37(b)(ii) Obtain signature of the parent monthly to verify the fees charged\*  
Comments:

**R38. Insurance**

- 38(b) Insurance policy - liability coverage with respect to the transportation of children\*  
If do not transport children, N/A   
Insurer: [Click or tap here to enter text.](#)  
Policy Number: [Click or tap here to enter text.](#)      Expiry date: [Click or tap to enter a date.](#)  
Comments:

**Regulations PART V – Standard for Homes**

**R61. Qualifications Licensees**

- 61(1) First aid (Type expiry date of certificate): [Click or tap to enter a date.](#)

Comments:

61(2) CPR (Type expiry date of certificate): Click or tap to enter a date.

Comments:

**Group Family Child Care Homes**

**R64. Assistant Records**

64 A licensee of a GFCCH - maintain records for each assistant that includes:

(a) A copy of proof of training in first aid and CPR (Type expiry date of certificate): Click or tap to enter a date.

Comments:

(b) The results of a criminal record check (Type date of record check and view Note to File): Click or tap to enter a date.

Comments:

(d) Any emergency medical information

Comments:

(e) A copy of the proof of participation in continuing education (Types names of workshops, dates completed and hours credited):

Comments:

**ADDITIONAL REQUIREMENTS**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**RECOMMENDATIONS/COMMENTS:**

Click or tap here to enter text.

Early Learning and Child Care Consultant

1 **Saskatchewan’s Early Learning and Child Care Program Quality Key Indicator Instrument for**  
2 **Pilot Study**

3  
4  
5 Ten Quality Key Indicators (QKI) make up the Saskatchewan’s Early Learning and Child Care Program  
6 Quality Key Indicator Instrument. The details about each of the Quality Indicators and data collection  
7 instructions in order to obtain the necessary data to determine if a program meets the Key Quality  
8 Indicators are delineated below for each quality key indicator. Quality Key Indicators (QKI) 1 – 5 will be  
9 collected via record or document review, interviewing individuals, or observation. Quality Key Indicators  
10 (QKI) 6 – 10 will be collected via observations in the classrooms throughout the day.

11 This instrument is to be used as part of a pilot study to determine its efficacy, so it is very important for  
12 the data collector/assessor, you, to make ample notes on what works for you and what does not. This is  
13 NOT a final instrument but is a pilot tool to be improved upon. Ample areas have been provided for  
14 note taking. Please mark up the instrument as need be throughout your data collection. For ease of  
15 marking up the tool, there are line numbers to the left. Use these as reference guides in making your  
16 edits, comments, etc. & if you send an email with comments, use these line numbers.

17 Dr Rick Fiene who is the NARA Research Consultant and a research psychology/professor of psychology  
18 will be tabulating the data you collect. Dr Fiene will be assessing the reliability and validity of the tool  
19 and measure its internal consistency. If you have any questions or comments for Dr Fiene, please email  
20 him at [Fiene@psu.edu](mailto:Fiene@psu.edu).

21 [Initial estimated time to complete the full assessment (3.5 hours)]

22 NOTE: QKI 11 is a placeholder for Coaching/Reflective Supervision which is undergoing future review. It  
23 is listed as a last indicator on this instrument.

24 **INDICATOR 1): Number of ECE III Educators (10 minutes)**

25 Assessors will review staff records in order to determine the number of staff who have these credentials  
 26 in early childhood education. Record the number of ECEs with the appropriate qualifications and  
 27 divide by the total number of ECEs in order to come up with a percent for the center.

28 **How to Measure:**

29 Go to the **Staff Information Summary** form to obtain the data for this item. There are two particular  
 30 columns that will do this. Under Certification: *Certification Date and Certification Level* (Highest ECE  
 31 Level Certified). The certification date should be earlier than the date of the review and the actual level  
 32 of the certification. In this case, we are interested in the number of (ECEIII's). Record the number of  
 33 ECEIII working at least 65 hours/month. Then record the number of total teaching staff working at least  
 34 65 hours/month below as well. Teaching staff is defined as staff who have a responsibility for working  
 35 with the children and the programming. Determine the percentage by dividing the total number of staff  
 36 into the total number of ECEIII Certified teaching staff, ECEIII Certified teaching staff is the numerator  
 37 and the total number of teaching staff is the denominator (ECEIII/Total number of teaching staff x 100%  
 38 = Percent).

39 **Scoring:**

40 The total number of ECEIII Certified teaching staff \_\_\_\_\_

41 The total number of teaching staff \_\_\_\_\_

42 Total ECEIII teaching staff divided by the total number of teaching staff \_\_\_\_\_ (%). Then  
 43 based on the percentage, you can find the score of 1-4 as per the chart below.

<b>Circle the Appropriate Level</b>	<b>1 = 0 to 25%</b>	<b>2= 26 to 50%</b>	<b>3 = 51 to 75%</b>	<b>4 = 76 to 100%</b>
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44

45 **INDICATOR 2): Stimulating and Dynamic Environment (10 minutes)**

46 The criteria for measuring this are drawn from *Play and Exploration Guide*. The program is child  
47 centred. Children are viewed as competent learners and they have the freedom to access classroom  
48 materials independently without adult intervention. The children are provided with meaningful choices  
49 through activity/learning centers. There is evidence of the children's interests and their projects in the  
50 learning environment.

51 **How to Measure:**

52 Below is the checklist of items that should be present in order to assess if the environment is both  
53 stimulating and dynamic for the children. You will want to observe that the following items are  
54 occurring in the classroom first. If you do not actually observe it occurring, then check the program plan  
55 to find documentation that it normally occurs but you just did not observe today. The checklist items  
56 would be found in *Play and Exploration* foundational materials.

57 Quality Early Learning Environments:

- 58 1. Co-teaching is evident. Y/N \_\_\_\_\_
- 59 2. Children are viewed as competent learners & are able to access materials independently.  
60 Y/N \_\_\_\_\_
- 61 3. Authentic and meaningful materials are used with children. Y/N \_\_\_\_\_
- 62 4. Children are provided with meaningful choices. Y/N \_\_\_\_\_
- 63 5. Children's work, art and photos are displayed respectfully. Y/N \_\_\_\_\_
- 64 6. Family photos are displayed in the early learning program. Y/N \_\_\_\_\_
- 65 7. Documentation of learning is displayed and discusses holistic development. Y/N \_\_\_\_\_
- 66 8. Environment reflects the culture and beliefs of the children, families and staff. Y/N \_\_\_\_\_
- 67 9. Variety of books & other print materials are available throughout the learning environment Y/N \_\_\_\_\_

68 10. A variety of writing materials are accessible to children the majority of the time. Y/N \_\_\_\_\_

69 11. There is evidence of the children’s interests and project(s) in the learning environment.

70 Y/N \_\_\_\_\_

71 **Scoring:**

72 Total up the number of items where you recorded a “Y” above that you observed (curriculum or in  
 73 classrooms), divide by 11 x 100% to come up with a percent and record here \_\_\_\_\_%. Then  
 74 based on the percentage, you can find the score of 1-4 as per the chart below.

<i>Circle the Appropriate Level</i>	<b>1 = 0 to 25%</b>	<b>2= 26 to 50%</b>	<b>3 = 51 to 75%</b>	<b>4 = 76 to 100%</b>
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75

76

77 **INDICATOR 3): Developmentally Appropriate Curriculum Based on Assessments of Each Child**

78 **(50-60 minutes)**

79 The key for this quality key indicator is that the program is following an individualized prescribed  
 80 planning document when it comes to curriculum. It does not mean it is a canned program, in fact, it  
 81 shouldn’t if it is based upon the individual needs of each child’s developmental assessment. The  
 82 assessor will ask to see what is used to guide the curriculum. There should be a written document that  
 83 clearly delineates the parameters of the philosophy, activities, guidance, and resources needed for the  
 84 particular curricular approach. There should also be a developmental assessment which is clearly tied to  
 85 the curriculum. The developmental assessment can be home-grown or a more standardized off-the-  
 86 shelf type of assessment, the key being its ability to inform the various aspects of the curriculum. The  
 87 purpose of the assessments is not to compare children but rather to compare the developmental  
 88 progress of individual children as they experience the activities of the curriculum.

89 The following key elements should be present when assessing this quality indicator.

- 90 • 1) The program practices emergent curriculum, allowing the interests of the children to
- 91 determine the learning content. The curriculum is informed by individual developmental
- 92 assessments of each child in the respective classrooms.
- 93 • 2) The children and educators are co-learners in the exploration of projects.
- 94 • 3) Learning activities of the children are documented, displayed in the learning environment
- 95 and used to plan further learning activities. This can be assessed developmentally.

96 **How to Measure:**

97 Take a sample of 10 individual children's records and consider the above three elements for EACH

98 record. You should be asking if there is a clear link between an assessment and the developmentally

99 appropriate curriculum so that an individualized learning approach is being undertaken and each child's

100 developmental needs are taken into consideration. These records could be formal such as portfolios

101 kept for each child or a more informal, anecdotal type of record keeping. The key is that there is a

102 record that can be looked at. It is not adequate if the teacher says they do it from memory – it needs to

103 be written down and documented.

104 Cross check the child's record to the actual curriculum. Record all the instances (Y's) in which this

105 occurs. All three blocks need to be checked for each record (1-10).

106 **Emergent Curriculum is Practiced**

1 Y/N	2 Y/N	3 Y/N	4 Y/N	5 Y/N	6 Y/N	7 Y/N	8 Y/N	9 Y/N	10 Y/N
-------	-------	-------	-------	-------	-------	-------	-------	-------	--------

107 **Key Element 1 +**



108

109 **Children and Educators are Co-learners**

1 Y/N	2 Y/N	3 Y/N	4 Y/N	5 Y/N	6 Y/N	7 Y/N	8 Y/N	9 Y/N	10 Y/N
-------	-------	-------	-------	-------	-------	-------	-------	-------	--------

110 **Key Element 2 +**

111 **Learning Activities are Documented and Displayed and Used to Plan Future Learning**

1 Y/N	2 Y/N	3 Y/N	4 Y/N	5 Y/N	6 Y/N	7 Y/N	8 Y/N	9 Y/N	10 Y/N
-------	-------	-------	-------	-------	-------	-------	-------	-------	--------

112 **Key Element 3 +**

113 **Add the above three Key Elements**

114 All three key elements must have a Y to get an overall score of Y. If all three key elements have a Y for  
 115 that individual record, then record Y in the corresponding block in the overall score.

1 Ys =	2 Ys =	3 Ys =	4 Ys =	5 Ys =	6 Ys =	7 Ys =	8 Ys =	9 Ys =	10 Ys =
--------	--------	--------	--------	--------	--------	--------	--------	--------	---------

116 **= Total of All Three Key Elements**

117 **Scoring:**

118 The number of positive records (all Ys for all three elements) where there is a crosswalk from  
 119 developmental assessment to curriculum \_\_\_\_\_

120 Percent of positive records (all Ys) (divide the number of positive records by 10 x 100%) \_\_\_\_\_ %.

121 Then based on the percentage, you can find the score of 1-4 as per the chart below.

<b>Circle the Appropriate Level</b>	<b>1 = 0 to 25%</b>	<b>2 = 26 to 50%</b>	<b>3 = 51 to 75%</b>	<b>4 = 76 to 100%</b>
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122

123

124



125 **INDICATOR 4): Opportunities for Staff and Families to Get to Know Each Other (10 minutes)**

126 There should be activities both within the center as well as off site where staff and parents have  
 127 opportunities to meet and greet each other. Communication with family members is documented and  
 128 enables early childhood providers to assess the need for follow-up. Early childhood providers hold  
 129 regular office hours when they are available to talk with family members either in person or by phone.  
 130 Family members are encouraged to lead the conversation and to raise any questions or concerns.

131 **How to Measure:**

132 Look for the following 3 examples in policies developed by the program and determine if they have been  
 133 actually carried out with families. It will be necessary to interview staff to complete this indicator if you  
 134 do not find the three examples in policies:

- 135 1. The program provides communication, education, and informational materials and  
 136 opportunities for families that are delivered in a way that meets their diverse needs. Y/N \_\_\_\_\_
- 137 2. The program communicates with families using different modes of communication, and at least  
 138 one mode promotes two-way communication. Y/N \_\_\_\_\_
- 139 3. The program demonstrates respect and engages in ongoing two-way communication. The  
 140 program respects each family’s strengths, choices, and goals for their children. Y/N \_\_\_\_

141 **Scoring:**

142 Record the number of Yes’s (Y’s): \_\_\_\_\_ (Range: 0 – 3)(Divide by 3 x 100% = \_\_\_\_\_%). Then based on  
 143 the percentage, you can find the score of 1-4 as per the chart below.

<i>Circle the Appropriate Level</i>	<b>1 = 0 to 25%</b>	<b>2= 26 to 50%</b>	<b>3 = 51 to 75%</b>	<b>4 = 76 to 100%</b>
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144

145

146 **INDICATOR 5): Families Receive Information on Their Child’s Progress Regularly Using a**  
147 **Formal Mechanism (Report or Parent Conference) (10 minutes)**

148 Based upon Indicator #3 above, the information gleaned from the developmental assessments should  
149 be the focus of the report or parent conference. Parental feedback about the assessment and how it  
150 compares to their experiences at home would be an excellent comparison point. All these interactions  
151 should be done in a culturally and linguistically appropriate way representing the parents being served.

152 **How to Measure:**

153 Look for the following four examples in policies developed by the program and determine if they have  
154 actually been carried out with families. Record the number of reports completed or parent conferences  
155 over the past year. It will be necessary to interview staff to complete this indicator if you cannot  
156 determine from records that the conferences or reports were actually completed.

157 NOTE: The examples are mutually exclusive and are not additive; the first example is the highest scored,  
158 the third example the least scored. After 1-3 are determined, then do the last example.

- 159 • 1) The program does have regularly scheduled (at least 2xs/year) parent conferences in which  
160 the children’s developmental progress is discussed AND provides the family with a report of  
161 their child’s developmental progress. Y/N \_\_\_\_\_ (Score 3 points). If “Yes” then go to Number 4.  
162 If “No”, then go to numbers 2 and 3.
- 163 • 2) The program has regularly scheduled (at least 2xs/year) parent conferences in which the  
164 children's developmental progress is discussed, but it does not provide a report to the parents  
165 on their child’s developmental progress. Y/N \_\_\_\_\_ (Score 2 points).

166 • 3) If the program does not have regularly scheduled (at least 2xs/year) parent conferences does  
167 it provide the family with a report of their child's developmental progress. Y/N \_\_\_\_\_ (Score 1  
168 point). Go to Number 4.

169 • 4) All these interactions are done in a culturally and linguistically appropriate way representing  
170 the parents being served. Y/N \_\_\_\_\_ (Score 1 point)

171 **Scoring:**

172 Add up the total points based on the Ys, this will range from "0" to "4". The only way a program can  
173 receive a "4", is if a program has regularly scheduled parent conferences at least 2xs/year and provides  
174 the family with a report of their child's progress; and it is done in a culturally and linguistically  
175 appropriate way.

176 Record the number of points: \_\_\_\_\_ (Range: 0 - 4)

177

**178 OBSERVATIONS:**

179 *For quality key indicators 6, 7 and 8, it is recommended that the licensing consultant refer to the*  
180 *appropriate Environmental Rating Scale (ERS) tool as a reference tool because these indicators are taken*  
181 *directly from these tools. It is also recommended that these be assessed/observed throughout the day*  
182 *and not just during key activity times. Please follow the specific instructions and examples as delineated*  
183 *below and in the appropriate ERS tool: ECERS 3 (Items 12 and 13) or ITERS (Item 12). These specific*  
184 *instructions and examples are provided within this tool for ease of administration and data collection. If*  
185 *there are several preschool aged classrooms randomly select one to do your observations.*

186

**187 INDICATOR 6): Educators Encourage Children to Communicate (20 minutes)**

188 Assessors will need to observe this item when they do their classroom observations. Initially you can ask  
189 educators or the director how children are encouraged to communicate but in order to gather reliable  
190 and valid information regarding this question/standard, it needs to be observed in the various  
191 interactions of staff and children. Things to look for would be more back and forth conversations rather  
192 than one-way conversations where educators are telling children what to do. Look for opportunities  
193 where children can describe what they are doing, how they feel about what they are doing, and why  
194 they are doing the particular activities. Educators expand upon children's conversations. These  
195 opportunities can occur anywhere in the classroom or outside, such as in dramatic play, table top  
196 activities or on the playground. Materials should be present that encourage communication such as toy  
197 telephones, puppets, flannel boards, dolls and dramatic play props, small barns, fire stations, or  
198 dollhouses. These create a lot of conversation among children as they assume many different roles.  
199 Children also talk when there is an interested person who listens to them. The staff in a high-quality

200 early childhood classroom will use both activities and materials to encourage growth in communication  
201 skills.

202 **How to Measure:**

203 Observe the classroom for a minimum of 15 minutes. Once completed, consider where the classroom  
204 falls based on the following scale;

205 Score the classroom a 1 if the following occur:

- 206 • No activities used by staff with children to encourage them to communicate, for example:  
207 nontalking about drawings, dictating stories, sharing ideas at circle time, finger plays, singing  
208 songs. Y/N \_\_\_\_\_
- 209 • Very few materials accessible that encourage children to communicate. Y/N \_\_\_\_\_

210 Score the classroom a 2 if the following occur (If the classroom does not have all 3 indicators but has 1-2  
211 of the indicators then score this item 1+):

- 212 • Some activities used by staff with children to encourage them to communicate. Y/N \_\_\_\_\_
- 213 • Some materials accessible to encourage children to communicate. Y/N \_\_\_\_\_
- 214 • Communication activities are generally appropriate for the children in the group. Y/N \_\_\_\_\_

215 Score the classroom a 3 if the following occur (If the classroom does not have both indicators but has  
216 one of the indicators then score this item 2+):

- 217 • Communication activities take place during both free play and group times, for example: child  
218 dictates story about painting; small group discusses trip to store. Y/N \_\_\_\_\_
- 219 • Materials that encourage children to communicate are accessible in a variety of interest centers,  
220 for example: small figures and animals in block area; puppets and flannel board pieces in book  
221 area; toys for dramatic play outdoors or indoors. Y/N \_\_\_\_\_

222 Score the classroom a 4 if the following occur (If the classroom does not have both indicators but has  
 223 one of the indicators then score this item 3+):

224 • Staff balance listening and talking appropriately for age and abilities of children during  
 225 communication activities, for example: leave time for children to respond; verbalize for child  
 226 with limited communication skills. Y/N \_\_\_\_\_

227 • Staff link children’s spoken communication with written language, for example: write down  
 228 what children dictate and read it back to them; help them write note to parents. Y/N \_\_\_\_\_

229 **Scoring:**

230 *Total up the number of “Y’s” and record the appropriate level. In order for a classroom to receive a*  
 231 *particular score, all “Y’s” must be checked for the appropriate level (1 - 4) from above or partial credit*  
 232 *given in order to obtain a “+”. If there is a “+” please also mark it in the box.*

<b>Circle the Appropriate Level</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
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233

234

235 **INDICATOR 7): Infant Toddler Observation (if applicable) (20 minutes)**

236 *NOTE: If there is an infant, toddler or combined infant/toddler classroom that needs to be assessed, then*  
 237 *use the following ITERS item directly from the ITERS Tool (Item 12), if there is not an infant toddler*  
 238 *classroom, then skip to Indicator 8.*

239

240 Conversations and questions should be used with all children, even young infants. Conversations using  
 241 verbal and nonverbal turn-taking should be considered when scoring. Most conversations and  
 242 questions initiated by infants will be nonverbal, such as widening of baby’s eyes or waving arms and  
 243 legs. Observe staff response to such nonverbal communication. For infants and toddlers, the  
 244 responsibility for starting most conversations and asking questions belongs to the staff. As children

245 become more able to initiate communication, staff should modify their approach in order to allow  
246 children to take on a greater role in initiating conversations and asking questions. Staff should provide  
247 answers to questions used with children if child cannot answer, and as children become more able to  
248 respond, questions should start to include those that the child can answer. If there was not an infant  
249 classroom, skip this Indicator and please note that here and on the summary score sheet by marking  
250 N/A: \_\_\_\_\_

251 **How to Measure:**

252 Observe the classroom for a minimum of 15 minutes. Once completed, consider where the classroom  
253 falls based on the following scale;

254 Score the classroom a 1 if the following occurs:

- 255 • Staff never initiate turn-taking conversations with children, for example: rarely encourage baby  
256 to babble back; simple back and forth exchanges with verbal children never observed.

257 Y/N \_\_\_\_\_

- 258 • Staff questions are often not appropriate for children or no questions are asked, for example:  
259 too difficult to answer; carry a negative message. Y/N \_\_\_\_\_

- 260 • Staff respond negatively when children can't answer questions, for example: "You should know  
261 this"; "You did not listen". Y/N \_\_\_\_\_

262 Score the classroom a 2 if the following occurs (If the classroom does not have all 3 indicators but has 1-  
263 2 of the indicators then score this item 1+):

- 264 • Staff sometimes initiate conversations with children, for example: babble back and forth with  
265 baby; copy baby's sounds; respond to baby's crying with verbal response; have short back and  
266 forth toddler interactions. Y/N \_\_\_\_\_

267 • Staff sometimes ask children appropriate questions and wait for child to respond, for example:  
268 ask baby if she likes toy and pay attention as baby smiles; ask toddler what he is eating and wait  
269 for him to think of word. Y/N \_\_\_\_\_

270 • Staff respond neutrally or positively to children who can't answer questions. Questions asked  
271 are sometimes meaningful to children, for example: child responds with interest; does not  
272 ignore staff questions. Y/N \_\_\_\_\_

273 Score the classroom a 3 if the following occurs (If the classroom does not have all 4 indicators but has 1-  
274 3 of the indicators then score this item 2+):

275 • Staff initiate engaging conversations with children throughout the observation, for example:  
276 show enthusiasm; use tone that attracts child's attention. Y/N \_\_\_\_\_

277 • Staff often personalize questions and/or conversations for individual children, for example: talk  
278 about children's families, preferences, interests; what they are playing with; what they did over  
279 weekend; child's mood; use child's name. Y/N \_\_\_\_\_

280 • Staff often pay attention to children's questions, verbal or nonverbal, and answer in a satisfying  
281 manner for the child. Y/N \_\_\_\_\_

282 • Staff ask questions in which children show interest in answering, for example: make the  
283 questions funny or mysterious; use attractive tone; meaningful and not too difficult to answer.  
284 Y/N \_\_\_\_\_

285 Score the classroom a 4 if the following occurs (If the classroom does not have both indicators but has  
286 one of the indicators then score this item 3+):

287 • Staff frequently have turn taking conversations with children throughout the observations.  
288 Many appropriate questions are used throughout the observation, during both play and  
289 routines. Y/N \_\_\_\_\_



- 290 • Staff ask children appropriate questions, wait a reasonable time for child response, and then  
 291 answer if needed, for example: “Are you hungry? . . . Yes, you are!”; “Where’s the ball? . . .  
 292 These it is! You found the ball”. Y/N \_\_\_\_\_

293 **Scoring:**

294 *Total up the number of “Y’s” and record the appropriate level. In order for a classroom to receive a*  
 295 *particular score, all “Y’s” must be checked for the appropriate level (1 - 4) from above or partial credit*  
 296 *given in order to obtain a “+”.*

<b>Circle the Appropriate Level</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
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299 **INDICATOR 8): Educators Use Language to Develop Reasoning Skills (20 minutes)**

300 Assessors will need to observe very carefully as this standard can be difficult to determine because it is  
 301 tying language and cognition together. Again, this opportunity can occur in any setting in or out of the  
 302 classroom because it is the basis for problem solving through the use of language. Also look for  
 303 educators redirecting children’s conversations when appropriate. Staff should use language to talk  
 304 about logical relationships using materials that stimulate reasoning. Through the use of materials, staff  
 305 can demonstrate concepts such as same/different, classifying, sequencing, one-to-one correspondence,  
 306 spatial relationships, and cause and effect.

307 **How to Measure:**

308 Observe the classroom for a minimum of 15 minutes. Once completed, consider where the classroom  
 309 falls based on the following scale;  
 310 Score the classroom a 1 if the following occur:

- 311 • Staff do not talk with children about logical relationships, for example: ignore children's  
312 questions and curiosity about why things happen, do not call attention to sequence of daily  
313 events, differences and similarity in number, size, shape, cause and effect. Y/N \_\_\_\_\_
- 314 • Concepts are introduced inappropriately, for example: concepts too difficult for age and abilities  
315 of children, inappropriate teaching methods used such as worksheets without any concrete  
316 experiences; teacher gives answers without helping children to figure things out. Y/N \_\_\_\_\_

317 Score the classroom a 2 if the following occur (If the classroom does not have both indicators but has  
318 one of the indicators then score this item 1+):

- 319 • Staff sometimes talk about logical relationships or concepts, for example: explain that outside  
320 time comes after snacks, points out differences in sizes of blocks children use. Y/N \_\_\_\_\_
- 321 • Some concepts are introduced appropriately for ages and abilities of children in group, using  
322 words and experiences, for example: guide children with questions and words to sort big and  
323 little blocks or to figure out why ice melts. Y/N \_\_\_\_\_

324 Score the classroom a 3 if the following occur (If the classroom does not have both indicators but has  
325 one of the indicators then score this item 2+):

- 326 • Staff talk about logical relationships while children play with materials that stimulate reasoning,  
327 for example: sequence cards, same/different games, size and shape toys, sorting games,  
328 numbers and math games. Y/N \_\_\_\_\_
- 329 • Children are encouraged to talk through or explain their reasoning when solving problems, for  
330 example: why they sorted objects into different groups, in what way two pictures are the same  
331 or different. Y/N \_\_\_\_\_

332 Score the classroom a 4 if the following occur (If the classroom does not have both indicators but has  
333 one of the indicators then score this item 3+):

- 334 • Staff encourage children to reason throughout the day, using actual events and experiences as a  
 335 basis for concept development, for example: children learn sequence by talking about their  
 336 experiences in the daily routine or recalling the sequence of a cooking project. Y/N \_\_\_\_\_
- 337 • Concepts are introduced based upon children's interests or needs to solve problems, for  
 338 example: talk children through balancing a tall block building, help children figure out how many  
 339 spoons are needed to set a table. Y/N \_\_\_\_\_

340 **Scoring:**

341 *Total up the number of "Y's" and record the appropriate level. In order for a classroom to receive a*  
 342 *particular score, all "Y's" must be checked for the appropriate level (1 - 4) from above or partial credit*  
 343 *given in order to obtain a "+".*

<b>Circle the Appropriate Level</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
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345 *For quality key indicators 9 and 10 it is recommended that these be assessed/observed throughout the*  
 346 *day and not just during key activity times. These two quality key indicators should be observed in two-*  
 347 *minute blocks over ten sequences for a total of 20 minutes. These two items should also be used with*  
 348 *each age group you are assessing.*

349 *Initially it will be necessary to observe these two quality indicators separately but could be observed and*  
 350 *recorded jointly once you are familiar with the tool and have done sufficient observations.*

351

352 **INDICATOR 9): Educators Listen Attentively When Children Speak (25 minutes)**

353 This quality indicator focuses on the early childhood educator(s) looking directly at the children with  
 354 nods, rephrases their comments, engages in conversations. Children should have the undivided  
 355 attention of the specific educator they are addressing. Educators should not be looking away or pre-

356 occupied with others. They should be at the child’s level making eye contact. The intent is to observe all  
 357 children and educators in the room.

358 **How to Measure:**

359 Do this in timed 2-minute observations recording each time you observe this occurring. Record at least  
 360 10 different observation periods. These do not need to be consecutive in order to fully observe  
 361 classrooms and educators. Please use the following scale to assess your recordings: Likert Scale (1-4)  
 362 where 1 = Never/Not at All; 2 = Somewhat/Few Instances; 3 = Quite a Bit/Many Instances; 4 = Very  
 363 Much/Consistently):

364 Make the actual recordings using the Likert Scale (1-4) above for each individual observation and record  
 365 in each cell below.

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366 **Scoring:**

367 Once all the observations are made, add up the results from the Likert Scale (1-4) and record the total  
 368 number here: \_\_\_\_\_ (Range: 10 - 40)(Divide this result by 10) = \_\_\_\_\_ (1-  
 369 4)(Round upward or downward to the whole number (3.7 = 4; 2.2 = 2)).

<b><i>Circle the Appropriate Level</i></b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
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372 **INDICATOR 10): Educators Speak Warmly to Children (25 minutes)**

373 This quality indicator focuses on the early childhood educator(s) always engaging in a caring voice and  
 374 body language with every child. Educators do not use harsh language or commands in speaking to  
 375 children, but rather again are on the child’s level making eye contact. Think of the way Fred Rogers

376 would engage his audience where you always felt you were the most important person in the world  
 377 when he talked into the TV.

378 **How to Measure:**

379 Do this in timed 2-minute observations recording each time you observe this occurring. Record at least  
 380 10 different observation periods. Please use the following scale to make your recordings: (This item is on  
 381 a Likert Scale (1-4) where 1 = Never/Not at All; 2 = Somewhat/Few Instances; 3 = Quite a Bit/Many  
 382 Instances; 4 = Very Much/Consistently):

383 Make the actual recordings using the Likert Scale (1-4) above for each individual observation and record  
 384 in each cell below.

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385 **Scoring:**

386 Once all the observations are made, add up the results from the Likert Scale (1-4) and record the total  
 387 number here: \_\_\_\_\_ (Range: 10 - 40)(Divide this result by 10) = \_\_\_\_\_ (1-4). (Round  
 388 upward or downward to the whole number (3.7 = 4; 2.2 = 2)).

<b>Circle the Appropriate Level</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
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391 **INDICATOR 11): Reflective Supervision Placeholder TBD.**

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394 **Notes (record any notations for indicators here by noting the number of the quality indicator and any**  
395 **notes or comments):**

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397 \_\_\_\_\_

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415 \_\_\_\_\_

Saskatchewan ECPQI

416 After completing your observations, reviewing all documentation, and interviewing staff when  
 417 necessary, please transfer all your results to the Summary Table below. If there was not an infant  
 418 classroom, please note here, NO infant classrooms: \_\_\_\_\_

419  
 420

<u>Key Q Indicator</u>	<u>Quality Indicator Content</u>	<u>Scale</u>	<u>Potential Score</u>	<u>Actual Score</u>
QKI 1	Professional Development	NAEYC	1-4	
QKI 2	The Environment	Saskatchewan	1-4	
QKI 3	Curriculum and Assessment	NAEYC	1-4	
QKI 4	Family Engagement I	QRIS	1-4	
QKI 5	Family Engagement II	QRIS	1-4	
QKI 6	Communication	ECERS	1-4	
QKI 7	Infant Classroom	ITERS	1-4 or NA	
QKI 8	Reasoning Skills	ECERS	1-4	
QKI 9	Listen Attentively	CIS	1-4	
QKI 10	Speak Warmly	CIS	1-4	

421

422 **Notes:**

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430 All these 10 quality indicators (SKPQI) have been taken from other sources having been identified in Quality  
431 Indicator Studies from 1980 – 2020. Please refer back to the source documents for details on their creation:

432 *ECERS, ITERS, QRIS/INQUIRE, CIS/Arnett, NAEYC, SASKATCHEWAN PLAY & EXPLORATION.*

433

434

435

436

437 **Members of the Saskatchewan Program Quality Work Group are the following:**

438 **Kim Taylor, Derek Pardy, Cindy Jeanes, Tanya Mengel, Samantha Ecarnot, Karen Heinrichs, Michelle**  
439 **Vellenoweth, Kristin Jarvis, and Rick Fiene.**

440

441

442 -----

443 **Additional Information: Derek Pardy, Government of Saskatchewan, Early Years, Ministry of Education, 2-2220**  
444 **College Ave, Regina, SK, Canada S4P 4V9.**

445 **Additional Information regarding the psychometrics of the tool: Richard Fiene, Ph.D., Research Psychologist,**  
446 **Research Institute for Key Indicators & Penn State University. [Fiene@psu.edu](mailto:Fiene@psu.edu)**

447

448 **4/1/2021**

449 **SKPQI7**

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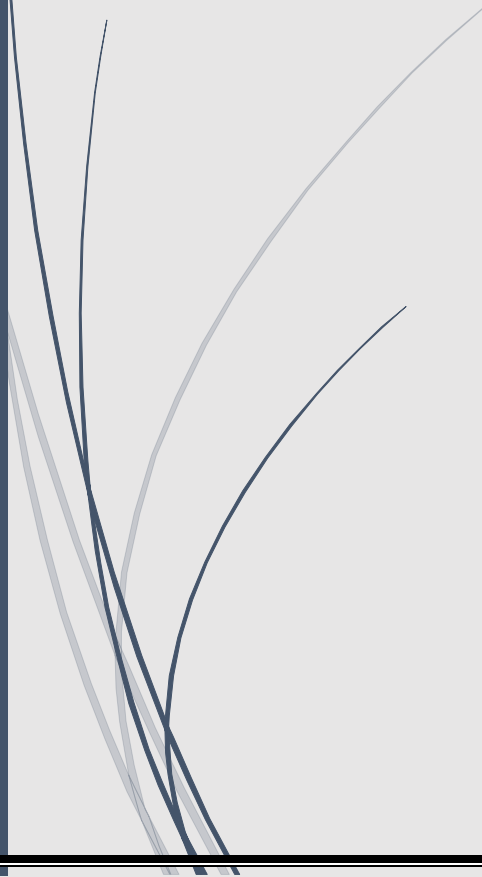
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The logo for NARA (National Assessment and Reporting Agency) is a blue arrow pointing to the right, with the word "NARA" written in white, bold, sans-serif capital letters inside it.

**NARA**

# **The Saskatchewan Early Care and Education Quality Indicators Tool and Validation**



**Abstract**

This validation study involved 30 programs, 90 classrooms and 180 observations of infant, toddler, and preschool classrooms utilizing the ECERS/ITERS and the SKECPQI instruments. Six trained observers collected the data over a two-month period. The analyses clearly demonstrated that the new SKECPQI instrument is a valid and reliable measure of program quality. PQI #2 clearly showed it predictive power in this study. The SKECPQI and PQI #2 correlated very highly with the ITERS and ECERS. The SKECPQI appears to correlate more highly with regulatory compliance violations than the ECERS or ITERS. The ceiling/plateauing effect is not as evident with the SKECPQI as it is with ECERS/ITERS. The Regulatory Compliance Scale (RCS) is a better sorter for regulatory compliance than the violation data. There is a good deal of internal consistency within the SKECPQI Tool just as it is with the ERSs. The Regulatory Compliance Theory of Diminishing Returns was validated in comparing RCS with ECERS/ITERS. Both the SKECPQI Scale and the Regulatory Compliance Scale are introduced as new improvements to measuring quality and regulatory compliance.

**The Saskatchewan Early Care and Education Quality Indicators Tool and Validation: The Last Piece of the Puzzle in Creating a Differential Monitoring Approach**

**National Association for Regulatory Administration**

**May 2023**

**INTRODUCTION**

This report will delineate the development, piloting and validating of the Saskatchewan Early Care and Education Quality Key Indicators (SKECPQI) Tool. The purpose of the tool is to assess the overall program quality in centered based childcare programs in the Province of Saskatchewan, Canada. The evolution of the tool resulted from a multi-year effort by the Ministry of Education in the Province of Saskatchewan to build an effective and efficient differential monitoring system.

This effort in building a new differential monitoring system started in 2019 and was completed in 2023. The first component of this restructuring was the Saskatchewan Licensing Key Indicator System (2019). This was followed by the Saskatchewan Risk Assessment Rules (2019). Once these were in place and operational, a validation study was conducted to measure that the two methodologies were operating as they should (2020). A work group was initiated in 2019 and completed its work in 2020 on an Early Care and Education Quality Key Indicator Tool (SKECPQI). The tool was put on hold for 2021 because of the pandemic and a new Canadian Federal initiative to expand childcare services across the province. The tool initiative began again in 2022. The pilot testing and validation occurred in 2023.

The work and these studies in the Province of Saskatchewan by the Ministry of Education is the first demonstration of a full-blown differential monitoring system involving licensing key indicator rules, risk assessment rules, and quality indicators. Besides the development of each tool, each of these tools have been validated as well. All this work was done as a collaborative effort between the Ministry of Education staff and the National Association for Regulatory Administration (NARA) consultant pool. Presently, Saskatchewan's overall system is the best example of a fully developed differential monitoring system for the early care and education field.

This was a monumental effort involving many individuals at the local, provincial, and national levels and many hours of data collection and analysis. All the reports are available on the NARA Website (<https://www.naralicensing.org/key-indicators>) and the full data set will be available via Mendeley Data Sources (<https://data.mendeley.com/datasets/kzk6xssx4d/1>).

### BACKGROUND HISTORY

This study and tool grew out of an interest by Saskatchewan Ministry of Education policy makers to establish a balance between regulatory compliance and program quality in the most effective and efficient manner. The Province of Saskatchewan did not have a QRIS (Quality Rating and Improvement System) in place nor plans on developing one. Generally, when a jurisdiction wants to develop a balance between regulatory compliance and program quality with rules/regulations/standards, QRIS's are generally developed and implemented.

In reviewing the research literature on regulatory science, differential monitoring has been a developing approach used by many other jurisdictions in the human service licensing field, especially in the United States and in several other Canadian Provinces. Based upon this review of the research literature and the work of the National Association for Regulatory Administration (NARA) which has been a long-term promoter of this approach and the resulting methodologies of licensing key indicators, risk assessment rules, and most recently quality indicators, a contract was entered into between the Ministry of Education and NARA.

The tool is the direct result of research into identifying licensing and quality key indicators over a 50-year (1970-2022) research effort in which specific methodologies were developed and the differential monitoring approach was tested and implemented in the 1970's. Since that time, a national database which expanded to an international database of common key indicators from jurisdictions' respective key indicator tools. These key indicators resulted in a very similar tool that Saskatchewan is using. In fact, in 2019 when the Saskatchewan work group was established, they started with that specific tool that had been developed (Fiene, 2019). During the 2019-2020 period, the work group made the tool into a more user-friendly tool for Saskatchewan childcare programs.

The big deal with utilizing the key indicator methodology is its ability to statistically predict as if one administered the full tool in question. Therefore, when one administers the first quality indicator in the Saskatchewan Early Care and Education Quality Indicator tool, it is as if they have administered a licensing based regulatory compliance instrument since the quality of staff is a statistically predictive rule (Fiene, 2002a). The same is true in administering the curriculum quality indicator because it is a statistically predictive standard when looking at overall program quality (Fiene, 2002b). When it comes to QRIS, having communication between staff and parents and parental involvement is a statistically predictive standard for an overall set of QRIS standards (Fiene, 2014). And finally, when administering the ECERS and ITERS or the CIS quality item indicators these are all statistically predictive items for their respective scales as if you had administered the full scales (Fiene, 2002b).

So, as a state/provincial administrator, I would be interested in focusing my efforts on these indicators which reflect compliance with high quality rules/regulations/standards for early care and education. This would be my starting point. I would make sure that my standards reflected quality teachers with the necessary supports such as coaching/mentoring, an early care and education philosophy based upon an emergent curriculum where children are viewed as competent learners, developmentally appropriate curriculum and child assessments, parental and staff communication and participation, and teacher language based/communicative focus when interacting with children in a give and take manner. All this done within a warm and loving style.

## Saskatchewan Early Care and Education Quality Indicators Tool Validation Study

An even more efficient and effective way of using the new program quality tool is to pair it with the National Center for Health and Safety in Child Care's *Parental Guide to Choosing Safe and Healthy Child Care* (DHHS: Assistant Secretary's Office for Planning and Evaluation, 2019). This is a more aggressive and controversial approach, but it is the most efficient way of conducting monitoring visits in the most abbreviated way. However, as efficiency increases, effectiveness may decrease; so, it is a delicate balancing act. This suggested approach builds off a similar suggestion in which only using *Caring for Our Children: Basics* (ACF, 2015) a DHHS Administration for Children and Families publication would be used as the base for regulatory compliance in the United States.

Differential monitoring grew out of a need for jurisdictions to be more effective and efficient in their oversight and inspection efforts of early care and education programs. This started to occur in the late 1960's and 1970's as many more programs were being established. It was becoming clear that the old one size fits all approach to program monitoring was being overwhelmed by the increasing numbers of programs. Also, from an efficiency standpoint it did not make sense to spend the same amount of time with programs that were performing well as those that really needed additional attention. The birth of differential monitoring occurred which at that time it was called inferential inspections (Fiene & Kroh, 2000). Different terminology, same concept.

Since then, differential monitoring has two basic methodologies that have been used successfully over the years: risk assessment and key indicators. The two methodologies have the same results, shortened or abbreviated reviews but they differ in their approaches. Risk assessment as the name implies identifies specific standards that place clients/children at greatest risk or morbidity or mortality if not complied with. Key indicators are specific standards that statistically predict overall regulatory compliance with all rules. Each has their place in the differential monitoring approach depending on the jurisdictions' emphasis. Most recently, to balance the emphasis on regulatory compliance has been the introduction of quality indicators which are specific standards drawn from quality initiatives, such as professional development, program quality tools, and quality rating & improvement systems.

It is and always has been recommended that these methodologies be used together and not separately. This final study undertaken in the Province of Saskatchewan completes the cycle of doing just that in developing a fully functional differential monitoring system with key licensing and quality indicators as well as risk assessment rules.

### THE STUDY DESIGN AND METHOD

The design of this study was to provide a validation study of the use of the Saskatchewan Early Care and Education Quality Key Indicators Tool. A convenience sample was selected in which a good variation of overall quality would be present. There were to be three buckets of quality: High, Middle, and Low. These would be defined via ERS scores. Because this was a validation study it was critical to have sufficient variation in the overall quality of programs to test the sensitivity of the new assessment tool.

The below table (Table 1) provided the guidance to the Saskatchewan Ministry of Education policy staff in determining how to collect the program quality data for the research pilot study related to early childhood quality indicators.

## Saskatchewan Early Care and Education Quality Indicators Tool Validation Study

**Table 1: Selection Process for Study Programs**

<u>Quality</u>	<u>Centers</u>	<u>Classrooms</u>	<u>Ages</u>	<u>Levels</u>	<u>ERS</u>	<u>SKECPQI</u>
High	10	30	10	Infant	A	1
			10	Toddler	B	2
			10	Preschool	C	3
Middle	10	30	10	Infant	A	1
			10	Toddler	B	2
			10	Preschool	C	3
Low	10	30	10	Infant	A	1
			10	Toddler	B	2
			10	Preschool	C	3

**Notes:**

A = *ITERS (Infants) (B-1yr)*

B = *ITERS (Toddlers) (1yr-2yrs)*

C = *ECERS (Preschoolers) (3+yrs)*

1 = *SKECPQI/Infant (QI items 1-5, 7, 9-10)*

2 = *SKECPQI/Toddler or Preschool (QI items 1-5, 7, 9-10) or (QI items 1-6, 8-10)*

3 = *SKECPQI/Preschool (QI items 1-6, 8-10)*

*SKECPQI = Saskatchewan Early Childhood Program Quality Indicators tool*

A total of 6 trained data collectors were needed, 3 for the ERSs and 3 for the SKECPQI. Each observer collected data from 30 classrooms. A data coordinator was utilized who collected all the data, reviewed the scores from the various tools and sent them to NARA. The data collectors were not aware of which centers are in which group, such as High, Middle, or Low

See the Appendix for the Draft of the SKECPQI tool that was used during data collection.

As said earlier, this study involves the validation of the Saskatchewan Early Childhood Quality Indicators Tool (SKECPQI) and involved the collection of new data utilizing the new tool and collecting Early Childhood Environmental Rating Scale (ECERS/ITERS) data as well. Independent contract staff were trained in the use of the SKECPQI as well as having had training on the ECERS/ITERS and were proficiently reliable on the ECERS/ITERS.

A sample of 30 childcare programs who volunteer to be part of this study was selected with 1/3 identified as high quality, 1/3 identified as medium quality, 1/3 identified as low quality. Each program had both the SKECPQI and the ECERS/ITERS administered to them utilizing two independent observers. The data from the SKECPQI was compared to the ECERS/ITERS to determine the relationship between the two/three scales. The research hypothesis is that there will be a positive relationship between the two/three scales in which those programs that score high on the SKECPQI will score high on the ECERS/ITERS and those that score low on the SKECPQI will score low on the ECERS/ITERS. The ECERS/ITERS will be used as the reference tool for establishing the validity of the SKECPQI.

A training program and all necessary revisions to policies and procedures was conducted as part of this project by a NARA Consultant on both phase 1 and 2. It will be determined later if the SKECPQI will be administered on an ongoing basis by contracted staff or by Ministry staff. Reporting templates were

## Saskatchewan Early Care and Education Quality Indicators Tool Validation Study

developed as part of this implementation stage. The implementation stage was evaluated to make certain that all components are in place and working as they should.

Timeline: Phase 1: 6 months; Phase 2: 9 months; Training and Implementation Phase: 12 months, will overlap with phase 1 and 2 and extend beyond both. The total time frame will be 24 months (about 2 years), this will include the final report and final evaluation of the implementation stage

### RESULTS

The ECERS and ITERS were used to validate the new Saskatchewan Early Care and Education Quality Indicators Tool (SKECPQI). This is standard procedure when conducting a validation study, a recognized empirically based and accepted standard tool is used in correlational analyses to determine if the new tool is measuring the same dimensions as the standardized tool.

The target tool, the Saskatchewan Early Care and Education Quality Indicators, was to be validated against the ECERS and ITERS to determine if there was a quality relationship between the two tools.

The validation analyses involved detailed correlational analyses between the various scales to determine if a relationship existed and how strong that relationship was. But before delving into this relationship and these analyses, an additional analysis was performed given the sophisticated nature of the Saskatchewan monitoring system. Saskatchewan's Ministry of Education's designed differential monitoring system is by far the most analyzed of all jurisdictions to date, so it was suggested to take advantage of this level of detail and build in an additional series of analyses to further test the regulatory compliance theory of diminishing returns in conducting this study. By doing so, Saskatchewan joins the ranks of the Provinces of Alberta and Ontario, the US States of Georgia and Washington, and the US National Head Start program in conducting studies to either confirm or not this theory of regulatory compliance (please see the NARA website on key indicators which contains all the research reports). The following results delineate the data from that portion of the study.

As part of the data collection in addition to collecting data on the ECERS and ITERS as well as the Saskatchewan Early Childhood Program Quality Indicators scale, a summary sheet containing regulatory compliance data was also obtained on each program. These data contained essential demographic information as well as violations from the last inspection along with a rating of the program which was cross referenced to the regulatory compliance data to generate a Regulatory Compliance Scale. This Regulatory Compliance Scale (RCS) had four levels of regulatory compliance: Full, Substantial, Medium, and Low. This RCS is like the regulatory compliance structure used in the previous studies in the above-mentioned jurisdictions in the US and Canada and has been further developed as a more valid means for measuring and analyzing regulatory compliance (Fiene, 2022). In the Fiene RCS, the following rubric was used: **Full = 0 violations; Substantial = 1-3 violations; Medium = 4-9 violations; and Low = 10+ violations.**

The first set of analyses was to determine if a correlation existed between the RCS and the ECERS and ITERS. This was the case with the following results: RCS x ITERS for the infant classrooms = .54;  $p < .002$ ; RCS x ITERS for the toddler classrooms = .42;  $p < .03$ ; and RCS x ECERS for the preschool classrooms = .75;  $p < .0001$ .

The second level of analyses (ANOVA) was to determine if the RCS levels of Full, Substantial, Medium, and Low demonstrated any significant differences in the ECERS and ITERS. The results were the

## Saskatchewan Early Care and Education Quality Indicators Tool Validation Study

following: Infant classrooms: Low = 3.07; Medium = 4.89; Substantial = 5.06; Full = 4.69; F = 11.43;  $p < .0001$ . Toddler classrooms: Low = 3.50; Medium = 4.56; Substantial = 4.62; Full = 5.06; F = 2.27;  $p < .11$ . Preschool classrooms: Low = 2.78; Medium = 4.39; Substantial = 4.90; Full = 5.12; F = 16.27;  $p < .0001$ . Apart from the toddler classrooms, both the infant and preschool classrooms support the regulatory compliance theory of diminishing returns ceiling and plateauing effect when it comes to measuring program quality as one moves up the regulatory compliance scale.

**Table 2: Regulatory Compliance Scale (RCS) and ECERS/ITERS Scores**

RCS	Infant Classrooms	Toddler Classrooms	Preschool Classrooms
Low	3.07	3.50	2.78
Medium	4.89	4.56	4.39
Substantial	5.06	4.62	4.90
Full	4.69	5.06	5.12
Significance	F = 11.43; $p < .0001$	F = 2.27; $p < .11$ NS	F = 16.27; $p < .0001$

ECERS, ITERS for Infant classrooms, ITERS for Toddler classrooms (n = 90):

The ECERS score ranged from 1.41 to 6.00. The ITERS for infant classrooms ranged from 2.16 to 5.77; and the ITERS for toddler classrooms ranged from 2.14 to 5.90. The respective means for the ECERS, ITERS-Infant classrooms, and the ITERS-Toddler classrooms were the following: 4.09, 4.39, 4.39. The means and ranges were all consistent.

The correlations of the infant, toddler and preschool classrooms in each of the 30 facilities were the following: Infant and Toddler classrooms = .65;  $p < .0001$ ; Infant and Preschool classrooms = .74;  $p < .0001$ ; and Toddler and Preschool classrooms = .52;  $p < .005$ . The classrooms demonstrated a great deal of consistency across the various facilities which one would expect.

SKECPQI for Preschool, Infant, and Toddler Classrooms (n = 90):

The SKECPQI score ranged from 13 to 100. The SKECPQI for infant classrooms ranged from 31 to 91 (Mean=60.10); the SKECPQI for toddler classrooms ranged from 13 to 100 (Mean=55.07); and the SKECPQI for preschool classrooms ranged from 25 to 100 (Mean=57.48).

The correlations of the infant, toddler, and preschool classrooms in each of the 30 facilities were the following: Infant and Toddler classrooms = .74;  $p < .0001$ ; Infant and Preschool classrooms = .85;  $p < .0001$ ; and Toddler and Preschool classrooms = .75;  $p < .0001$ . The classrooms demonstrated a great deal of consistency across the various facilities which one would hope to be the case with this type of tool or scale. Based upon these results, the inter-correlations were extremely high and show a great deal of stability and are a reliable measure of quality indicators.

SKECPQI #2 showed a great deal of promise as a standalone quality indicator. SKECPQI#2 correlated significantly with ITERS (.56;  $p < .0001$ ), and ECERS (.61;  $p < .0001$ ) and with the overall SKECPQI scores for infant classrooms (.88;  $p < .0001$ ), toddler classrooms (.81;  $p < .0001$ ), and preschool classrooms (.90;  $p < .0001$ ). This quality indicator dealt with philosophy, curriculum planning and programming. This is not the first time that such an indicator was an excellent predictor. This result has been the case in other program quality studies as well (Fiene, Greenberg, Bergsten, Fegley, Carl, Gibbons, 2002b).



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The SKECPQI scale demonstrated a great deal of robustness in the data distribution and a good deal of variation in the data set. These are the characteristics of a new tool that you would hope to find in the scale construction and implementation.

### Regulatory Compliance Data for Each of the Programs (n = 30):

The Regulatory Compliance Scale (RCS) distributions were the following: Full = 13%; Substantial = 20%; Medium = 37%; and Low = 27%. Generally regulatory compliance data are more skewed than this distribution but because of the nature of this study, facilities were deliberately selected breaking them up into these categories/levels.

The Regulatory Compliance Scale (RCS) actual regulatory compliance violations played out in the following table, these results for the average number of violations were statistically significant ( $F = 3.69$ ;  $p < .03$ ):

**Table 3: Regulatory Compliance Scale by the Number of Violations**

RCS	Regulatory Compliance Means	Number of Facilities
Low	4.75	8
Medium	3.90	10
Substantial	1.60	5
Full	0	4

### Comparing the ECERS and ITERS with SKECPQI and Regulatory Compliance (RCS) Data:

These are the correlations between RCS and SKECPQI for infants, toddlers, and preschool classrooms. RCS x PQI for the infant classrooms = .58;  $p < .001$ ; RCS x SKECPQI for the toddler classrooms = .51;  $p < .005$ ; and RCS x SKECPQI for the preschool classrooms = .60;  $p < .001$ . The SKECPQI clearly demonstrates its relationship with regulatory compliance. Also, when the SKECPQI is compared with regulatory compliance violation data, the correlations are higher than those obtained in comparing the ERSs to regulatory compliance violation data. And, in fact, the SKECPQI when compared with the RCS appears not to have a ceiling or plateauing effect. It would appear that the SKECPQI is measuring quality in a different way since this effect does not appear evident in the RCS distributions. This result will need to be confirmed in other studies to make certain this relationship holds up. This is a first for comparing regulatory compliance data with program quality data. In the past, either a ceiling or plateauing effect was always present when looking at the relationship between regulatory compliance and program quality.

Here are the correlations between SKECPQIs and ERSs for infant, toddler, and preschool classrooms: PQI x ITERS for the infant classrooms = .66;  $p < .0001$ ; PQI x ITERS for the toddler classrooms = .53;  $p < .003$ ; and PQI x ECERS for the preschool classrooms = .66;  $p < .0001$ . These inter-correlations most suggest that the SKECPQI is a valid tool measuring program quality on a different dimension (quality indicators) than the ERS but measuring quality, nonetheless.

A regression analysis determined that with RCS as the dependent variable, ECERS and regulatory violations were statistically significant at the  $p < .0001$  with an  $R = .91$ . This accounted for practically 75% of the variance in being able to determine regulatory compliance.

### DISCUSSION

Last piece of the puzzle in creating a differential monitoring system, that is how this report is being characterized. The Province of Saskatchewan has undertaken all the other methodologies utilized in a differential monitoring approach (Please see the NARA website for these reports, the link is hot linked on the first page of this report). Licensing key indicators and risk assessment rules have been implemented successfully. What remained were the Quality Indicators. This report completes the full cycle of validating these last indicators.

With the completion of this validation study, the Saskatchewan Early Childhood Program Quality Indicators Scale could be adapted by other jurisdictions and utilized as a screener methodology. The reason for suggesting this approach is that all the quality indicators are taken from the Key Indicator Methodology and therefore have predictive value when it comes to determining overall quality (Fiene, 2019a). Also, the indicators are drawn from several early care and education delivery systems and quality initiatives, such as licensing, QRIS, quality scales, accreditation, and professional development.

The other significant finding from this study was the additional confirmation of the regulatory compliance theory of diminishing returns in which the results from this study are consistent with the findings from other studies conducted in Canada and the United States. This continues to be a major finding when it comes to comparing regulatory compliance with program quality and the resulting ceiling and/or plateauing effect related to quality scores. Again, from a public policy viewpoint, this finding has significant implications in how licensing decisions are or should be made.

A very interesting finding which was not expected was the fact that when the SKECPQI scores were compared with the regulatory compliance violation data the usual ceiling/plateauing effect did not emerge as in previous studies when these types of analyses were performed. This result needs further exploration to determine why this occurred. In future studies utilizing the SKECPQI, it will be necessary to do similar analyses with regulatory compliance data to ascertain if this same result occurs. At this point, it is difficult to determine if it is characteristic within the SKECPQI that is producing this result, such as a better balance between regulatory compliance and program quality. Only with further study will we be better able to determine the cause of this different result.

### CONCLUSION

This report will be read with a certain amount of skepticism in that it suggests using differential monitoring on a much broader scale; however, this report is like several other validation studies conducted by NARA over the past decade which have now clearly demonstrated the validity of the differential monitoring approach. And because of these validation studies, the differential monitoring approach has been utilized by many jurisdictions and has been cited in the United States Federal Legislation that reauthorized the Child Care and Development Block Grant. In the legislation, it is suggested but not required that states entertain the use of the approach. Based upon the latest childcare licensing data, it appears that many states have attempted to utilize the approach.

This report fits with the other regulatory compliance theory reports from states and provinces that have been completed over the past decade by NARA. As mentioned in the **Results and Discussion Sections**, this study is the most comprehensive of the group since the Province of Saskatchewan developed not

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only risk rules and key indicator rules for licensing but also quality indicators that could be used within their differential monitoring system. This is the first demonstration of this comprehensive approach.

This study and report complete what was to be a three-year effort but turned into a five-year effort because of the COVID19 Pandemic. Each component of this overall project is well documented on the NARA Key Indicator website. The three major results of this study: confirmation of the regulatory compliance theory of diminishing returns, the introduction of the regulatory compliance scale and the introduction of the Saskatchewan Early Childhood Program Quality Indicators Tool/Scale are all significant contributions to the licensing research literature, but it is this last contribution that needs further development.

The Saskatchewan Early Childhood Program Quality Indicators Tool/Scale is a new program quality tool that is rather robust in measuring quality using key indicators which are taken from various quality initiative studies conducted over the past several decades. The hope is that it will continue within the early care and education field being validated by other researchers and being used to determine the relative scope of program quality in various early care and education settings. We could see the scale being utilized throughout the United States and Canada. It would be an excellent supplement to either the ERS or CLASS tools. It is a simple, straightforward tool that can be easily trained on and administered. It could provide an interesting supplement for licensing staff when they are doing their licensing reviews. In fact, it is intended to be used in conjunction with licensing key indicators and risk rule tools.

Although this was not reported in the **Results Section**, we think it is vitally important to highlight the significant contributions of the licensing staff and others who helped to develop the groupings and levels of regulatory compliance and quality. It was only because of their level of early childhood expertise and their knowledge of the programs that made the sequencing so effective and impactful as an analytical frame of reference.

One last thought is the introduction of the Regulatory Compliance Scale (RCS) as a more logical and robust rubric when comparing regulatory compliance data with program quality. This thought has been presented elsewhere as a possible improvement within licensing measurement and monitoring systems (Fiene, 2022). The scale has been piloted in the past, but this is the first formal test of it in a specific jurisdiction.

### **NOTES:**

**Saskatchewan Ministry of Education Program Quality Tool Work Group:** Kim Taylor, Derek Parady, Cindy Jeanes, Tanya Mengel, Samantha Ecarnot, Karen Heinrichs, Michelle Vellenoweth, Kristin Jarvis, and Rick Fiene.

**Research Team:** Sonya Stevens, Alisa Hendrickson, Cindy Jeanes, Derek Parady, Debbie Thompson, and Rick Fiene.

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***For additional information regarding this research validation study and report, please contact:***

**NARA: National Association for Regulatory Administration. <http://naralicensing.org/key-indicators>**

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Fiene, Greenberg, Bergsten, Fegley, Carl, Gibbons, (2002b). *Pennsylvania Early Childhood Program Quality Study*, Harrisburg, Pa: Governor's Office.

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Also, check out the following websites for additional Differential Monitoring Reports:

<https://rikinstitute.com> or <https://www.naralicensing.org/key-indicators>

Appendix

Saskatchewan's Early Learning and Child Care Program Quality Key Indicator Instrument  
(SKECPQI)

The Saskatchewan Program Quality Work Group<sup>1</sup>

March 2023

**INTRODUCTION and BACKGROUND to SKECPQI**

Ten Quality Key Indicators (QKI) make up the Saskatchewan's Early Learning and Child Care Program Quality Key Indicator Instrument (SKECPQI). The details about each of the Quality Indicators and data collection instructions in order to obtain the necessary data to determine if a program meets the Key Quality Indicators are delineated below for each quality key indicator. Part 1 - Quality Key Indicators (QKI) 1 – 5 will be collected via record or document review, interviewing individuals, or observation. Part 2 - Quality Key Indicators (QKI) 6 – 10 will be collected via observations in the classrooms throughout the assessment.

These ten quality key indicators were taken from previous studies conducted over the past 40 years by Dr Richard Fiene utilizing the Regulatory Compliance Key Indicator metric (RCKIm) that he developed in the late 1970's. These QKI have held up over time and have now been coupled together into this tool and being pilot tested in the Province of Saskatchewan. The original tool was reviewed by a Provincial Ministry of Education Work Group who met during 2019-2020 and made some revisions to the original tool. All these changes are reflected in this version of the SKECPQI (2023).

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1) Saskatchewan Program Quality Work Group: Kim Taylor, Derek Pardy, Cindy Jeanes, Tanya Mengel, Samantha Ecarnot, Karen Heinrichs, Michelle Vellenoweth, Kristin Jarvis, and Rick Fiene.

**PART 1 – Record/Document Review, Interview, Observation Quality Indicators**

**INDICATOR 1): Number of ECE III Educators**

Assessors will review staff records to determine the number of staff who have these credentials in early childhood education. Record the number of ECEs with the appropriate qualifications and divide them by the total number of ECEs to come up with a percent for the center.

**How to Measure:**

Go to the **Staff Information Summary** form to obtain the data for this item. There are two columns that will do this. Under Certification: *Certification Date and Certification Level* (Highest ECE Level Certified). The certification date should be earlier than the date of the review and the actual level of the certification. In this case, we are interested in the number of (ECEIII's). Record the number of ECEIII working at least 65 hours/month. Then record the number of total teaching staff working at least 65 hours/month below as well. Teaching staff is defined as staff who have a responsibility for working with the children and the programming. Determine the percentage by dividing the total number of staff into the total number of ECEIII Certified teaching staff, ECEIII Certified teaching staff is the numerator, and the total number of teaching staff is the denominator (ECEIII/Total number of teaching staff x 100% = Percent).

**Scoring for PQI 1:**

The total number of ECEIII Certified teaching staff \_\_\_\_\_ (1.1)

The total number of teaching staff \_\_\_\_\_ (1.2)

Total ECEIII teaching staff divided by the total number of teaching staff \_\_\_\_\_ (%).

Then based on the percentage, you can find the score of 1-4 as per the chart below.

<b><i>Circle the Appropriate Level</i></b>	<b>1 = 0 to 25%</b>	<b>2= 26 to 50%</b>	<b>3 = 51 to 75%</b>	<b>4 = 76 to 100%</b>
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**INDICATOR 2): Stimulating and Dynamic Environment**

The criteria for measuring this are drawn from **Play and Exploration Guide**. The program is child centered. Children are viewed as competent learners, and they have the freedom to access classroom materials independently without adult intervention. The children are provided with meaningful choices through activity/learning centers. There is evidence of the children’s interests and their projects in the learning environment.

**How to Measure:**

Below is the checklist of items that should be present to assess if the environment is both stimulating and dynamic for the children. You will want to observe that the following items are occurring in the classroom first. If you do not actually observe it occurring, then check the program plan to find documentation that it normally occurs but you just did not observe today. The checklist items would be found in *Play and Exploration* foundational materials.

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Quality Early Learning Environments (Please record all that you observe Y or N):

1. Co-teaching is evident. Y/N \_\_\_\_\_ (2.1)
2. Children are viewed as competent learners & can access materials independently. Y/N \_\_\_\_ (2.2)
3. Authentic and meaningful materials are used with children. Y/N \_\_\_\_\_ (2.3)
4. Children are provided with meaningful choices. Y/N \_\_\_\_\_ (2.4)
5. Children's work, art and photos are displayed respectfully. Y/N \_\_\_\_\_ (2.5)
6. Family photos are displayed in the early learning program. Y/N \_\_\_\_\_ (2.6)
7. Documentation of learning is displayed and discusses holistic development. Y/N \_\_\_\_\_ (2.7)
8. Environment reflects the culture and beliefs of the children, families and staff. Y/N \_\_\_\_\_ (2.8)
9. Variety of books & other print materials are available throughout the classroom Y/N \_\_\_\_ (2.9)
10. A variety of writing materials are accessible to children most of the time. Y/N \_\_\_\_\_ (2.10)
11. There is evidence of the children's interests & projects in the classroom. Y/N \_\_\_\_ (2.11)

### Scoring for PQI 2:

Total up the number of items where you recorded a "Y" above that you observed (curriculum or in classrooms), divide by 11 x 100% to come up with a percent and record here \_\_\_\_\_ %. Then based on the percentage, you can find the score of 1-4 as per the chart below.

<b><i>Circle the Appropriate Level</i></b>	<b>1 = 0 to 25%</b>	<b>2 = 26 to 50%</b>	<b>3 = 51 to 75%</b>	<b>4 = 76 to 100%</b>
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### INDICATOR 3): Developmentally Appropriate Curriculum Based on Assessments of Each Child

The key for this quality key indicator is that the program is following an individualized prescribed planning document when it comes to curriculum. It does not mean it is a canned program, in fact, it shouldn't if it is based upon the individual needs of each child's developmental assessment. The assessor will ask to see what is used to guide the curriculum. There should be a written document that clearly delineates the parameters of the philosophy, activities, guidance, and resources needed for the particular curricular approach. There should also be a developmental assessment which is clearly tied to the curriculum. The developmental assessment can be home-grown or a more standardized off-the-shelf type of assessment, the key being its ability to inform the various aspects of the curriculum. The purpose of the assessments is not to compare children but rather to compare the developmental progress of individual children as they experience the activities of the curriculum.

The following key elements should be present when assessing this quality indicator.

- 1) The program practices emergent curriculum, allowing the interests of the children to determine the learning content. The curriculum is informed by individual developmental assessments of each child in the respective classrooms.
- 2) The children and educators are co-learners in the exploration of projects.
- 3) Learning activities of the children are documented, displayed in the learning environment and used to plan further learning activities. This can be assessed developmentally.

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### How to Measure:

Take a sample of 10 individual children's records and consider the above three elements for EACH record. You should be asking yourself if there is a clear link between an assessment and the developmentally appropriate curriculum so that an individualized learning approach is being undertaken and each child's developmental needs are taken into consideration. These records could be formal, such as portfolios kept for each child or a more informal, anecdotal type of record keeping. The key is that there is a record that can be looked at. It is not adequate if the teacher says they do it from memory – it needs to be written down and documented.

Cross check the child's record to the actual curriculum. Record all the instances (Y's) in which this occurs. All three blocks need to be checked for each record (1-10).

### Emergent Curriculum is Practiced (3.1)

1 Y/N	2 Y/N	3 Y/N	4 Y/N	5 Y/N	6 Y/N	7 Y/N	8 Y/N	9 Y/N	10 Y/N
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**Key Element 1 +**

### Children and Educators are Co-learners (3.2)

1 Y/N	2 Y/N	3 Y/N	4 Y/N	5 Y/N	6 Y/N	7 Y/N	8 Y/N	9 Y/N	10 Y/N
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**Key Element 2 +**

### Learning Activities are Documented and Displayed and Used to Plan Future Learning (3.3)

1 Y/N	2 Y/N	3 Y/N	4 Y/N	5 Y/N	6 Y/N	7 Y/N	8 Y/N	9 Y/N	10 Y/N
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**Key Element 3 +**

All three key elements must have a Y to get an overall score of Y. If all three key elements have a Y for that individual record, then record Y in the corresponding block in the overall score.

1 Ys =	2 Ys =	3 Ys =	4 Ys =	5 Ys =	6 Ys =	7 Ys =	8 Ys =	9 Ys =	10 Ys =
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**= Total of All Three Key Elements (3.4)**

### Scoring for PQI 3:

The number of positive records (all Ys for all three elements) where there is a crosswalk from developmental assessment to curriculum \_\_\_\_\_

Percent of positive records (all Ys) (divide the number of positive records by 10 x 100%) \_\_\_\_\_ %.  
Then based on the percentage, you can find the score of 1-4 as per the chart below.



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<i>Circle the Appropriate Level</i>	<b>1 = 0 to 25%</b>	<b>2= 26 to 50%</b>	<b>3 = 51 to 75%</b>	<b>4 = 76 to 100%</b>
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**INDICATOR 4): Opportunities for Staff and Families to Get to Know Each Other**

There should be activities both within the center as well as off site where staff and parents have opportunities to meet and greet each other. Communication with family members is documented and enables early childhood providers to assess the need for follow-up. Early childhood providers hold regular office hours when they are available to talk with family members either in person or by phone. Family members are encouraged to lead the conversation and to raise any questions or concerns.

**How to Measure:**

Look for the following 3 examples in policies developed by the program and determine if they have been carried out with families. It will be necessary to interview staff to complete this indicator if you do not find the three examples in policies:

1. The program provides communication, education, and informational materials & opportunities for families that are delivered in a way that meets their diverse needs. Y/N \_\_\_\_\_ (4.1)
2. The program communicates with families using different modes of communication, and at least one mode promotes two-way communication. Y/N \_\_\_\_\_ (4.2)
3. The program demonstrates respect and engages in ongoing two-way communication. The program respects each family’s strengths, choices, & goals for their children. Y/N \_\_\_\_ (4.3)

**Scoring for PQI 4:**

Record the number of Yes’s (Y’s): \_\_\_\_\_ (Range: 0 – 3) (Divide by 3 x 100% = \_\_\_\_\_ %). Then based on the percentage, you can find the score of 1-4 as per the chart below.

<i>Circle the Appropriate Level</i>	<b>1 = 0 to 25%</b>	<b>2= 26 to 50%</b>	<b>3 = 51 to 75%</b>	<b>4 = 76 to 100%</b>
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**INDICATOR 5): Families Receive Information on Their Child’s Progress Regularly Using a Formal Mechanism**

Based upon Indicator #3 above, the information gleaned from the developmental assessments should be the focus of the report or parent conference. Parental feedback about the assessment and how it compares to their experiences at home would be an excellent comparison point. All these interactions should be done in a culturally and linguistically appropriate way representing the parents being served.

**How to Measure:**

Look for the following four examples in policies developed by the program and determine if they have been carried out with families. Record the number of reports completed or parent conferences over the past year. It will be necessary to interview staff to complete this indicator if you cannot determine from records that the conferences or reports were completed.

NOTE: The examples are mutually exclusive and are not additive; the first example is the highest scored, the third example the least scored. After 1-3 are determined, then do the last example.

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- 1) The program does have regularly scheduled (at least 2xs/year) parent conferences in which the children's developmental progress is discussed AND provides the family with a report of their child's developmental progress. Y/N \_\_\_\_\_ (5.1) (Score 3 points). If "Yes" then go to Number 4. If "No", then go to numbers 2 and 3.
- 2) The program has regularly scheduled (at least 2xs/year) parent conferences in which the children's developmental progress is discussed, but it does not provide a report to the parents on their child's developmental progress. Y/N \_\_\_\_\_ (5.2) (Score 2 points).
- 3) If the program does not have regularly scheduled (at least 2xs/year) parent conferences, does it provide the family with a report of their child's developmental progress. Y/N \_\_\_\_\_ (5.3) (Score 1 point). Go to Number 4.
- 4) All these interactions are done in a culturally and linguistically appropriate way representing the parents being served. Y/N \_\_\_\_\_ (5.4) (Score 1 point)

### Scoring for PQI5:

Add up the total points based on the Ys; this will range from "0" to "4". The only way a program can receive a "4", is if a program has regularly scheduled parent conferences at least 2xs/year and provides the family with a report of their child's progress; and it is done in a culturally and linguistically appropriate way.

Record the number of points: \_\_\_\_\_ (Range: 0 - 4)

Total Score for Part 1 = \_\_\_\_\_

### **PART 2 - OBSERVATIONS:**

*For quality key indicators 6, 7 and 8, it is recommended that the licensing consultant refer to the appropriate Environmental Rating Scale (ERS) tool as a reference tool because these indicators are taken directly from these tools. It is also recommended that these be assessed/observed throughout the assessment and not just during key activity times. Please follow the specific instructions and examples as delineated below and in the appropriate ERS tool: ECERS (Items 12 and 13) or ITERS (Item 12). These specific instructions and examples are provided within this tool for ease of administration and data collection. If there are several preschool aged classrooms randomly select one to do your observations.*

### **INDICATOR 6): Educators Encourage Children to Communicate (Preschool Class)**

Assessors will need to observe this item when they do their classroom observations. Initially you can ask educators or the director how children are encouraged to communicate but in order to gather reliable and valid information regarding this question/standard, it needs to be observed in the various interactions between staff and children. Things to look for would be more back and forth conversations rather than one-way conversations where educators are telling children what to do. Look for opportunities where children can describe what they are doing, how they feel about what they are doing, and why they are doing particular activities. Educators expand upon children's conversations.

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These opportunities can occur anywhere in the classroom or outside, such as in dramatic play, tabletop activities or on the playground. Materials should be present that encourage communication such as toy telephones, puppets, flannel boards, dolls and dramatic play props, small barns, fire stations, or dollhouses. These create a lot of conversation among children as they assume many different roles. Children also talk when there is an interested person who listens to them. The staff in a high-quality early childhood classroom will use both activities and materials to encourage growth in communication skills.

### How to Measure:

Observe the classroom for a minimum of 15 minutes. Once completed, consider where the classroom falls based on the following scale;

Score the classroom a 1 if the following occur:

- No activities used by staff with children to encourage them to communicate, for example: nontalking about drawings, dictating stories, sharing ideas at circle time, finger plays, singing songs. Y/N \_\_\_\_ (6.1)
- Very few materials accessible that encourage children to communicate. Y/N \_\_\_\_ (6.2)

Score the classroom a 2 if the following occur (If the classroom does not have all 3 indicators but has 2 of the indicators then score this item 1+):

- Some activities are used by staff w/children to encourage them to communicate. Y/N \_\_\_\_ (6.3)
- Some materials are accessible to encourage children to communicate. Y/N \_\_\_\_ (6.4)
- Communication activities are generally appropriate for the children in the group. Y/N \_\_\_\_ (6.5)

Score the classroom a 3 if the following occur (If the classroom does not have both indicators but has one of the indicators then score this item 2+):

- Communication activities take place during both free play and group times, for example: child dictates story about painting; small group discusses trip to store. Y/N \_\_\_\_ (6.6)
- Materials that encourage children to communicate are accessible in a variety of interest centers, for example: small figures and animals in block area; puppets and flannel board pieces in book area; toys for dramatic play outdoors or indoors. Y/N \_\_\_\_ (6.7)

Score the classroom a 4 if the following occur (If the classroom does not have both indicators but has one of the indicators then score this item 3+):

- Staff balance listening and talking appropriately for age and abilities of children during communication activities, for example: leave time for children to respond; verbalize for child with limited communication skills. Y/N \_\_\_\_ (6.9)
- Staff link children’s spoken communication with written language, for example: write down what children dictate & read it back to them; help them write notes to parents. Y/N \_\_\_\_ (6.10)

### Scoring for PQI 6:

*Total up the number of “Y’s” and record the appropriate level. In order for a classroom to receive a particular score, all “Y’s” must be checked for the appropriate level (1 - 4) from above or partial credit given in order to obtain a “+”. If there is a “+” please also mark it in the box.*

<b>Circle the Appropriate Level</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
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**INDICATOR 7): Infant Toddler Observation (if applicable) (Infant Classroom)**

*NOTE: If there is an infant, toddler or combined infant/toddler classroom that needs to be assessed, then use the following ITERS item directly from the ITERS Tool (Item 12), if there is not an infant toddler classroom, then skip to Indicator 8.*

Conversations and questions should be used with all children, even young infants. Conversations using verbal and nonverbal turn-taking should be considered when scoring. Most conversations and questions initiated by infants will be nonverbal, such as widening of baby's eyes or waving arms and legs. Observe staff response to such nonverbal communication. For infants and toddlers, the responsibility for starting most conversations and asking questions belongs to the staff. As children become more able to initiate communication, staff should modify their approach in order to allow children to take on a greater role in initiating conversations and asking questions. Staff should provide answers to questions used by children if children cannot answer, and as children become more able to respond, questions should start to include those that the child can answer. If there was not an infant classroom, skip this Indicator and please note that here and on the summary score sheet by marking N/A: \_\_\_\_\_

**How to Measure:**

Observe the classroom for a minimum of 15 minutes. Once completed, consider where the classroom falls based on the following scale;

Score the classroom a 1 if the following occurs:

- Staff never initiate turn-taking conversations with children, for example: rarely encourage baby to babble back; simple back and forth exchanges with verbal children never observed. Y/N \_\_\_\_\_ (7.1)
- Staff questions are often not appropriate for children, or no questions are asked, for example: too difficult to answer; carry a negative message. Y/N \_\_\_\_\_ (7.2)
- Staff respond negatively when children can't answer questions, for example: "You should know this"; "You did not listen". Y/N \_\_\_\_\_ (7.3)

Score the classroom a 2 if the following occurs (If the classroom does not have all 3 indicators but has 2 of the indicators then score this item 1+):

- Staff sometimes initiate conversations with children, for example: babble back and forth with baby; copy baby's sounds; respond to baby's crying with verbal response; have short back and forth toddler interactions. Y/N \_\_\_\_\_ (7.4)
- Staff sometimes ask children appropriate questions and wait for the child to respond, for example: ask baby if she likes toy and pay attention as baby smiles; ask toddler what he is eating and wait for him to think of word. Y/N \_\_\_\_\_ (7.5)
- Staff respond neutrally or positively to children who can't answer questions. Questions asked are sometimes meaningful to children, for example: child responds with interest; does not ignore staff questions. Y/N \_\_\_\_\_ (7.6)

Score the classroom a 3 if the following occurs (If the classroom does not have all 4 indicators but has 2 or more of the indicators then score this item 2+):

- Staff initiate engaging conversations with children throughout the observation, for example: show enthusiasm; use tone that attracts child's attention. Y/N \_\_\_\_\_ (7.7)
- Staff often personalize questions and/or conversations for individual children, for example: talk about children's families, preferences, interests; what they are playing with; what they did over weekend; child's mood; use child's name. Y/N \_\_\_\_\_ (7.8)

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- Staff often pay attention to children’s questions, verbal or nonverbal, and answer in a satisfying manner for the child. Y/N \_\_\_\_\_ (7.9)
- Staff ask questions in which children show interest in answering, for example: make the questions funny or mysterious; use attractive tone; meaningful and not too difficult to answer. Y/N \_\_\_\_\_ (7.10)

Score the classroom a 4 if the following occurs (If the classroom does not have both indicators but has one of the indicators then score this item 3+):

- Staff frequently have turn taking conversations with children throughout the observations. Many appropriate questions are used throughout the observation, during both play and routines. Y/N \_\_\_\_\_ (7.11)
- Staff ask children appropriate questions, wait a reasonable time for child response, and then answer if needed, for example: “Are you hungry? . . . Yes, you are!”; “Where’s the ball? . . . These it is! You found the ball”. Y/N \_\_\_\_\_ (7.12)

### Scoring for PQI 7:

*Total up the number of “Y’s” and record the appropriate level. For a classroom to receive a particular score, all “Y’s” must be checked for the appropriate level (1 - 4) from above or partial credit given in order to obtain a “+”.*

<b>Circle the Appropriate Level</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
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### INDICATOR 8): Educators Use Language to Develop Reasoning Skills (Preschool)

Assessors will need to observe very carefully as this standard can be difficult to determine because it is tying language and cognition together. Again, this opportunity can occur in any setting in or out of the classroom because it is the basis for problem solving through the use of language. Also look for educators redirecting children’s conversations when appropriate. Staff should use language to talk about logical relationships using materials that stimulate reasoning. Through the use of materials, staff can demonstrate concepts such as same/different, classifying, sequencing, one-to-one correspondence, spatial relationships, and cause and effect.

#### How to Measure:

Observe the classroom for a minimum of 15 minutes. Once completed, consider where the classroom falls based on the following scale;

Score the classroom a 1 if the following occur:

- Staff do not talk with children about logical relationships, for example: ignore children's questions and curiosity about why things happen, do not call attention to sequence of daily events, differences and similarity in number, size, shape, cause and effect. Y/N \_\_\_\_\_ (8.1)
- Concepts are introduced inappropriately, for example: concepts too difficult for age and abilities of children, inappropriate teaching methods used such as worksheets without any concrete experiences; teacher gives answers w/o helping children to figure things out. Y/N \_\_\_\_\_ (8.2)

Score the classroom a 2 if the following occur (If the classroom does not have both indicators but has one of the indicators then score this item 1+):

- Staff sometimes talk about logical relationships or concepts, e.g.: explain that outside time comes after snacks, point out differences in sizes of blocks children use. Y/N \_\_\_\_\_ (8.3)

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- Some concepts are introduced appropriately for ages and abilities of children in group, using words and experiences, for example: guide children with questions and words to sort big and little blocks or to figure out why ice melts. Y/N \_\_\_\_\_ (8.4)

Score the classroom a 3 if the following occur (If the classroom does not have both indicators but has one of the indicators then score this item 2+):

- Staff talk about logical relationships while children play with materials that stimulate reasoning, for example: sequence cards, same/different games, size and shape toys, sorting games, numbers and math games. Y/N \_\_\_\_\_ (8.5)
- Children are encouraged to talk through or explain their reasoning when solving problems, for example: why they sorted objects into different groups, in what way two pictures are the same or different. Y/N \_\_\_\_\_ (8.6)

Score the classroom a 4 if the following occur (If the classroom does not have both indicators but has one of the indicators then score this item 3+):

- Staff encourage children to reason throughout the day, using actual events and experiences as a basis for concept development, e.g.: children learn sequence by talking about their experiences in the daily routine or recalling the sequence of a cooking project. Y/N \_\_\_\_\_ (8.7)
- Concepts are introduced based upon children's interests or needs to solve problems, for example: talk children through balancing a tall block building, help children figure out how many spoons are needed to set a table. Y/N \_\_\_\_\_ (8.8)

### Scoring for PQI 8:

*Total up the number of "Y's" and record the appropriate level. In order for a classroom to receive a particular score, all "Y's" must be checked for the appropriate level (1 - 4) from above or partial credit given in order to obtain a "+".*

<b>Circle the Appropriate Level</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
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*For quality key indicators 9 and 10 it is recommended that these be assessed/observed throughout the observation period and not just during key activity times. These two quality key indicators should be observed in two-minute blocks over ten sequences for a total of 20 minutes. These two items should also be used with each age group you are assessing.*

### **INDICATOR 9): Educators Listen Attentively When Children Speak**

This quality indicator focuses on the early childhood educator(s) looking directly at the children with nods, rephrases their comments, engages in conversations. Children should have the undivided attention of the specific educator they are addressing. Educators should not be looking away or pre-occupied with others. They should be at the child's level making eye contact. The intent is to observe all children and educators in the room.

#### **How to Measure:**

Do this in timed 2-minute observations recording each time you observe this occurring. Record at least 10 different observation periods. These do not need to be consecutive in order to fully observe classrooms and educators. Please use the following scale to assess your recordings: Likert Scale (1-4) where 1 = Never/Not at All; 2 = Somewhat/Few Instances; 3 = Quite a Bit/Many Instances; 4 = Very Much/Consistently):

Make the actual recordings using the Likert Scale (1-4) above for each individual observation and record in each cell below.

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10 Observations:

10.1      2      3      4      5      6      7      8      9      10.10

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**Scoring for PQI 9:**

Once all the observations are made, add up the results from the Likert Scale (1-4) and record the total number here: \_\_\_\_\_ (Range: 10 - 40)(Divide this result by 10) = \_\_\_\_\_ (1-4)(Round upward or downward to the whole number (3.7 = 4; 2.2 = 2)).

<b><i>Circle the Appropriate Level</i></b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
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**INDICATOR 10): Educators Speak Warmly to Children**

This quality indicator focuses on the early childhood educator(s) always engaging in a caring voice and body language with every child. Educators do not use harsh language or commands in speaking to children, but rather again are on the child’s level making eye contact. Think of the way Fred Rogers would engage his audience where you always felt you were the most important person in the world when he talked to the TV.

**How to Measure:**

Do this in timed 2-minute observations recording each time you observe this occurring. Record at least 10 different observation periods. Please use the following scale to make your recordings: (This item is on a Likert Scale (1-4) where 1 = Never/Not at All; 2 = Somewhat/Few Instances; 3 = Quite a Bit/Many Instances; 4 = Very Much/Consistently):

Make the actual recordings using the Likert Scale (1-4) above for each individual observation and record in each cell below.

10 Observations:

10.1      2      3      4      5      6      7      8      9      10.10

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**Scoring for PQI 10:**

Once all the observations are made, add up the results from the Likert Scale (1-4) and record the total number here: \_\_\_\_\_ (Range: 10 - 40) (Divide this result by 10) = \_\_\_\_\_ (1-4). (Round upward or downward to the whole number (3.7 = 4; 2.2 = 2)).

<b><i>Circle the Appropriate Level</i></b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
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**SKECPQI Scoring Protocol**

LEVEL	Standardized Scores	Actual Scores
High Quality	Mixed Age: 36+ Preschool: 32+ Infant-Toddler: 28+	Mixed Age: _____ Preschool: _____ Infant-Toddler: _____
High - Mid Quality	Mixed Age: 30 – 35 Preschool: 26 - 31 Infant-Toddler: 22 - 27	Mixed Age: _____ Preschool: _____ Infant-Toddler: _____
Mid – Low Quality	Mixed Age: 20 – 29 Preschool: 16 - 25 Infant-Toddler: 12 - 21	Mixed Age: _____ Preschool: _____ Infant-Toddler: _____
Low Quality	Mixed Ages: 19 or less Preschool: 15 or less Infant-Toddler: 11 or less	Mixed Age: _____ Preschool: _____ Infant-Toddler: _____

**Note:**

**Members of the Original Saskatchewan Program Quality Work Group are the following:**

**Ministry of Education: Kim Taylor, Derek Parady, Cindy Jeanes, Tanya Mengel, Samantha Ecarnot, Karen Heinrichs, Michelle Vellenoweth, Kristin Jarvis, and NARA Consultant: Rick Fiene.**

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Additional Information contact: Derek Parady, Government of Saskatchewan, Senior Policy Analyst, Early Years, Ministry of Education, 2-2220 College Ave, Regina, SK, Canada S4P 4V9.

Additional Information regarding the psychometrics of the tool contact: Richard Fiene, Ph.D., Research Psychologist, Research Institute for Key Indicators & Penn State University. [RFiene@RIKInstitute.com](mailto:RFiene@RIKInstitute.com) or [RFiene@NARALicensing.org](mailto:RFiene@NARALicensing.org)

10/2020; 4/2021; 1/2023; 2/2023; 3/2023 versions



## Saskatchewan Early Care and Education Quality Indicators Tool Validation Study

After completing your observations, reviewing all documentation, and interviewing staff, when necessary, please transfer all your results to the Summary Table below. If there was not an infant classroom, please note here, no infant classroom: \_\_\_\_\_. If there was not a toddler classroom, please note here, no toddler classroom: \_\_\_\_\_. If there was not a preschool classroom, please note here, no preschool classroom: \_\_\_\_\_.

<b><u>Key Q Indicator</u></b>	<b><u>Quality Indicator Content</u></b>	<b><u>Scale Source</u></b>	<b><u>Potential Score</u></b>	<b><u>Actual Score</u></b>
<b>QKI 1</b>	Professional Development	NAEYC	1-4	1, 2, 3, 4
<b>QKI 2</b>	The Environment	Saskatchewan	1-4	1, 2, 3, 4
<b>QKI 3</b>	Curriculum and Assessment	NAEYC	1-4	1, 2, 3, 4
<b>QKI 4</b>	Family Engagement I	QRIS	1-4	1, 2, 3, 4
<b>QKI 5</b>	Family Engagement II	QRIS	1-4	1, 2, 3, 4
<b>QKI 6</b>	Communication (Preschool)	ECERS	1-4 or NA	1, 2, 3, 4, +, NA
<b>QKI 7</b>	<i>Infant Classroom</i>	<i>ITERS</i>	<i>1-4 or NA</i>	1, 2, 3, 4, +, NA
<b>QKI 8</b>	Reasoning Skills (Preschool)	ECERS	1-4 or NA	1, 2, 3, 4, +, NA
<b>QKI 9</b>	Listen Attentively	CIS	1-4	1, 2, 3, 4
<b>QKI 10</b>	Speak Warmly	CIS	1-4	1, 2, 3, 4

**Notes:**

Use *ITERS* if: (Infants) (B-1yr)

Use *ITERS* if: (Toddlers) (1yr-2yr)

Use *ECERS* if: (Preschoolers) (3yr+)

SKECPQI/Infant (administer QKI items 1-5, 7, 9-10) (Scores 8-32)

SKECPQI/Toddler or Preschool (administer QKI items 1-5, 7, 9-10) (Scores 8-32) or (administer QKI items 1-6, 8-10) (Scores 9-36). Mixed age group (administer QKI items 1-10) (Scores 10-40)

SKECPQI/Preschool (administer QKI items 1-6, 8-10) (Scores 9-36)

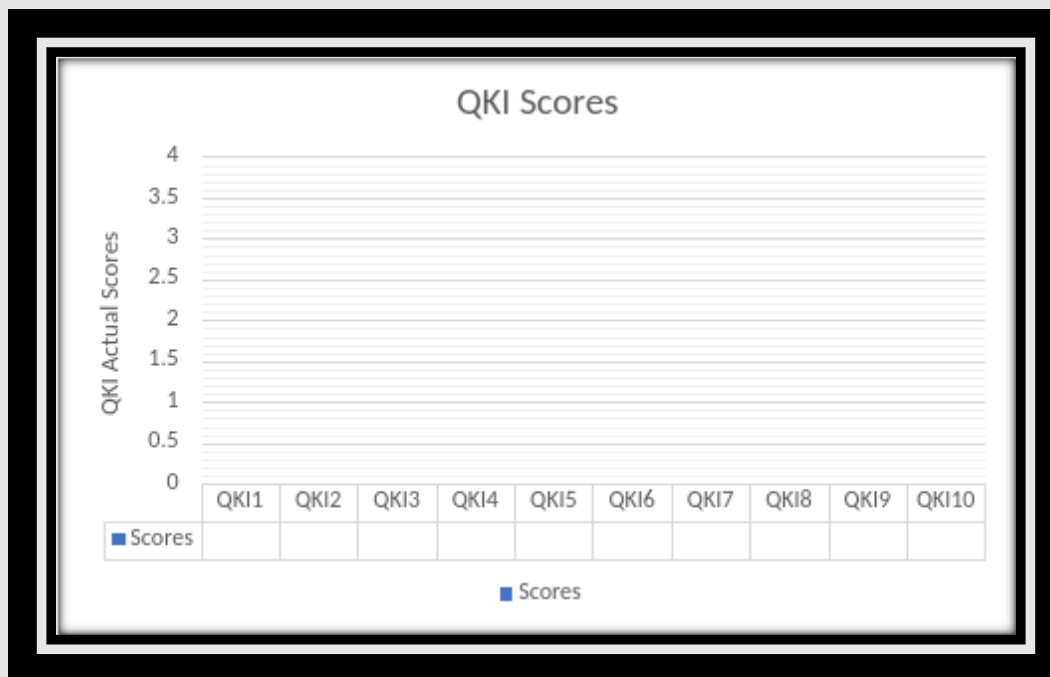
**All the above 10 quality indicators (SKECPQI) have been taken from other sources having been identified in Quality Indicator Studies conducted by Dr Richard Fiene from 1980 – 2020. Please refer to the source documents for details on their creation: *ECERS, ITERS, QRIS/INQUIRE, CIS/Arnett, NAEYC, SASKATCHEWAN PLAY & EXPLORATION*. For additional information, reports, and publications related to these studies, please go to <https://www.naralicensing.org/key-indicators> Or <https://rikinstitute.com/publications/>**

**SKECPQI: SASKATCHEWAN EARLY CHILDHOOD PROGRAM QUALITY INDICATORS**

**CHART/GRAPH**

Scores

QKI1	
QKI2	
QKI3	
QKI4	
QKI5	
QKI6	
QKI7	
QKI8	
QKI9	
QKI10	
<b>TOTAL</b>	



Saskatchewan Early Care and Education Quality Indicators Tool Validation Study

QKI and key elements/sub items and comments Scoresheet:

QKI1 \_\_\_\_\_ 1.1 \_\_\_\_\_ 1.2 \_\_\_\_\_ Comments: \_\_\_\_\_

QKI2 \_\_\_\_\_ %

2.1 \_\_\_\_\_ Comments: \_\_\_\_\_

2.2 \_\_\_\_\_ Comments: \_\_\_\_\_

2.3 \_\_\_\_\_ Comments: \_\_\_\_\_

2.4 \_\_\_\_\_ Comments: \_\_\_\_\_

2.5 \_\_\_\_\_ Comments: \_\_\_\_\_

2.6 \_\_\_\_\_ Comments: \_\_\_\_\_

2.7 \_\_\_\_\_ Comments: \_\_\_\_\_

2.8 \_\_\_\_\_ Comments: \_\_\_\_\_

2.9 \_\_\_\_\_ Comments: \_\_\_\_\_

2.10 \_\_\_\_\_ Comments: \_\_\_\_\_

2.11 \_\_\_\_\_ Comments: \_\_\_\_\_

QKI3 \_\_\_\_\_ %

3.1 \_\_\_\_\_ Comments: \_\_\_\_\_

3.2 \_\_\_\_\_ Comments: \_\_\_\_\_

3.3 \_\_\_\_\_ Comments: \_\_\_\_\_

3.4 \_\_\_\_\_ Comments: \_\_\_\_\_

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QKI4 \_\_\_\_\_ %

4.1 \_\_\_\_\_ Comments: \_\_\_\_\_

4.2 \_\_\_\_\_ Comments: \_\_\_\_\_

4.3 \_\_\_\_\_ Comments: \_\_\_\_\_

QKI5 \_\_\_\_\_ Points

5.1 \_\_\_\_\_ Comments: \_\_\_\_\_

5.2 \_\_\_\_\_ Comments: \_\_\_\_\_

5.3 \_\_\_\_\_ Comments: \_\_\_\_\_

5.4 \_\_\_\_\_ Comments: \_\_\_\_\_

QKI6 \_\_\_\_\_ Level

6.1 \_\_\_\_\_ Comments: \_\_\_\_\_

6.2 \_\_\_\_\_ Comments: \_\_\_\_\_

6.3 \_\_\_\_\_ Comments: \_\_\_\_\_

6.4 \_\_\_\_\_ Comments: \_\_\_\_\_

6.5 \_\_\_\_\_ Comments: \_\_\_\_\_

6.6 \_\_\_\_\_ Comments: \_\_\_\_\_

6.7 \_\_\_\_\_ Comments: \_\_\_\_\_

6.8 \_\_\_\_\_ Comments: \_\_\_\_\_

6.9 \_\_\_\_\_ Comments: \_\_\_\_\_

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QKI7 \_\_\_\_\_ Level

7.1 \_\_\_\_\_ Comments: \_\_\_\_\_

7.2 \_\_\_\_\_ Comments: \_\_\_\_\_

7.3 \_\_\_\_\_ Comments: \_\_\_\_\_

7.4 \_\_\_\_\_ Comments: \_\_\_\_\_

7.5 \_\_\_\_\_ Comments: \_\_\_\_\_

7.6 \_\_\_\_\_ Comments: \_\_\_\_\_

7.7 \_\_\_\_\_ Comments: \_\_\_\_\_

7.8 \_\_\_\_\_ Comments: \_\_\_\_\_

7.9 \_\_\_\_\_ Comments: \_\_\_\_\_

7.10 \_\_\_\_\_ Comments: \_\_\_\_\_

7.11 \_\_\_\_\_ Comments: \_\_\_\_\_

7.12 \_\_\_\_\_ Comments: \_\_\_\_\_

QKI 8 \_\_\_\_\_ Level

8.1 \_\_\_\_\_ Comments: \_\_\_\_\_

8.2 \_\_\_\_\_ Comments: \_\_\_\_\_

8.3 \_\_\_\_\_ Comments: \_\_\_\_\_

8.4 \_\_\_\_\_ Comments: \_\_\_\_\_

8.5 \_\_\_\_\_ Comments: \_\_\_\_\_

**Saskatchewan Early Care and Education Quality Indicators Tool Validation Study**

8.6 \_\_\_\_\_ Comments: \_\_\_\_\_

8.7 \_\_\_\_\_ Comments: \_\_\_\_\_

8.8 \_\_\_\_\_ Comments: \_\_\_\_\_

QKI9 \_\_\_\_\_ Level

9.1 \_\_\_\_\_ Comments: \_\_\_\_\_

9.2 \_\_\_\_\_ Comments: \_\_\_\_\_

9.3 \_\_\_\_\_ Comments: \_\_\_\_\_

9.4 \_\_\_\_\_ Comments: \_\_\_\_\_

9.5 \_\_\_\_\_ Comments: \_\_\_\_\_

9.6 \_\_\_\_\_ Comments: \_\_\_\_\_

9.7 \_\_\_\_\_ Comments: \_\_\_\_\_

9.8 \_\_\_\_\_ Comments: \_\_\_\_\_

9.9 \_\_\_\_\_ Comments: \_\_\_\_\_

9.10 \_\_\_\_\_ Comments: \_\_\_\_\_

QKI10 \_\_\_\_\_ Level

10.1 \_\_\_\_\_ Comments: \_\_\_\_\_

10.2 \_\_\_\_\_ Comments: \_\_\_\_\_

10.3 \_\_\_\_\_ Comments: \_\_\_\_\_

10.4 \_\_\_\_\_ Comments: \_\_\_\_\_

**Saskatchewan Early Care and Education Quality Indicators Tool Validation Study**

10.5 \_\_\_\_\_ Comments: \_\_\_\_\_

10.6 \_\_\_\_\_ Comments: \_\_\_\_\_

10.7 \_\_\_\_\_ Comments: \_\_\_\_\_

10.8 \_\_\_\_\_ Comments: \_\_\_\_\_

10.9 \_\_\_\_\_ Comments: \_\_\_\_\_

10.10 \_\_\_\_\_ Comments: \_\_\_\_\_

Saskatchewan Early Care and Education Quality Indicators Tool Validation Study

Quality Key Indicators (QKI)	Elements/Items	Data Collection
1	1.	Record Review
2	11 . . . . .	Policy, Records, Interviews
3	4 . . . .	Policy, Records, Interviews
4	3 . . .	Policy, Records, Interviews
5	4 . . . .	Policy, Records, Interviews
6	9 . . . . .	Observation
7	12 . . . . .	Observation
8	8 . . . . .	Observation
9	10 . . . . .	Observation
10	10 . . . . .	Observation
<b>TOTAL</b>	<b>Potential Score = 78</b>	<b>Actual Score Obtained = _____</b>





Variables
ID
ITERSI
ECERS
QIMI
QIMP
RC
Rank
PQI2I
PQI2PS
QIMI
QIMP
DICH
QITERS
QECERS1
QECERS2
CIS9IT
CIS10IT
CIS9P
CIS10P
I3
P3
I1
P1
I5
P5
I4
P4
Missingness report
Codebook table

# Codebook

Code ▾

Code

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Code

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## Warning in detect_scales(codebook_data): QECERS items found, but no
## aggregate
```

```
## Warning in detect_scales(codebook_data): I items found, but no aggregate
```

```
## Warning in detect_scales(codebook_data): P items found, but no aggregate
```

Code

Code

## Metadata

### Description

**Dataset name:** codebook\_data

Code

The dataset has N=60 rows and 27 columns. 20 rows have no missing values on any column.

Code

► Metadata for search engines

Code

## Variables

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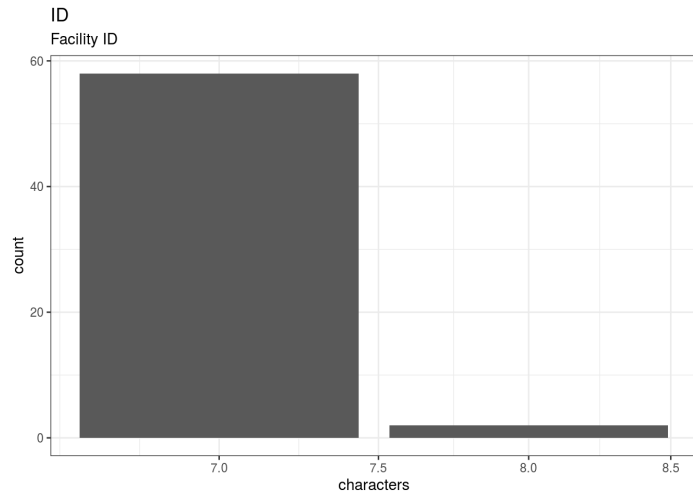
### ID

Facility ID

Distribution	Summary statistics
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Code

Code



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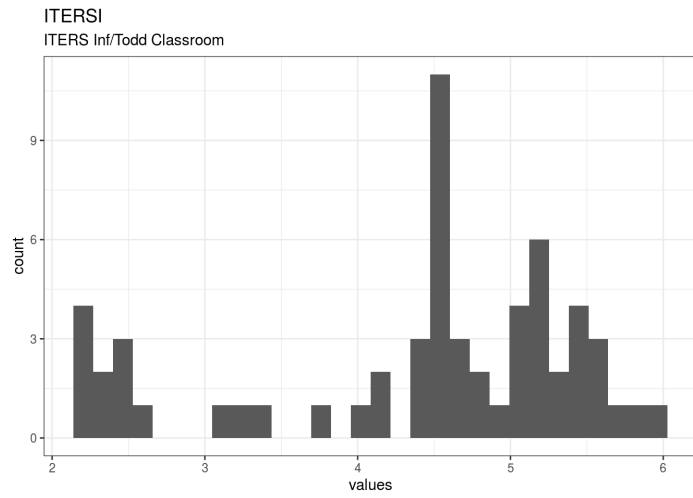
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ITERS Inf/Todd Classroom

Distribution Summary statistics

Code

Code



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Code

### ECERS

ECERS Preschool Classroom

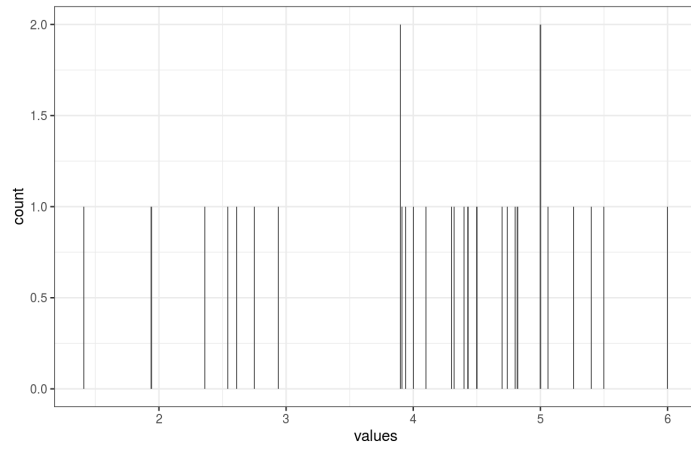
Distribution Summary statistics

Code

Code

### ECERS

ECERS Preschool Classroom



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Code

### QIMI

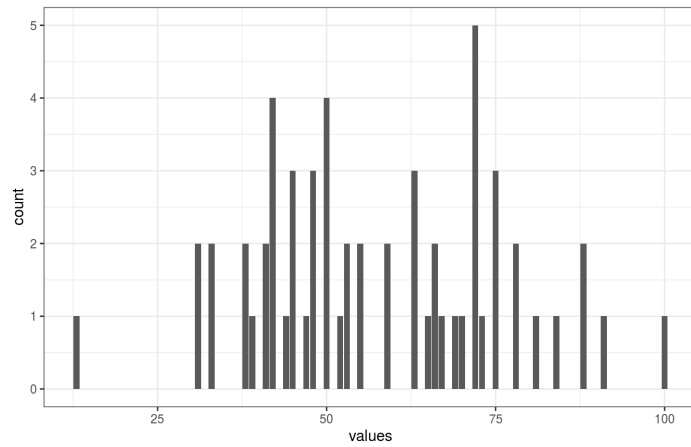
QIM Inf/Todd Classroom

Distribution Summary statistics

Code

Code

QIMI  
QIM Inf/Todd Classroom



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Code

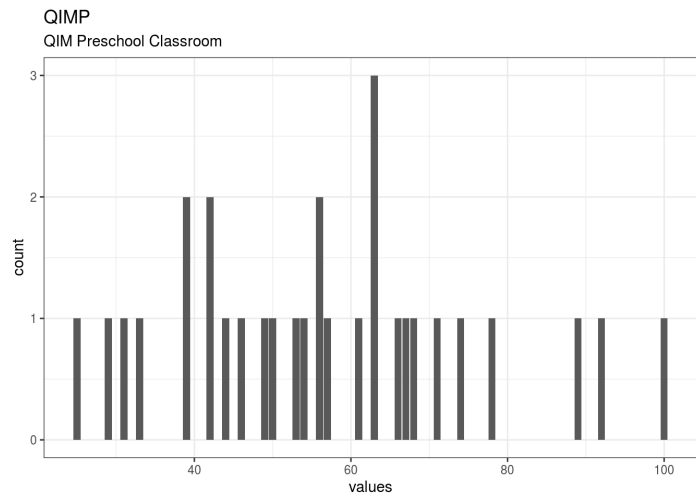
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QIM Preschool Classroom

Distribution Summary statistics

Code

Code



Code

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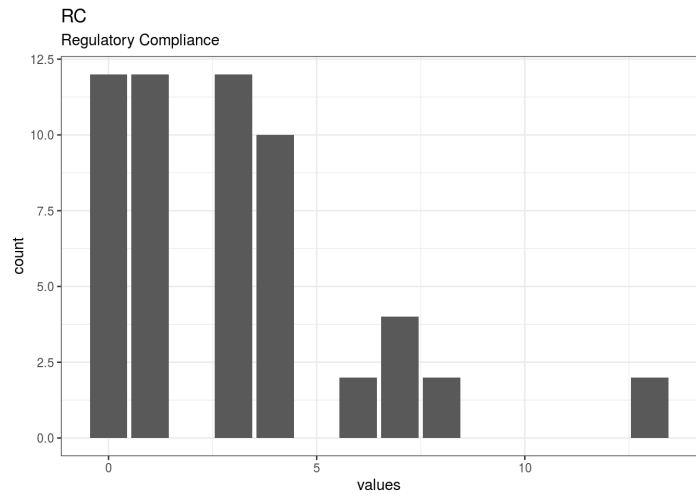
### RC

Regulatory Compliance

[Distribution](#) [Summary statistics](#)

Code

Code



Code

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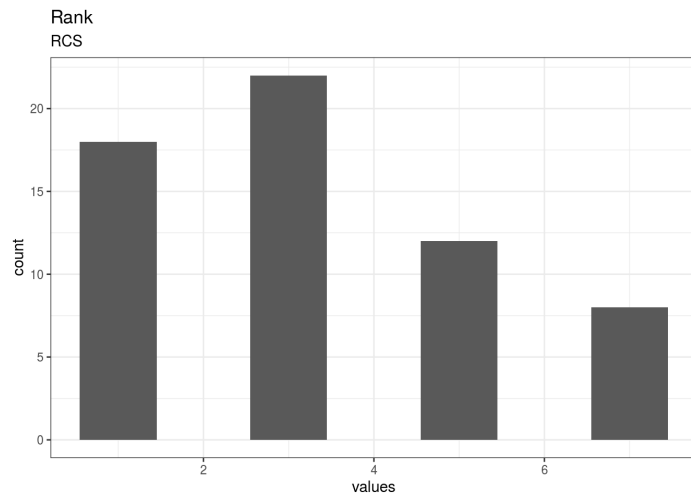
### Rank

RCS

[Distribution](#) [Summary statistics](#)

Code

Code



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Code

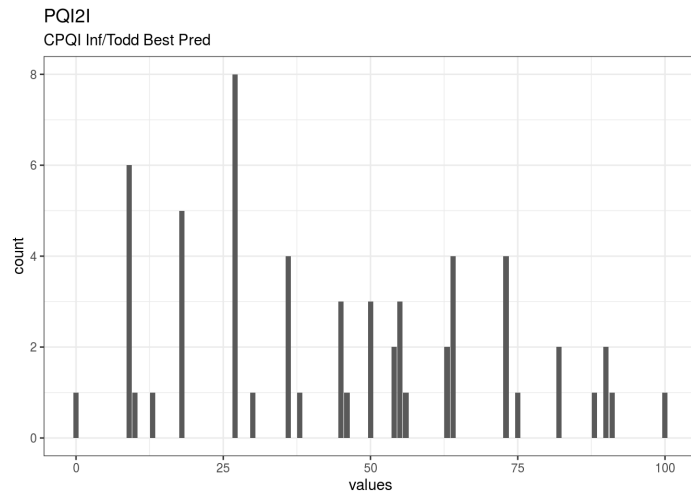
### PQI2I

CPQI Inf/Todd Best Pred

Distribution Summary statistics

Code

Code



1 missing values.

Code

### PQI2PS

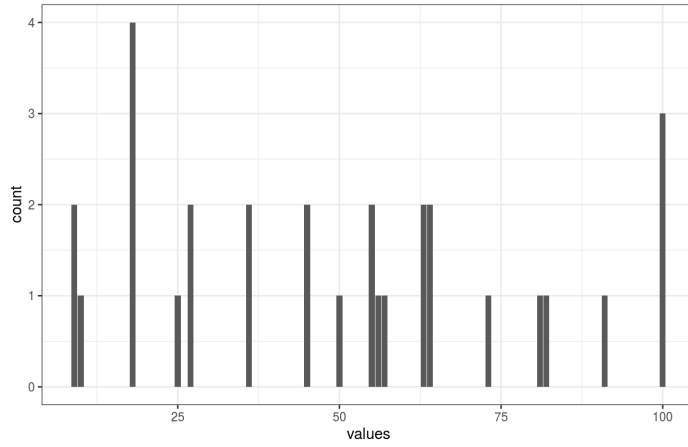
SKECPQI Preschool Best Predictor

Distribution Summary statistics

Code

Code

### PQI2PS SKECPQI Preschool Best Predictor



Code

30 missing values.

### QIMI

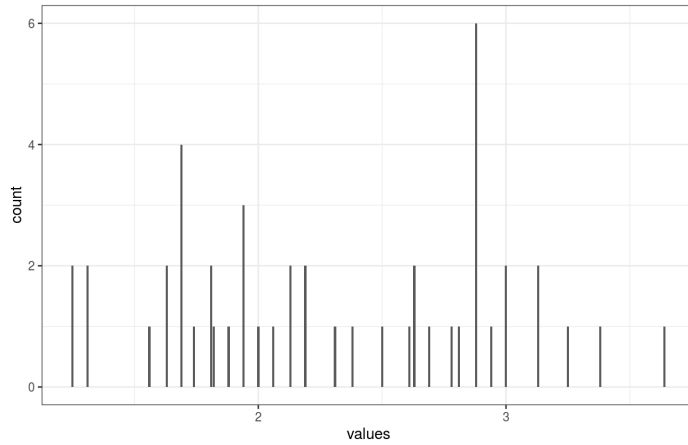
Infant/Toddler Scale

Distribution Summary statistics

Code

Code

### QIMI# Infant/Toddler Scale



Code

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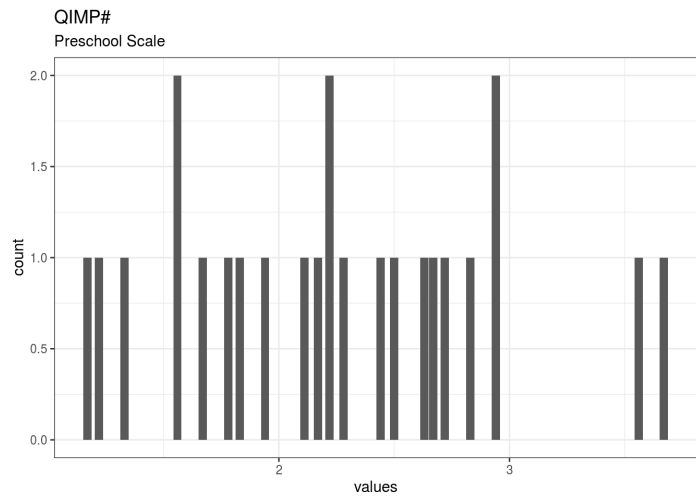
### QIMP

Preschool Scale

Distribution Summary statistics

Code

Code



Code

36 missing values.

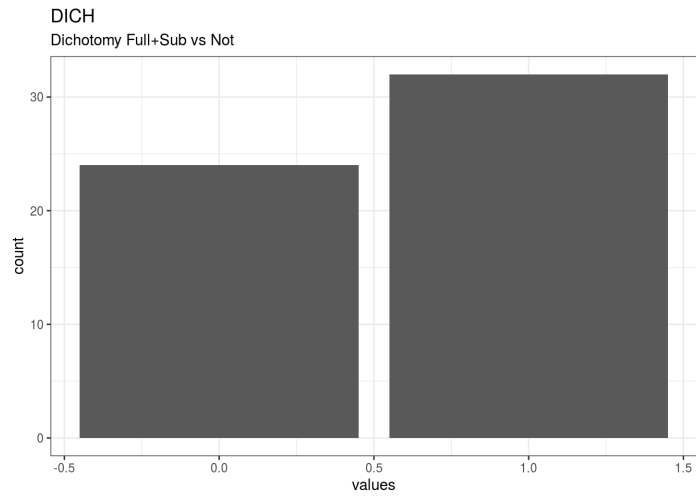
### DICH

Dichotomy Full+Sub vs Not

Distribution Summary statistics

Code

Code



Code

4 missing values.

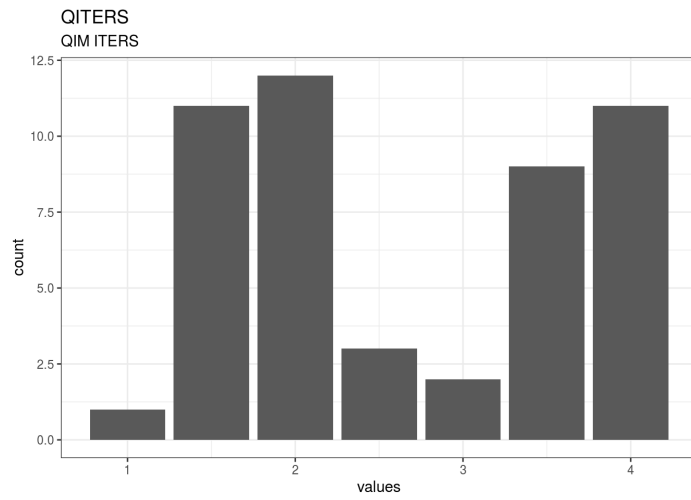
### QITERS

QIM ITERS

Distribution Summary statistics

Code

Code



Code

11 missing values.

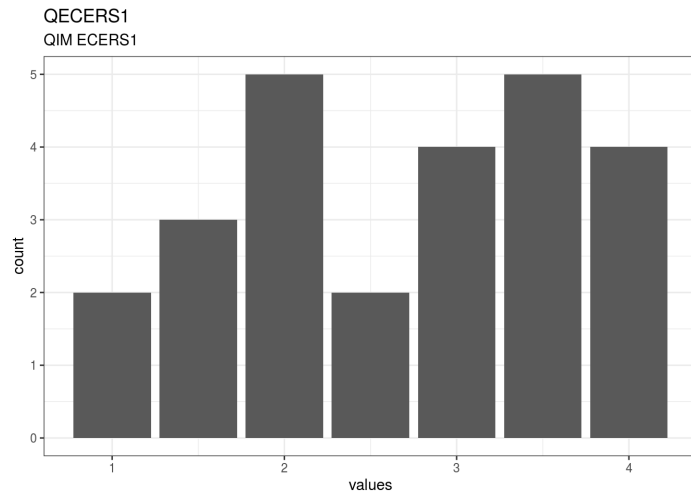
### QECERS1

QIM ECERS1

Distribution Summary statistics

Code

Code



Code

35 missing values.

### QECERS2

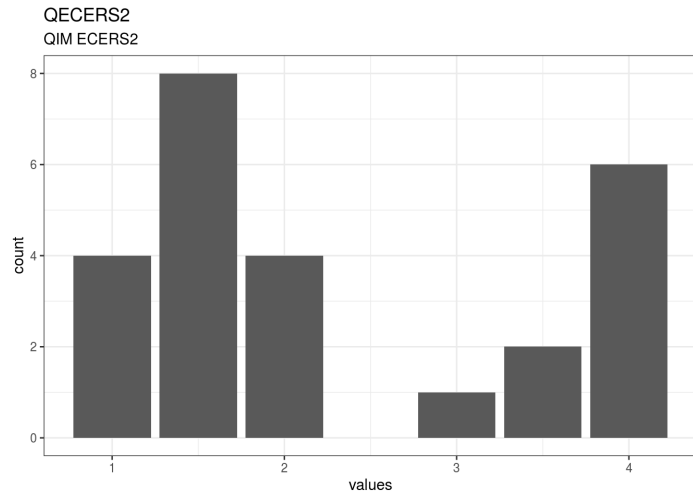
QIM ECERS2

Distribution Summary statistics

Code

Code





Code

35 missing values.

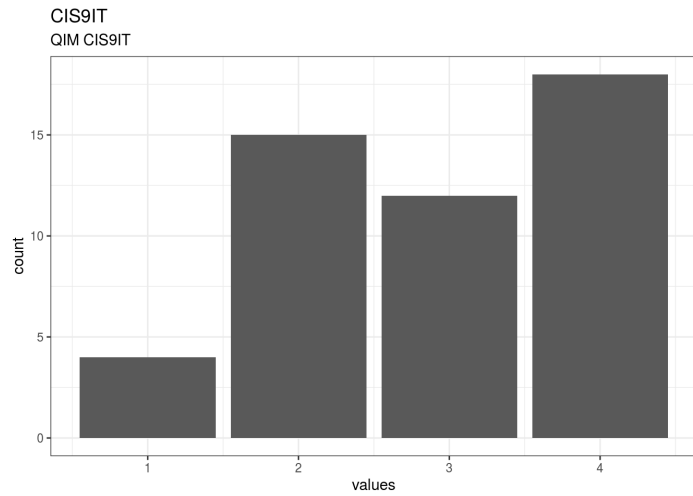
### CIS9IT

QIM CIS9IT

Distribution Summary statistics

Code

Code



Code

11 missing values.

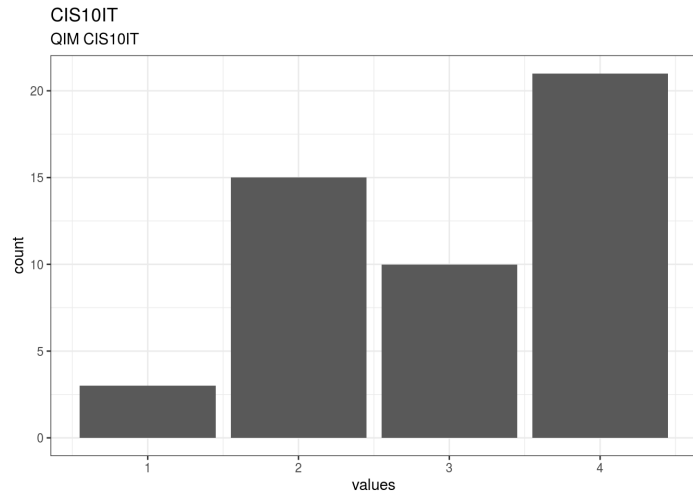
### CIS10IT

QIM CIS10IT

Distribution Summary statistics

Code

Code



Code

11 missing values.

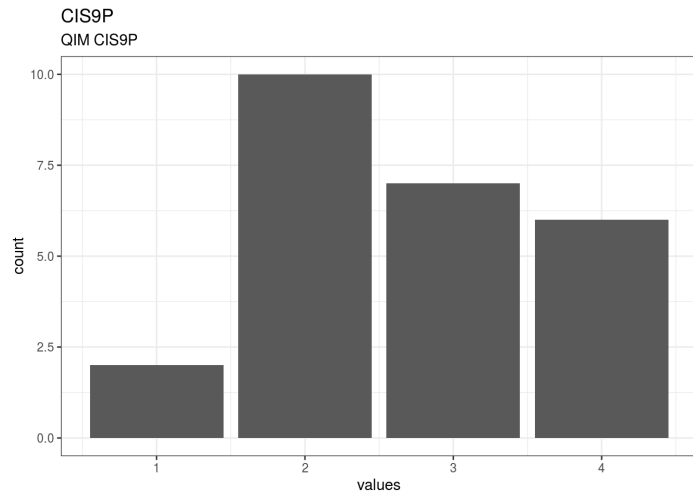
### CIS9P

QIM CIS9P

Distribution Summary statistics

Code

Code



Code

35 missing values.

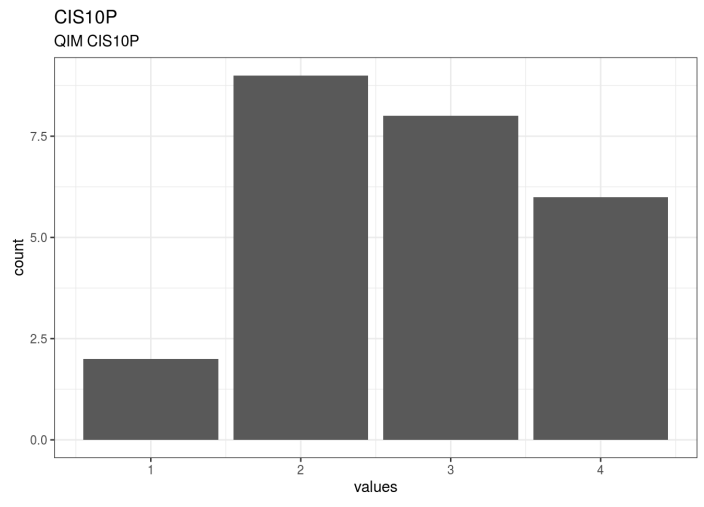
### CIS10P

QIM CIS10P

Distribution Summary statistics

Code

Code



Code

35 missing values.

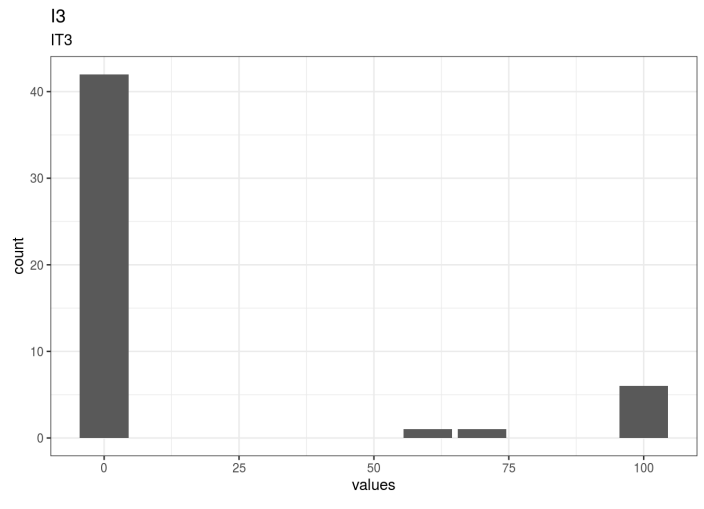
### I3

IT3

[Distribution](#) [Summary statistics](#)

Code

Code



Code

10 missing values.

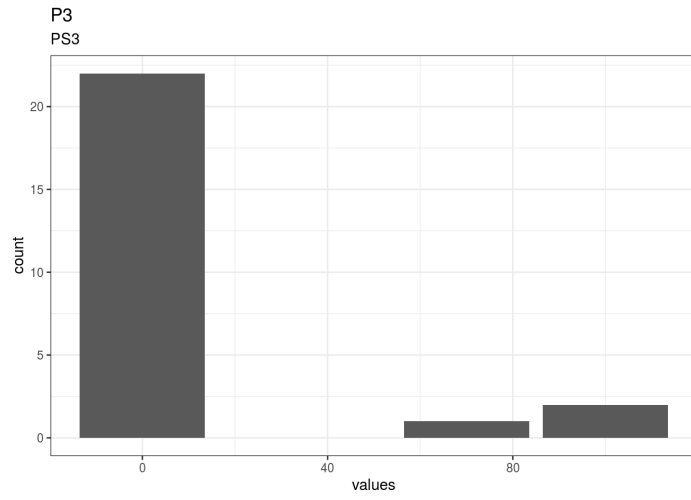
### P3

PS3

[Distribution](#) [Summary statistics](#)

Code

Code



Code

35 missing values.

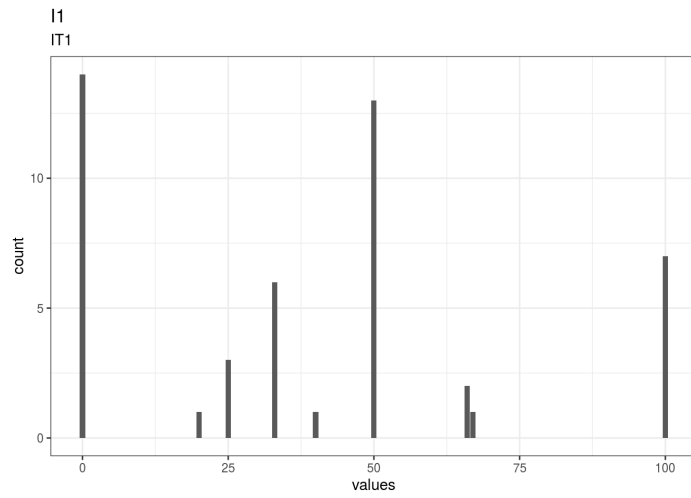
### I1

IT1

[Distribution](#) [Summary statistics](#)

Code

Code



Code

12 missing values.

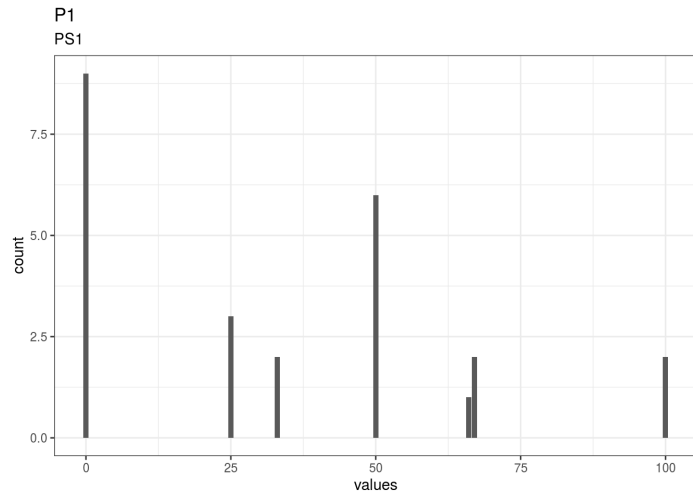
### P1

PS1

[Distribution](#) [Summary statistics](#)

Code

Code



Code

35 missing values.

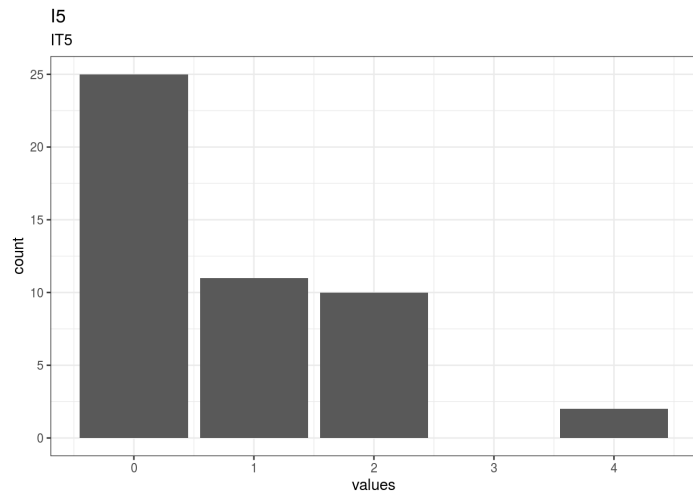
### I5

IT5

Distribution Summary statistics

Code

Code



Code

12 missing values.

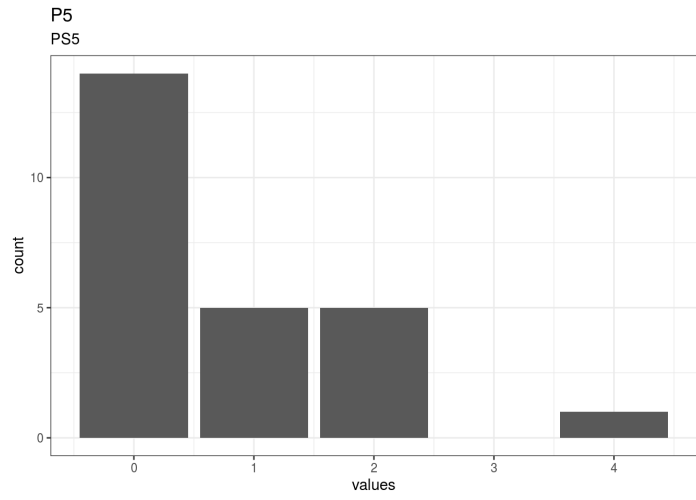
### P5

PS5

Distribution Summary statistics

Code

Code



Code

35 missing values.

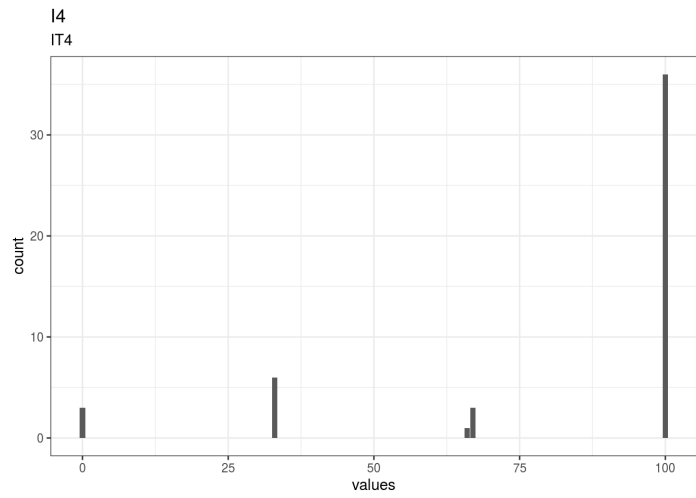
### I4

IT4

Distribution Summary statistics

Code

Code



Code

11 missing values.

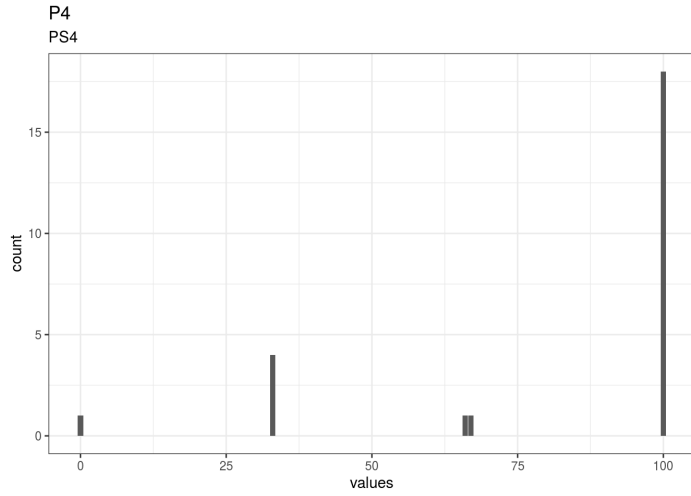
### P4

PS4

Distribution Summary statistics

Code

Code



Code

35 missing values.

### Missingness report

Code

description	ITERSI	QIMI	PQI2I	RC	DICH	I3	QITERS	CIS9IT	CIS10IT
<chr>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>
Missing values per variable	1	1	1	4	4	10	11	11	11
Missing values in 12 variables	1	1	1	1	1	1	1	1	1
Missing values in 0 variables	1	1	1	1	1	1	1	1	1
Missing values in 17 variables	1	1	1	1	1	0	0	0	0
Missing values in 20 variables	1	1	1	1	1	0	0	0	0
Missing values in 2 variables	1	1	1	0	0	1	1	1	1
Missing values in 14 variables	1	1	1	0	0	1	1	1	1
Missing values in 1 variables	1	1	1	1	1	1	1	1	1
Missing values in 1 variables	1	1	1	1	1	1	1	1	1
Missing values in 2 variables	1	1	1	1	1	1	1	1	1

1-10 of 12 rows | 1-10 of 28 columns Previous 1 2 Next

Code

### Codebook table

Code

Search:

name	label	data_type	missing	complete	n	empty	n_unique	min	max	mean	sd	p0
ID	Facility ID	character	0	60	60	0	30	7	8			
ITERSI	ITERS Inf/Todd Classroom	numeric	1	59	60					4.39	1.1	2.14
ECERS	ECERS Preschool Classroom	numeric	31	29	60					4.09	1.14	1.41
QIMI	QIM Inf/Todd Classroom	numeric	1	59	60					57.63	17.76	13
QIMP	QIM Preschool Classroom	numeric	30	30	60					56.67	18.6	25
RC	Regulatory Compliance	numeric	4	56	60					3.04	3.01	0
Rank	RCS	numeric	0	60	60					3.33	2.02	1
PQI2I	CPQI Inf/Todd Best Pred	numeric	1	59	60					44.53	26.08	0
PQI2PS	SKECPQI Preschool Best Predictor	numeric	30	30	60					49.83	28.61	9

name	label	data_type	missing	complete	n	empty	n_unique	min	max	mean	sd	p0	
QIMI#	Infant/Toddler Scale	numeric	12	48	60					2.3	0.63	1.25	1.0
QIMP#	Preschool Scale	numeric	36	24	60					2.25	0.68	1.17	1.0
DICH	Dichotomy Full+Sub vs Not	numeric	4	56	60					0.57	0.5	0	0
QITERS	QIM ITERS	numeric	11	49	60					2.66	1.01	1	2
QECERS1	QIM ECERS1	numeric	35	25	60					2.68	0.98	1	2
QECERS2	QIM ECERS2	numeric	35	25	60					2.32	1.17	1	1.0
CIS9IT	QIM CIS9IT	numeric	11	49	60					2.9	1.01	1	2
CIS10IT	QIM CIS10IT	numeric	11	49	60					3	1	1	2
CIS9P	QIM CIS9P	numeric	35	25	60					2.68	0.95	1	2
CIS10P	QIM CIS10P	numeric	35	25	60					2.72	0.94	1	2
I3	IT3	numeric	10	50	60					14.6	34.36	0	0
P3	PS3	numeric	35	25	60					10.8	30.27	0	0
I1	IT1	numeric	12	48	60					39.21	33.36	0	0
P1	PS1	numeric	35	25	60					33.64	31.69	0	0
I5	IT5	numeric	12	48	60					0.81	1.04	0	0
P5	PS5	numeric	35	25	60					0.76	1.05	0	0
I4	IT4	numeric	11	49	60					82.96	31.33	0	67
P4	PS4	numeric	35	25	60					82.6	30.71	0	67

Showing 1 to 27 of 27 entries

Previous 1 Next

Code

► JSON-LD metadata



**Descriptive Statistics**

	N	Mean	Std Dev	Minimum	Maximum
ITERS Inf/Todd Classroom	59	4.39	1.10	2.14	5.90
ECERS Preschool Classroom	29	4.09	1.14	1.41	6.00
QIM Inf/Todd Classroom	59	57.63	17.76	13.00	100.00
QIM Preschool Classroom	30	56.67	18.60	25.00	100.00
Regulatory Compliance	56	3.04	3.01	.00	13.00
RCS	60	3.33	2.02	1.00	7.00
CPQI Inf/Todd Best Pred	59	44.53	26.08	.00	100.00
SKECPQI Preschool Best Predictor	30	49.83	28.61	9.00	100.00
Infant/Toddler Scale	48	2.30	.63	1.25	3.64
Preschool Scale	24	2.25	.68	1.17	3.67
Dichotomy Full+Sub vs Not	56	.57	.50	.00	1.00
QIM ITERS	49	2.66	1.01	1.00	4.00
QIM ECERS1	25	2.68	.98	1.00	4.00
QIM ECERS2	25	2.32	1.17	1.00	4.00
QIM CIS9IT	49	2.90	1.01	1.00	4.00
QIM CIS10IT	49	3.00	1.00	1.00	4.00
QIM CIS9P	25	2.68	.95	1.00	4.00
QIM CIS10P	25	2.72	.94	1.00	4.00
IT1	48	39.21	33.36	.00	100.00
IT3	50	14.60	34.36	.00	100.00
IT4	49	82.96	31.33	.00	100.00
IT5	48	.81	1.04	.00	4.00
PS1	25	33.64	31.69	.00	100.00
PS3	25	10.80	30.27	.00	100.00
PS4	25	82.60	30.71	.00	100.00
PS5	25	.76	1.05	.00	4.00
RCS 1-3: H, M, L	60	3.07	1.60	1.00	5.00
Valid N (listwise)	60				
Missing N (listwise)	40				

**Statistics**

	ITERS Inf/Todd Classroom	ECERS Preschool Classroom	QIM Inf/Todd Classroom	QIM Preschool Classroom	Regulatory Compliance	RCS	CPQI Inf/Todd Best Pred	SKECPQI Preschool Best Predictor	Infant/Toddler Scale	Preschool Scale	Dichotomy Full+Sub vs Not
N Valid	59	29	59	30	56	60	59	30	48	24	56
Missing	1	31	1	30	4	0	1	30	12	36	4
Mean	4.39	4.09	57.63	56.67	3.04	3.33	44.53	49.83	2.30	2.25	.57
Std Dev	1.10	1.14	17.76	18.60	3.01	2.02	26.08	28.61	.63	.68	.50
Minimum	2.14	1.41	13.00	25.00	.00	1.00	.00	9.00	1.25	1.17	.00
Maximum	5.90	6.00	100.00	100.00	13.00	7.00	100.00	100.00	3.64	3.67	1.00

	QIM ITERS	QIM ECERS1	QIM ECERS2	QIM CIS9IT	QIM CIS10IT	QIM CIS9P	QIM CIS10P	IT1	IT3	IT4	IT5	PS1	PS3
N Valid	49	25	25	49	49	25	25	48	50	49	48	25	25
Missing	11	35	35	11	11	35	35	12	10	11	12	35	35
Mean	2.66	2.68	2.32	2.90	3.00	2.68	2.72	39.21	14.60	82.96	.81	33.64	10.80
Std Dev	1.01	.98	1.17	1.01	1.00	.95	.94	33.36	34.36	31.33	1.04	31.69	30.27
Minimum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.00	.00	.00	.00	.00	.00
Maximum	4.00	4.00	4.00	4.00	4.00	4.00	4.00	100.00	100.00	100.00	4.00	100.00	100.00

		PS4	PS5	RCS 1-3: H, M, L
N Valid		25	25	60
Missing		35	35	0
Mean		82.60	.76	3.07
Std Dev		30.71	1.05	1.60
Minimum		.00	.00	1.00
Maximum		100.00	4.00	5.00

**ITERS Inf/Todd Classroom**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2.14	1	1.7%	1.7%	1.7%
2.16	1	1.7%	1.7%	3.4%
2.23	2	3.3%	3.4%	6.8%
2.30	1	1.7%	1.7%	8.5%
2.37	1	1.7%	1.7%	10.2%
2.44	1	1.7%	1.7%	11.9%
2.45	1	1.7%	1.7%	13.6%
2.50	1	1.7%	1.7%	15.3%
2.59	1	1.7%	1.7%	16.9%
3.10	1	1.7%	1.7%	18.6%
3.20	1	1.7%	1.7%	20.3%
3.31	1	1.7%	1.7%	22.0%
3.79	1	1.7%	1.7%	23.7%
4.00	1	1.7%	1.7%	25.4%
4.19	2	3.3%	3.4%	28.8%
4.40	3	5.0%	5.1%	33.9%
4.48	1	1.7%	1.7%	35.6%
4.50	4	6.7%	6.8%	42.4%
4.52	1	1.7%	1.7%	44.1%
4.59	1	1.7%	1.7%	45.8%
4.60	4	6.7%	6.8%	52.5%
4.68	1	1.7%	1.7%	54.2%
4.73	2	3.3%	3.4%	57.6%
4.74	1	1.7%	1.7%	59.3%
4.84	1	1.7%	1.7%	61.0%
4.97	1	1.7%	1.7%	62.7%
5.00	1	1.7%	1.7%	64.4%
5.10	3	5.0%	5.1%	69.5%
5.15	1	1.7%	1.7%	71.2%
5.16	1	1.7%	1.7%	72.9%
5.20	1	1.7%	1.7%	74.6%
5.22	1	1.7%	1.7%	76.3%
5.25	2	3.3%	3.4%	79.7%
5.29	1	1.7%	1.7%	81.4%
5.30	1	1.7%	1.7%	83.1%
5.40	2	3.3%	3.4%	86.4%
5.45	2	3.3%	3.4%	89.8%
5.56	1	1.7%	1.7%	91.5%
5.59	1	1.7%	1.7%	93.2%
5.60	1	1.7%	1.7%	94.9%
5.70	1	1.7%	1.7%	96.6%
5.77	1	1.7%	1.7%	98.3%
5.90	1	1.7%	1.7%	100.0%
Missing .	1	1.7%		
Total	60	100.0%		

**ECERS Preschool Classroom**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.41	1	1.7%	3.4%	3.4%
1.94	1	1.7%	3.4%	6.9%
2.36	1	1.7%	3.4%	10.3%
2.54	1	1.7%	3.4%	13.8%
2.61	1	1.7%	3.4%	17.2%
2.75	1	1.7%	3.4%	20.7%

	Frequency	Percent	Valid Percent	Cumulative Percent
2.94	1	1.7%	3.4%	24.1%
3.90	2	3.3%	6.9%	31.0%
3.91	1	1.7%	3.4%	34.5%
3.94	1	1.7%	3.4%	37.9%
4.00	1	1.7%	3.4%	41.4%
4.10	1	1.7%	3.4%	44.8%
4.30	1	1.7%	3.4%	48.3%
4.32	1	1.7%	3.4%	51.7%
4.40	1	1.7%	3.4%	55.2%
4.43	1	1.7%	3.4%	58.6%
4.50	1	1.7%	3.4%	62.1%
4.70	1	1.7%	3.4%	65.5%
4.74	1	1.7%	3.4%	69.0%
4.80	1	1.7%	3.4%	72.4%
4.82	1	1.7%	3.4%	75.9%
5.00	2	3.3%	6.9%	82.8%
5.06	1	1.7%	3.4%	86.2%
5.26	1	1.7%	3.4%	89.7%
5.40	1	1.7%	3.4%	93.1%
5.50	1	1.7%	3.4%	96.6%
6.00	1	1.7%	3.4%	100.0%
Missing	.	31	51.7%	
Total		60	100.0%	

**QIM Inf/Todd Classroom**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	13.00	1	1.7%	1.7%
	31.00	2	3.3%	5.1%
	33.00	2	3.3%	8.5%
	38.00	2	3.3%	11.9%
	39.00	1	1.7%	13.6%
	41.00	2	3.3%	16.9%
	42.00	4	6.7%	23.7%
	44.00	1	1.7%	25.4%
	45.00	3	5.0%	30.5%
	47.00	1	1.7%	32.2%
	48.00	3	5.0%	37.3%
	50.00	4	6.7%	44.1%
	52.00	1	1.7%	45.8%
	53.00	2	3.3%	49.2%
	55.00	2	3.3%	52.5%
	59.00	2	3.3%	55.9%
	63.00	3	5.0%	61.0%
	65.00	1	1.7%	62.7%
	66.00	2	3.3%	66.1%
	67.00	1	1.7%	67.8%
	69.00	1	1.7%	69.5%
	70.00	1	1.7%	71.2%
	72.00	5	8.3%	79.7%
	73.00	1	1.7%	81.4%
	75.00	3	5.0%	86.4%
	78.00	2	3.3%	89.8%
	81.00	1	1.7%	91.5%
	84.00	1	1.7%	93.2%
	88.00	2	3.3%	96.6%
	91.00	1	1.7%	98.3%
	100.00	1	1.7%	100.0%
Missing	.	1	1.7%	
Total		60	100.0%	

**QIM Preschool Classroom**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25.00	1	1.7%	3.3%
	29.00	1	1.7%	6.7%
	31.00	1	1.7%	10.0%
	33.00	1	1.7%	13.3%

	Frequency	Percent	Valid Percent	Cumulative Percent
39.00	2	3.3%	6.7%	20.0%
42.00	2	3.3%	6.7%	26.7%
44.00	1	1.7%	3.3%	30.0%
46.00	1	1.7%	3.3%	33.3%
49.00	1	1.7%	3.3%	36.7%
50.00	1	1.7%	3.3%	40.0%
53.00	1	1.7%	3.3%	43.3%
54.00	1	1.7%	3.3%	46.7%
56.00	2	3.3%	6.7%	53.3%
57.00	1	1.7%	3.3%	56.7%
61.00	1	1.7%	3.3%	60.0%
63.00	3	5.0%	10.0%	70.0%
66.00	1	1.7%	3.3%	73.3%
67.00	1	1.7%	3.3%	76.7%
68.00	1	1.7%	3.3%	80.0%
71.00	1	1.7%	3.3%	83.3%
74.00	1	1.7%	3.3%	86.7%
78.00	1	1.7%	3.3%	90.0%
89.00	1	1.7%	3.3%	93.3%
92.00	1	1.7%	3.3%	96.7%
100.00	1	1.7%	3.3%	100.0%
Missing .	30	50.0%		
Total	60	100.0%		

**Regulatory Compliance**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	12	20.0%	21.4%	21.4%
1.00	12	20.0%	21.4%	42.9%
3.00	12	20.0%	21.4%	64.3%
4.00	10	16.7%	17.9%	82.1%
6.00	2	3.3%	3.6%	85.7%
7.00	4	6.7%	7.1%	92.9%
8.00	2	3.3%	3.6%	96.4%
13.00	2	3.3%	3.6%	100.0%
Missing .	4	6.7%		
Total	60	100.0%		

**RCS**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	18	30.0%	30.0%	30.0%
3.00	22	36.7%	36.7%	66.7%
5.00	12	20.0%	20.0%	86.7%
7.00	8	13.3%	13.3%	100.0%
Total	60	100.0%		

**CPQI Inf/Todd Best Pred**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	1	1.7%	1.7%	1.7%
9.00	6	10.0%	10.2%	11.9%
10.00	1	1.7%	1.7%	13.6%
13.00	1	1.7%	1.7%	15.3%
18.00	5	8.3%	8.5%	23.7%
27.00	8	13.3%	13.6%	37.3%
30.00	1	1.7%	1.7%	39.0%
36.00	4	6.7%	6.8%	45.8%
38.00	1	1.7%	1.7%	47.5%
45.00	3	5.0%	5.1%	52.5%
46.00	1	1.7%	1.7%	54.2%
50.00	3	5.0%	5.1%	59.3%
54.00	2	3.3%	3.4%	62.7%
55.00	3	5.0%	5.1%	67.8%
56.00	1	1.7%	1.7%	69.5%
63.00	2	3.3%	3.4%	72.9%
64.00	4	6.7%	6.8%	79.7%
73.00	4	6.7%	6.8%	86.4%

	Frequency	Percent	Valid Percent	Cumulative Percent
75.00	1	1.7%	1.7%	88.1%
82.00	2	3.3%	3.4%	91.5%
88.00	1	1.7%	1.7%	93.2%
90.00	2	3.3%	3.4%	96.6%
91.00	1	1.7%	1.7%	98.3%
100.00	1	1.7%	1.7%	100.0%
Missing .	1	1.7%		
Total	60	100.0%		

**SKECPQI Preschool Best Predictor**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 9.00	2	3.3%	6.7%	6.7%
10.00	1	1.7%	3.3%	10.0%
18.00	4	6.7%	13.3%	23.3%
25.00	1	1.7%	3.3%	26.7%
27.00	2	3.3%	6.7%	33.3%
36.00	2	3.3%	6.7%	40.0%
45.00	2	3.3%	6.7%	46.7%
50.00	1	1.7%	3.3%	50.0%
55.00	2	3.3%	6.7%	56.7%
56.00	1	1.7%	3.3%	60.0%
57.00	1	1.7%	3.3%	63.3%
63.00	2	3.3%	6.7%	70.0%
64.00	2	3.3%	6.7%	76.7%
73.00	1	1.7%	3.3%	80.0%
81.00	1	1.7%	3.3%	83.3%
82.00	1	1.7%	3.3%	86.7%
91.00	1	1.7%	3.3%	90.0%
100.00	3	5.0%	10.0%	100.0%
Missing .	30	50.0%		
Total	60	100.0%		

**Infant/Toddler Scale**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.25	2	3.3%	4.2%	4.2%
1.31	2	3.3%	4.2%	8.3%
1.56	1	1.7%	2.1%	10.4%
1.63	2	3.3%	4.2%	14.6%
1.69	4	6.7%	8.3%	22.9%
1.74	1	1.7%	2.1%	25.0%
1.81	2	3.3%	4.2%	29.2%
1.82	1	1.7%	2.1%	31.3%
1.88	1	1.7%	2.1%	33.3%
1.94	3	5.0%	6.3%	39.6%
2.00	1	1.7%	2.1%	41.7%
2.06	1	1.7%	2.1%	43.8%
2.13	2	3.3%	4.2%	47.9%
2.19	2	3.3%	4.2%	52.1%
2.31	1	1.7%	2.1%	54.2%
2.38	1	1.7%	2.1%	56.3%
2.50	1	1.7%	2.1%	58.3%
2.61	1	1.7%	2.1%	60.4%
2.63	2	3.3%	4.2%	64.6%
2.69	1	1.7%	2.1%	66.7%
2.78	1	1.7%	2.1%	68.8%
2.81	1	1.7%	2.1%	70.8%
2.88	6	10.0%	12.5%	83.3%
2.94	1	1.7%	2.1%	85.4%
3.00	2	3.3%	4.2%	89.6%
3.13	2	3.3%	4.2%	93.8%
3.25	1	1.7%	2.1%	95.8%
3.38	1	1.7%	2.1%	97.9%
3.64	1	1.7%	2.1%	100.0%
Missing .	12	20.0%		
Total	60	100.0%		

**Preschool Scale**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.17	1	1.7%	4.2%	4.2%
1.22	1	1.7%	4.2%	8.3%
1.33	1	1.7%	4.2%	12.5%
1.56	2	3.3%	8.3%	20.8%
1.67	1	1.7%	4.2%	25.0%
1.78	1	1.7%	4.2%	29.2%
1.83	1	1.7%	4.2%	33.3%
1.94	1	1.7%	4.2%	37.5%
2.11	1	1.7%	4.2%	41.7%
2.17	1	1.7%	4.2%	45.8%
2.22	2	3.3%	8.3%	54.2%
2.28	1	1.7%	4.2%	58.3%
2.44	1	1.7%	4.2%	62.5%
2.50	1	1.7%	4.2%	66.7%
2.63	1	1.7%	4.2%	70.8%
2.67	1	1.7%	4.2%	75.0%
2.72	1	1.7%	4.2%	79.2%
2.83	1	1.7%	4.2%	83.3%
2.94	2	3.3%	8.3%	91.7%
3.56	1	1.7%	4.2%	95.8%
3.67	1	1.7%	4.2%	100.0%
Missing .	36	60.0%		
Total	60	100.0%		

**Dichotomy Full+Sub vs Not**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	24	40.0%	42.9%	42.9%
1.00	32	53.3%	57.1%	100.0%
Missing .	4	6.7%		
Total	60	100.0%		

**QIM ITERS**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	1	1.7%	2.0%	2.0%
1.50	11	18.3%	22.4%	24.5%
2.00	12	20.0%	24.5%	49.0%
2.50	3	5.0%	6.1%	55.1%
3.00	2	3.3%	4.1%	59.2%
3.50	9	15.0%	18.4%	77.6%
4.00	11	18.3%	22.4%	100.0%
Missing .	11	18.3%		
Total	60	100.0%		

**QIM ECERS1**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	2	3.3%	8.0%	8.0%
1.50	3	5.0%	12.0%	20.0%
2.00	5	8.3%	20.0%	40.0%
2.50	2	3.3%	8.0%	48.0%
3.00	4	6.7%	16.0%	64.0%
3.50	5	8.3%	20.0%	84.0%
4.00	4	6.7%	16.0%	100.0%
Missing .	35	58.3%		
Total	60	100.0%		

**QIM ECERS2**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	4	6.7%	16.0%	16.0%
1.50	8	13.3%	32.0%	48.0%
2.00	4	6.7%	16.0%	64.0%
3.00	1	1.7%	4.0%	68.0%
3.50	2	3.3%	8.0%	76.0%
4.00	6	10.0%	24.0%	100.0%

	Frequency	Percent	Valid Percent	Cumulative Percent
Missing .	35	58.3%		
Total	60	100.0%		

**QIM CIS9IT**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	4	6.7%	8.2%	8.2%
2.00	15	25.0%	30.6%	38.8%
3.00	12	20.0%	24.5%	63.3%
4.00	18	30.0%	36.7%	100.0%
Missing .	11	18.3%		
Total	60	100.0%		

**QIM CIS10IT**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	3	5.0%	6.1%	6.1%
2.00	15	25.0%	30.6%	36.7%
3.00	10	16.7%	20.4%	57.1%
4.00	21	35.0%	42.9%	100.0%
Missing .	11	18.3%		
Total	60	100.0%		

**QIM CIS9P**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	2	3.3%	8.0%	8.0%
2.00	10	16.7%	40.0%	48.0%
3.00	7	11.7%	28.0%	76.0%
4.00	6	10.0%	24.0%	100.0%
Missing .	35	58.3%		
Total	60	100.0%		

**QIM CIS10P**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	2	3.3%	8.0%	8.0%
2.00	9	15.0%	36.0%	44.0%
3.00	8	13.3%	32.0%	76.0%
4.00	6	10.0%	24.0%	100.0%
Missing .	35	58.3%		
Total	60	100.0%		

**IT1**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	14	23.3%	29.2%	29.2%
20.00	1	1.7%	2.1%	31.3%
25.00	3	5.0%	6.3%	37.5%
33.00	6	10.0%	12.5%	50.0%
40.00	1	1.7%	2.1%	52.1%
50.00	13	21.7%	27.1%	79.2%
66.00	2	3.3%	4.2%	83.3%
67.00	1	1.7%	2.1%	85.4%
100.00	7	11.7%	14.6%	100.0%
Missing .	12	20.0%		
Total	60	100.0%		

**IT3**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	42	70.0%	84.0%	84.0%
60.00	1	1.7%	2.0%	86.0%
70.00	1	1.7%	2.0%	88.0%
100.00	6	10.0%	12.0%	100.0%
Missing .	10	16.7%		
Total	60	100.0%		

**IT4**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	3	5.0%	6.1%	6.1%
33.00	6	10.0%	12.2%	18.4%
66.00	1	1.7%	2.0%	20.4%
67.00	3	5.0%	6.1%	26.5%
100.00	36	60.0%	73.5%	100.0%
Missing .	11	18.3%		
Total	60	100.0%		

**IT5**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	25	41.7%	52.1%	52.1%
1.00	11	18.3%	22.9%	75.0%
2.00	10	16.7%	20.8%	95.8%
4.00	2	3.3%	4.2%	100.0%
Missing .	12	20.0%		
Total	60	100.0%		

**PS1**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	9	15.0%	36.0%	36.0%
25.00	3	5.0%	12.0%	48.0%
33.00	2	3.3%	8.0%	56.0%
50.00	6	10.0%	24.0%	80.0%
66.00	1	1.7%	4.0%	84.0%
67.00	2	3.3%	8.0%	92.0%
100.00	2	3.3%	8.0%	100.0%
Missing .	35	58.3%		
Total	60	100.0%		

**PS3**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	22	36.7%	88.0%	88.0%
70.00	1	1.7%	4.0%	92.0%
100.00	2	3.3%	8.0%	100.0%
Missing .	35	58.3%		
Total	60	100.0%		

**PS4**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	1	1.7%	4.0%	4.0%
33.00	4	6.7%	16.0%	20.0%
66.00	1	1.7%	4.0%	24.0%
67.00	1	1.7%	4.0%	28.0%
100.00	18	30.0%	72.0%	100.0%
Missing .	35	58.3%		
Total	60	100.0%		

**PS5**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	14	23.3%	56.0%	56.0%
1.00	5	8.3%	20.0%	76.0%
2.00	5	8.3%	20.0%	96.0%
4.00	1	1.7%	4.0%	100.0%
Missing .	35	58.3%		
Total	60	100.0%		

**RCS 1-3: H, M, L**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	18	30.0%	30.0%	30.0%
3.00	22	36.7%	36.7%	66.7%



	Frequency	Percent	Valid Percent	Cumulative Percent
5.00	20	33.3%	33.3%	100.0%
Total	60	100.0%		

**Model Summary (ITERS Inf/Todd Classroom)**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.59	.34	.33	.91

**ANOVA (ITERS Inf/Todd Classroom)**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	24.16	1	24.16	29.37	.000
Residual	46.07	56	.82		
Total	70.24	57			

**Coefficients (ITERS Inf/Todd Classroom)**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	2.28	.41	.00	5.59	.000	1.46	3.10		
QIM Inf/Todd Classroom	.04	.01	.59	5.42	.000	.02	.05	.00	8.1E+010

**Coefficient Correlations (ITERS Inf/Todd Classroom)**

	QIM Inf/Todd Classroom
Covariances QIM Inf/Todd Classroom	.17

**Model Summary (ITERS Inf/Todd Classroom)**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.56	.31	.30	.93

**ANOVA (ITERS Inf/Todd Classroom)**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	21.95	1	21.95	25.46	.000
Residual	48.29	56	.86		
Total	70.24	57			

**Coefficients (ITERS Inf/Todd Classroom)**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	3.31	.25	.00	13.41	.000	2.82	3.81		
CPQI Inf/Todd Best Pred	.02	.00	.56	5.05	.000	.01	.03	1.00	1.00

**Coefficient Correlations (ITERS Inf/Todd Classroom)**

		CPQI Inf/Todd Best Pred
Covariances	CPQI Inf/Todd Best Pred	.06

**Model Summary (ITERS Inf/Todd Classroom)**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.46	.21	.20	.98

**ANOVA (ITERS Inf/Todd Classroom)**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	15.09	1	15.09	15.59	.000
Residual	55.18	57	.97		
Total	70.28	58			

**Coefficients (ITERS Inf/Todd Classroom)**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	3.54	.25	.00	14.08	.000	3.03	4.04		
RCS	.25	.06	.46	3.95	.000	.12	.38	.00	+Infinit

**Coefficient Correlations (ITERS Inf/Todd Classroom)**

	RCS
Covariances	RCS .06

**Model Summary (ECERS Preschool Classroom)**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.68	.47	.45	.85

**ANOVA (ECERS Preschool Classroom)**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	16.99	1	16.99	23.79	.000
Residual	19.28	27	.71		
Total	36.27	28			

**Coefficients (ECERS Preschool Classroom)**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	1.75	.50	.00	3.47	.002	.71	2.78		
QIM Preschool Classroom	.04	.01	.68	4.88	.000	.02	.06	.79	1.27

**Coefficient Correlations (ECERS Preschool Classroom)**

	QIM Preschool Classroom
Covariances	QIM Preschool Classroom .25

**Model Summary (ECERS Preschool Classroom)**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.64	.41	.39	.89

**ANOVA (ECERS Preschool Classroom)**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	15.00	1	15.00	19.05	.000
Residual	21.27	27	.79		
Total	36.27	28			

**Coefficients (ECERS Preschool Classroom)**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	2.78	.34	.00	8.11	.000	2.08	3.48		
SKECPQI Preschool Best Predictor	.03	.01	.64	4.36	.000	.01	.04	.79	1.27

**Coefficient Correlations (ECERS Preschool Classroom)**

		SKECPQI Preschool Best Predictor
Covariances	SKECPQI Preschool Best Predictor	.12

**Model Summary (ECERS Preschool Classroom)**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.76	.58	.56	.75

**ANOVA (ECERS Preschool Classroom)**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	20.89	1	20.89	36.69	.000
Residual	15.38	27	.57		
Total	36.27	28			

**Coefficients (ECERS Preschool Classroom)**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	2.69	.27	.00	10.01	.000	2.14	3.25		
RCS	.42	.07	.76	6.06	.000	.28	.56	.59	1.71

**Coefficient Correlations (ECERS Preschool Classroom)**

		RCS
Covariances	RCS	.07

**Descriptives**

	RCS	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
ECERS Preschool Classroom	1.00	9	2.75	.90	.30	2.06	3.45	1.41	4.30
	3.00	10	4.39	.51	.16	4.02	4.76	3.90	5.50
	5.00	6	4.90	.66	.27	4.21	5.59	4.10	6.00
	7.00	4	5.12	.19	.10	4.81	5.42	5.00	5.40
	Total	29	4.09	1.14	.21	3.65	4.52	1.41	6.00

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
ECERS Preschool Classroom	Between Groups	25.08	3	8.36	18.68	.000
	Within Groups	11.19	25	.45		
	Total	36.27	28			

**Descriptives**

	RCS	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
ITERS Inf/Todd Classroom	1.00	17	3.41	1.19	.29	2.80	4.02	2.16	5.45
	3.00	22	4.72	.77	.16	4.38	5.07	2.50	5.77
	5.00	12	4.84	.94	.27	4.25	5.44	2.14	5.90
	7.00	8	4.88	.61	.22	4.37	5.38	3.79	5.60
	Total	59	4.39	1.10	.14	4.10	4.68	2.14	5.90

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
ITERS Inf/Todd Classroom	Between Groups	23.07	3	7.69	8.96	.000
	Within Groups	47.21	55	.86		
	Total	70.28	58			

**Descriptives**

	RCS	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
QIM Inf/Todd Classroom	1.00	17	46.47	14.56	3.53	38.98	53.96	31.00	78.00
	3.00	22	57.05	16.97	3.62	49.52	64.57	13.00	88.00
	5.00	12	60.92	14.32	4.13	51.82	70.01	42.00	91.00
	7.00	8	78.00	12.14	4.29	67.85	88.15	63.00	100.00
	Total	59	57.63	17.76	2.31	53.00	62.26	13.00	100.00

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
QIM Inf/Todd Classroom	Between Groups	5573.69	3	1857.90	8.03	.000
	Within Groups	12728.11	55	231.42		
	Total	18301.80	58			

**Descriptives**

	RCS	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
QIM Preschool Classroom	1.00	9	44.00	12.36	4.12	34.50	53.50	29.00	63.00
	3.00	11	54.73	16.08	4.85	43.93	65.53	25.00	78.00

RCS	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
5.00	6	64.00	15.58	6.36	47.65	80.35	49.00	89.00
7.00	4	79.50	19.33	9.67	48.74	110.26	63.00	100.00
Total	30	56.67	18.60	3.40	49.72	63.61	25.00	100.00

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
QIM Preschool Classroom	Between Groups	3893.48	3	1297.83	5.49	.005
	Within Groups	6141.18	26	236.20		
	Total	10034.67	29			

**Descriptives**

RCS	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
Regulatory Compliance	1.00	18	4.22	3.99	.94	2.24	6.21	.00	13.00
	3.00	20	3.90	2.02	.45	2.95	4.85	1.00	8.00
	5.00	10	1.60	1.26	.40	.70	2.50	1.00	4.00
	7.00	8	.00	.00	.00	.00	.00	.00	.00
Total	56	3.04	3.01	.40		2.23	3.84	.00	13.00

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Regulatory Compliance	Between Groups	134.62	3	44.87	6.42	.001
	Within Groups	363.31	52	6.99		
	Total	497.93	55			



		ITERS Inf/Todd Classroom	ECERS Preschool Classroom	QIM Inf/ Todd Classroom	QIM Preschool Classroom	Regulatory Compliance	RCS	CPQI Inf/ Todd Best Pred	SKECPQI Preschool Best Predictor	Infant/ Toddler Scale	Preschool Scale
vs Not	Sig. (2- tailed)	.732	.672	.343	.312	.000	.000	.146	.477	.797	.826
	N	55	27	55	28	56	56	55	28	44	22
QIM ITERS	Pearson Correlation	.544	.368	.736	.592	.078	.268	.527	.605	.724	.571
	Sig. (2- tailed)	.000	.077	.000	.002	.610	.063	.000	.001	.000	.004
	N	48	24	49	25	45	49	49	25	48	24
QIM ECERS1	Pearson Correlation	.621	.741	.689	.867	-.223	.653	.677	.744	.679	.865
	Sig. (2- tailed)	.001	.000	.000	.000	.307	.000	.000	.000	.000	.000
	N	25	24	25	25	23	25	25	25	24	24
QIM ECERS2	Pearson Correlation	.395	.475	.610	.811	-.211	.406	.643	.752	.588	.807
	Sig. (2- tailed)	.050	.019	.001	.000	.333	.044	.001	.000	.003	.000
	N	25	24	25	25	23	25	25	25	24	24
QIM CIS9IT	Pearson Correlation	.762	.550	.787	.667	.183	.367	.603	.731	.780	.661
	Sig. (2- tailed)	.000	.005	.000	.000	.229	.010	.000	.000	.000	.000
	N	48	24	49	25	45	49	49	25	48	24
QIM CIS10IT	Pearson Correlation	.778	.628	.789	.717	.207	.339	.569	.733	.782	.704
	Sig. (2- tailed)	.000	.001	.000	.000	.172	.017	.000	.000	.000	.000
	N	48	24	49	25	45	49	49	25	48	24
QIM CIS9P	Pearson Correlation	.643	.642	.561	.778	-.219	.628	.455	.590	.553	.780
	Sig. (2- tailed)	.001	.001	.004	.000	.317	.001	.022	.002	.005	.000
	N	25	24	25	25	23	25	25	25	24	24
QIM CIS10P	Pearson Correlation	.608	.665	.527	.757	-.252	.585	.393	.524	.571	.788
	Sig. (2- tailed)	.001	.000	.007	.000	.245	.002	.052	.007	.004	.000
	N	25	24	25	25	23	25	25	25	24	24
IT3	Pearson Correlation	.187	.435	.568	.565	.148	.405	.524	.490	.534	.545
	Sig. (2- tailed)	.198	.034	.000	.003	.326	.004	.000	.013	.000	.006
	N	49	24	49	25	46	50	49	25	48	24
PS3	Pearson Correlation	.185	.418	.476	.585	.102	.426	.401	.550	.520	.597
	Sig. (2- tailed)	.375	.042	.016	.002	.644	.034	.047	.004	.009	.002
	N	25	24	25	25	23	25	25	25	24	24
IT1	Pearson Correlation	.300	.048	.559	.222	.115	.036	.386	.230	.595	.246
	Sig. (2- tailed)	.040	.829	.000	.296	.458	.810	.007	.280	.000	.259
	N	47	23	48	24	44	48	48	24	47	23
PS1	Pearson Correlation	.500	.348	.538	.407	.316	.093	.562	.406	.526	.411
	Sig. (2- tailed)	.011	.096	.006	.043	.141	.657	.003	.044	.008	.046
	N	25	24	25	25	23	25	25	25	24	24
IT5	Pearson Correlation	.073	.306	.442	.507	-.086	.438	.491	.446	.426	.491
	Sig. (2- tailed)	.620	.145	.002	.010	.578	.002	.000	.025	.003	.015
	N	48	24	48	25	44	48	48	25	47	24
PS5	Pearson Correlation	.200	.306	.532	.507	-.084	.476	.501	.446	.506	.491
	Sig. (2- tailed)	.338	.145	.006	.010	.702	.016	.011	.025	.012	.015
	N	25	24	25	25	23	25	25	25	24	24
IT4	Pearson Correlation	.454	.415	.542	.560	-.051	.423	.480	.486	.538	.547
	Sig. (2- tailed)	.001	.044	.000	.004	.738	.002	.000	.014	.000	.006
	N	48	24	49	25	45	49	49	25	48	24

		ITERS Inf/Todd Classroom	ECERS Preschool Classroom	QIM Inf/ Todd Classroom	QIM Preschool Classroom	Regulatory Compliance	RCS	CPQI Inf/ Todd Best Pred	SKECPQI Preschool Best Predictor	Infant/ Toddler Scale	Preschool Scale
PS4	Pearson Correlation	.527	.340	.497	.553	-.054	.414	.574	.437	.482	.540
	Sig. (2-tailed)	.007	.105	.012	.004	.806	.039	.003	.029	.017	.006
	N	25	24	25	25	23	25	25	25	24	24
RCS 1-3: H, M, L	Pearson Correlation	.510	.800	.477	.572	-.448	.955	.455	.552	.486	.646
	Sig. (2-tailed)	.000	.000	.000	.001	.001	.000	.000	.002	.000	.001
	N	59	29	59	30	56	60	59	30	48	24

		Dichotomy Full+Sub vs Not	QIM ITERS	QIM ECERS1	QIM ECERS2	QIM CIS9IT	QIM CIS10IT	QIM CIS9P	QIM CIS10P	IT3	PS3	IT1	PS1
ITERS Inf/ Todd Classroom	Pearson Correlation	-.047	.544	.621	.395	.762	.778	.643	.608	.187	.185	.300	.500
	Sig. (2-tailed)	.732	.000	.001	.050	.000	.000	.001	.001	.198	.375	.040	.011
	N	55	48	25	25	48	48	25	25	49	25	47	25
ECERS Preschool Classroom	Pearson Correlation	-.085	.368	.741	.475	.550	.628	.642	.665	.435	.418	.048	.348
	Sig. (2-tailed)	.672	.077	.000	.019	.005	.001	.001	.000	.034	.042	.829	.096
	N	27	24	24	24	24	24	24	24	24	24	23	24
QIM Inf/ Todd Classroom	Pearson Correlation	-.130	.736	.689	.610	.787	.789	.561	.527	.568	.476	.559	.538
	Sig. (2-tailed)	.343	.000	.000	.001	.000	.000	.004	.007	.000	.016	.000	.006
	N	55	49	25	25	49	49	25	25	49	25	48	25
QIM Preschool Classroom	Pearson Correlation	-.198	.592	.867	.811	.667	.717	.778	.757	.565	.585	.222	.407
	Sig. (2-tailed)	.312	.002	.000	.000	.000	.000	.000	.000	.003	.002	.296	.043
	N	28	25	25	25	25	25	25	25	25	25	24	25
Regulatory Compliance	Pearson Correlation	.736	.078	-.223	-.211	.183	.207	-.219	-.252	.148	.102	.115	.316
	Sig. (2-tailed)	.000	.610	.307	.333	.229	.172	.317	.245	.326	.644	.458	.141
	N	56	45	23	23	45	45	23	23	46	23	44	23
RCS	Pearson Correlation	-.513	.268	.653	.406	.367	.339	.628	.585	.405	.426	.036	.093
	Sig. (2-tailed)	.000	.063	.000	.044	.010	.017	.001	.002	.004	.034	.810	.657
	N	56	49	25	25	49	49	25	25	50	25	48	25
CPQI Inf/ Todd Best Pred	Pearson Correlation	-.199	.527	.677	.643	.603	.569	.455	.393	.524	.401	.386	.562
	Sig. (2-tailed)	.146	.000	.000	.001	.000	.000	.022	.052	.000	.047	.007	.003
	N	55	49	25	25	49	49	25	25	49	25	48	25
SKECPQI Preschool Best Predictor	Pearson Correlation	-.140	.605	.744	.752	.731	.733	.590	.524	.490	.550	.230	.406
	Sig. (2-tailed)	.477	.001	.000	.000	.000	.000	.002	.007	.013	.004	.280	.044
	N	28	25	25	25	25	25	25	25	25	25	24	25
Infant/ Toddler Scale	Pearson Correlation	.040	.724	.679	.588	.780	.782	.553	.571	.534	.520	.595	.526
	Sig. (2-tailed)	.797	.000	.000	.003	.000	.000	.005	.004	.000	.009	.000	.008
	N	44	48	24	24	48	48	24	24	48	24	47	24
Preschool Scale	Pearson Correlation	-.050	.571	.865	.807	.661	.704	.780	.788	.545	.597	.246	.411
	Sig. (2-tailed)	.826	.004	.000	.000	.000	.000	.000	.000	.006	.002	.259	.046
	N	22	24	24	24	24	24	24	24	24	24	23	24
Dichotomy Full+Sub vs Not	Pearson Correlation	1.000	.108	-.140	-.118	.134	.147	-.105	-.110	.070	.016	.105	.368
	Sig. (2-tailed)		.482	.523	.591	.380	.335	.634	.617	.642	.941	.498	.084
	N	56	45	23	23	45	45	23	23	46	23	44	23
QIM ITERS	Pearson Correlation	.108	1.000	.571	.556	.733	.782	.533	.546	.087	-.031	.425	.547





		Dichotomy Full+Sub vs Not	QIM ITERS	QIM ECERS1	QIM ECERS2	QIM CIS9IT	QIM CIS10IT	QIM CIS9P	QIM CIS10P	IT3	PS3	IT1	PS1
RCS 1-3: H, M, L	Pearson Correlation	-.450	.269	.657	.420	.397	.375	.652	.604	.349	.368	.042	.139
	Sig. (2-tailed)	.001	.061	.000	.037	.005	.008	.000	.001	.013	.071	.778	.507
	N	56	49	25	25	49	49	25	25	50	25	48	25
		IT5	PS5	IT4	PS4	RCS 1-3: H, M, L							
ITERS Inf/ Todd Classroom	Pearson Correlation	.073	.200	.454	.527	.510							
	Sig. (2-tailed)	.620	.338	.001	.007	.000							
	N	48	25	48	25	59							
ECERS Preschool Classroom	Pearson Correlation	.306	.306	.415	.340	.800							
	Sig. (2-tailed)	.145	.145	.044	.105	.000							
	N	24	24	24	24	29							
QIM Inf/ Todd Classroom	Pearson Correlation	.442	.532	.542	.497	.477							
	Sig. (2-tailed)	.002	.006	.000	.012	.000							
	N	48	25	49	25	59							
QIM Preschool Classroom	Pearson Correlation	.507	.507	.560	.553	.572							
	Sig. (2-tailed)	.010	.010	.004	.004	.001							
	N	25	25	25	25	30							
Regulatory Compliance	Pearson Correlation	-.086	-.084	-.051	-.054	-.448							
	Sig. (2-tailed)	.578	.702	.738	.806	.001							
	N	44	23	45	23	56							
RCS	Pearson Correlation	.438	.476	.423	.414	.955							
	Sig. (2-tailed)	.002	.016	.002	.039	.000							
	N	48	25	49	25	60							
CPQI Inf/ Todd Best Pred	Pearson Correlation	.491	.501	.480	.574	.455							
	Sig. (2-tailed)	.000	.011	.000	.003	.000							
	N	48	25	49	25	59							
SKECPQI Preschool Best Predictor	Pearson Correlation	.446	.446	.486	.437	.552							
	Sig. (2-tailed)	.025	.025	.014	.029	.002							
	N	25	25	25	25	30							
Infant/ Toddler Scale	Pearson Correlation	.426	.506	.538	.482	.486							
	Sig. (2-tailed)	.003	.012	.000	.017	.000							
	N	47	24	48	24	48							
Preschool Scale	Pearson Correlation	.491	.491	.547	.540	.646							
	Sig. (2-tailed)	.015	.015	.006	.006	.001							
	N	24	24	24	24	24							
Dichotomy Full+Sub vs Not	Pearson Correlation	-.168	-.164	-.190	-.202	-.450							
	Sig. (2-tailed)	.276	.454	.210	.354	.001							
	N	44	23	45	23	56							
QIM ITERS	Pearson Correlation	-.068	-.003	.364	.197	.269							
	Sig. (2-tailed)	.646	.987	.010	.346	.061							
	N	48	25	49	25	49							
QIM ECERS1	Pearson Correlation	.226	.226	.457	.433	.657							

		IT5	PS5	IT4	PS4	RCS 1-3: H, M, L
	Sig. (2-tailed)	.277	.277	.022	.030	.000
	N	25	25	25	25	25
QIM ECERS2	Pearson Correlation	.268	.268	.171	.200	.420
	Sig. (2-tailed)	.196	.196	.413	.338	.037
	N	25	25	25	25	25
QIM CIS9IT	Pearson Correlation	.025	.165	.319	.291	.397
	Sig. (2-tailed)	.865	.432	.025	.159	.005
	N	48	25	49	25	49
QIM CIS10IT	Pearson Correlation	-.040	.079	.355	.325	.375
	Sig. (2-tailed)	.786	.708	.012	.112	.008
	N	48	25	49	25	49
QIM CIS9P	Pearson Correlation	.129	.129	.450	.425	.652
	Sig. (2-tailed)	.539	.539	.024	.034	.000
	N	25	25	25	25	25
QIM CIS10P	Pearson Correlation	.098	.098	.431	.405	.604
	Sig. (2-tailed)	.641	.641	.031	.045	.001
	N	25	25	25	25	25
IT3	Pearson Correlation	.657	.715	.239	.284	.349
	Sig. (2-tailed)	.000	.000	.099	.169	.013
	N	48	25	49	25	50
PS3	Pearson Correlation	.700	.700	.201	.211	.368
	Sig. (2-tailed)	.000	.000	.336	.312	.071
	N	25	25	25	25	25
IT1	Pearson Correlation	.233	.334	.044	-.085	.042
	Sig. (2-tailed)	.115	.111	.765	.693	.778
	N	47	24	48	24	48
PS1	Pearson Correlation	.002	.002	.370	.316	.139
	Sig. (2-tailed)	.991	.991	.069	.124	.507
	N	25	25	25	25	25
IT5	Pearson Correlation	1.000	1.000	.115	.168	.290
	Sig. (2-tailed)		.000	.436	.421	.045
	N	48	25	48	25	48
PS5	Pearson Correlation	1.000	1.000	.119	.168	.339
	Sig. (2-tailed)	.000		.570	.421	.097
	N	25	25	25	25	25
IT4	Pearson Correlation	.115	.119	1.000	.954	.443
	Sig. (2-tailed)	.436	.570		.000	.001
	N	48	25	49	25	49
PS4	Pearson Correlation	.168	.168	.954	1.000	.431
	Sig. (2-tailed)	.421	.421	.000		.032
	N	25	25	25	25	25
RCS 1-3: H, M, L	Pearson Correlation	.290	.339	.443	.431	1.000
	Sig. (2-tailed)	.045	.097	.001	.032	
	N	48	25	49	25	60

**Correlations**

		ITERS Inf/Todd Classroom	QIM Inf/Todd Classroom
ITERS Inf/Todd Classroom	Pearson Correlation	1.000	.587
	Sig. (2-tailed)		.000
	N	59	58
QIM Inf/Todd Classroom	Pearson Correlation	.587	1.000
	Sig. (2-tailed)	.000	
	N	58	59

**Correlations**

		ECERS Preschool Classroom	QIM Preschool Classroom
ECERS Preschool Classroom	Pearson Correlation	1.000	.684
	Sig. (2-tailed)		.000
	N	29	29
QIM Preschool Classroom	Pearson Correlation	.684	1.000
	Sig. (2-tailed)	.000	
	N	29	30

**Correlations**

		ITERS Inf/Todd Classroom	CPQI Inf/Todd Best Pred
ITERS Inf/Todd Classroom	Pearson Correlation	1.000	.559
	Sig. (2-tailed)		.000
	N	59	58
CPQI Inf/Todd Best Pred	Pearson Correlation	.559	1.000
	Sig. (2-tailed)	.000	
	N	58	59

**Correlations**

		ECERS Preschool Classroom	SKECPQI Preschool Best Predictor
ECERS Preschool Classroom	Pearson Correlation	1.000	.643
	Sig. (2-tailed)		.000
	N	29	29
SKECPQI Preschool Best Predictor	Pearson Correlation	.643	1.000
	Sig. (2-tailed)	.000	
	N	29	30

**Correlations**

		QIM Preschool Classroom	SKECPQI Preschool Best Predictor
QIM Preschool Classroom	Pearson Correlation	1.000	.902
	Sig. (2-tailed)		.000
	N	30	30
SKECPQI Preschool Best Predictor	Pearson Correlation	.902	1.000
	Sig. (2-tailed)	.000	
	N	30	30

**Correlations**

		QIM Inf/Todd Classroom	CPQI Inf/Todd Best Pred
QIM Inf/Todd Classroom	Pearson Correlation	1.000	.838
	Sig. (2-tailed)		.000
	N	59	59
CPQI Inf/Todd Best Pred	Pearson Correlation	.838	1.000
	Sig. (2-tailed)	.000	
	N	59	59

**Correlations**

		ITERS Inf/Todd Classroom	Infant/Toddler Scale
ITERS Inf/Todd Classroom	Pearson Correlation	1.000	.656
	Sig. (2-tailed)		.000
	N	59	47
Infant/Toddler Scale	Pearson Correlation	.656	1.000
	Sig. (2-tailed)	.000	
	N	47	48

**Correlations**

		ECERS Preschool Classroom	Preschool Scale
ECERS Preschool Classroom	Pearson Correlation	1.000	.720
	Sig. (2-tailed)		.000
	N	29	23
Preschool Scale	Pearson Correlation	.720	1.000
	Sig. (2-tailed)	.000	
	N	23	24

**Correlations**

		ITERS Inf/Todd Classroom	RCS
ITERS Inf/Todd Classroom	Pearson Correlation	1.000	.463
	Sig. (2-tailed)		.000
	N	59	59
RCS	Pearson Correlation	.463	1.000
	Sig. (2-tailed)	.000	
	N	59	60

**Correlations**

		ECERS Preschool Classroom	RCS
ECERS Preschool Classroom	Pearson Correlation	1.000	.759
	Sig. (2-tailed)		.000
	N	29	29
RCS	Pearson Correlation	.759	1.000
	Sig. (2-tailed)	.000	
	N	29	60

**Correlations**

		RCS	Regulatory Compliance
RCS	Pearson Correlation	1.000	-.492
	Sig. (2-tailed)		.000
	N	60	56
Regulatory Compliance	Pearson Correlation	-.492	1.000
	Sig. (2-tailed)	.000	
	N	56	56

**Correlations**

		Dichotomy Full+Sub vs Not	Regulatory Compliance
Dichotomy Full+Sub vs Not	Pearson Correlation	1.000	.736
	Sig. (2-tailed)		.000
	N	56	56
Regulatory Compliance	Pearson Correlation	.736	1.000
	Sig. (2-tailed)	.000	
	N	56	56

**Correlations**

		RCS	Dichotomy Full+Sub vs Not
RCS	Pearson Correlation	1.000	-.513
	Sig. (2-tailed)		.000
	N	60	56
Dichotomy Full+Sub vs Not	Pearson Correlation	-.513	1.000
	Sig. (2-tailed)	.000	
	N	56	56

**Correlations**

		QIM Inf/Todd Classroom	QIM ITERS
QIM Inf/Todd Classroom	Pearson Correlation	1.000	.736
	Sig. (2-tailed)		.000
	N	59	49
QIM ITERS	Pearson Correlation	.736	1.000
	Sig. (2-tailed)	.000	
	N	49	49

**Correlations**

		QIM Inf/Todd Classroom	QIM CIS9IT
QIM Inf/Todd Classroom	Pearson Correlation	1.000	.787
	Sig. (2-tailed)		.000
	N	59	49
QIM CIS9IT	Pearson Correlation	.787	1.000
	Sig. (2-tailed)	.000	
	N	49	49

**Correlations**

		QIM Inf/Todd Classroom	QIM CIS10IT
QIM Inf/Todd Classroom	Pearson Correlation	1.000	.789
	Sig. (2-tailed)		.000
	N	59	49
QIM CIS10IT	Pearson Correlation	.789	1.000
	Sig. (2-tailed)	.000	
	N	49	49

**Correlations**

		QIM Preschool Classroom	QIM ECERS1
QIM Preschool Classroom	Pearson Correlation	1.000	.867
	Sig. (2-tailed)		.000
	N	30	25
QIM ECERS1	Pearson Correlation	.867	1.000
	Sig. (2-tailed)	.000	
	N	25	25

**Correlations**

		QIM Preschool Classroom	QIM ECERS2
QIM Preschool Classroom	Pearson Correlation	1.000	.811
	Sig. (2-tailed)		.000
	N	30	25
QIM ECERS2	Pearson Correlation	.811	1.000
	Sig. (2-tailed)	.000	
	N	25	25

**Correlations**

		QIM Preschool Classroom	QIM CIS9P
QIM Preschool Classroom	Pearson Correlation	1.000	.778
	Sig. (2-tailed)		.000
	N	30	25
QIM CIS9P	Pearson Correlation	.778	1.000
	Sig. (2-tailed)	.000	
	N	25	25

**Correlations**

		QIM Preschool Classroom	QIM CIS10P
QIM Preschool Classroom	Pearson Correlation	1.000	.757
	Sig. (2-tailed)		.000
	N	30	25
QIM CIS10P	Pearson Correlation	.757	1.000
	Sig. (2-tailed)	.000	
	N	25	25

**Correlations**

		ITERS Inf/Todd Classroom	QIM ITERS
ITERS Inf/Todd Classroom	Pearson Correlation	1.000	.544
	Sig. (2-tailed)		.000
	N	59	48
QIM ITERS	Pearson Correlation	.544	1.000
	Sig. (2-tailed)	.000	
	N	48	49

**Correlations**

		ITERS Inf/Todd Classroom	QIM CIS9IT
ITERS Inf/Todd Classroom	Pearson Correlation	1.000	.762
	Sig. (2-tailed)		.000
	N	59	48
QIM CIS9IT	Pearson Correlation	.762	1.000
	Sig. (2-tailed)	.000	
	N	48	49

**Correlations**

		ITERS Inf/Todd Classroom	QIM CIS10IT
ITERS Inf/Todd Classroom	Pearson Correlation	1.000	.778
	Sig. (2-tailed)		.000
	N	59	48
QIM CIS10IT	Pearson Correlation	.778	1.000
	Sig. (2-tailed)	.000	
	N	48	49

**Correlations**

		ECERS Preschool Classroom	QIM ECERS1
ECERS Preschool Classroom	Pearson Correlation	1.000	.741
	Sig. (2-tailed)		.000
	N	29	24
QIM ECERS1	Pearson Correlation	.741	1.000
	Sig. (2-tailed)	.000	
	N	24	25

**Correlations**

		ECERS Preschool Classroom	QIM ECERS2
ECERS Preschool Classroom	Pearson Correlation	1.000	.475
	Sig. (2-tailed)		.019
	N	29	24
QIM ECERS2	Pearson Correlation	.475	1.000
	Sig. (2-tailed)	.019	
	N	24	25

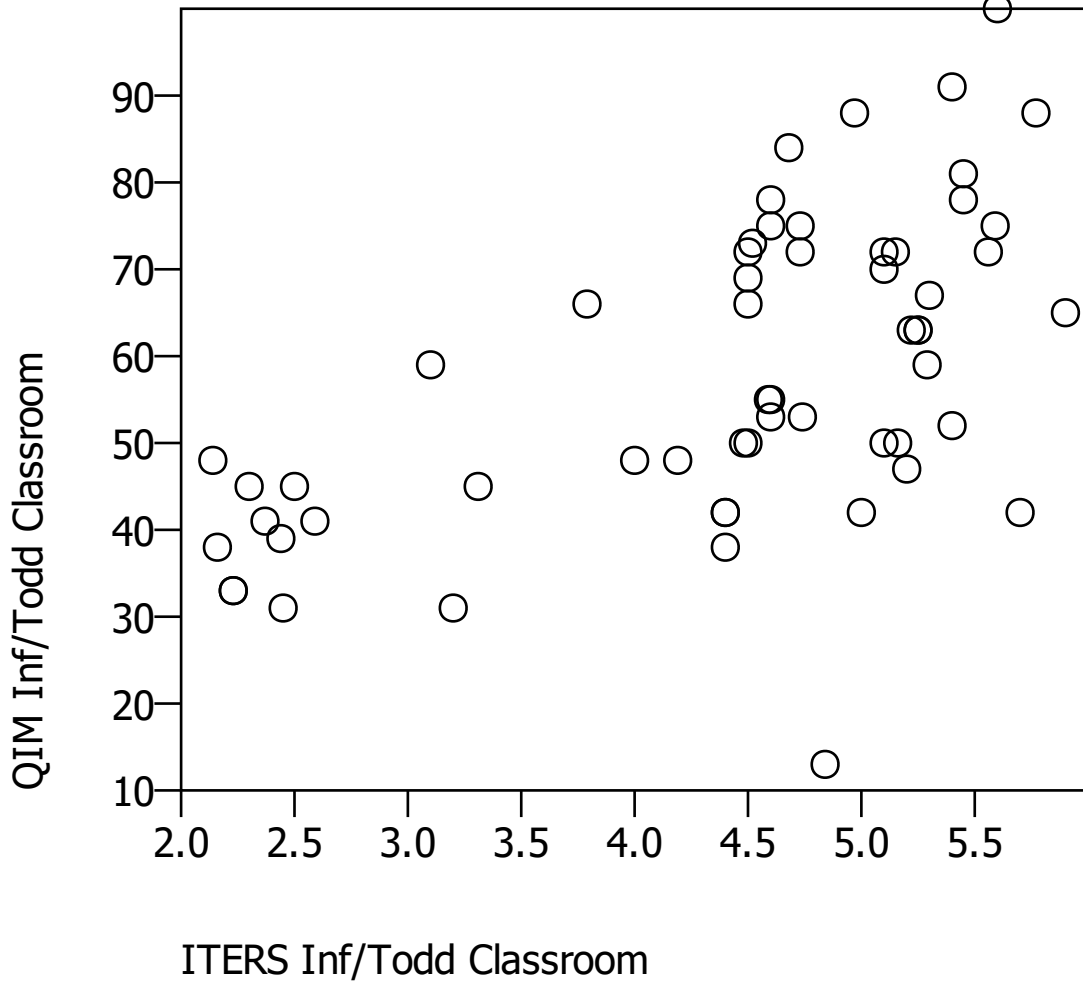
**Correlations**

		ECERS Preschool Classroom	QIM CIS9P
ECERS Preschool Classroom	Pearson Correlation	1.000	.642
	Sig. (2-tailed)		.001
	N	29	24
QIM CIS9P	Pearson Correlation	.642	1.000
	Sig. (2-tailed)	.001	
	N	24	25

**Correlations**

		ECERS Preschool Classroom	QIM CIS10P
ECERS Preschool Classroom	Pearson Correlation	1.000	.665
	Sig. (2-tailed)		.000
	N	29	24
QIM CIS10P	Pearson Correlation	.665	1.000
	Sig. (2-tailed)	.000	
	N	24	25

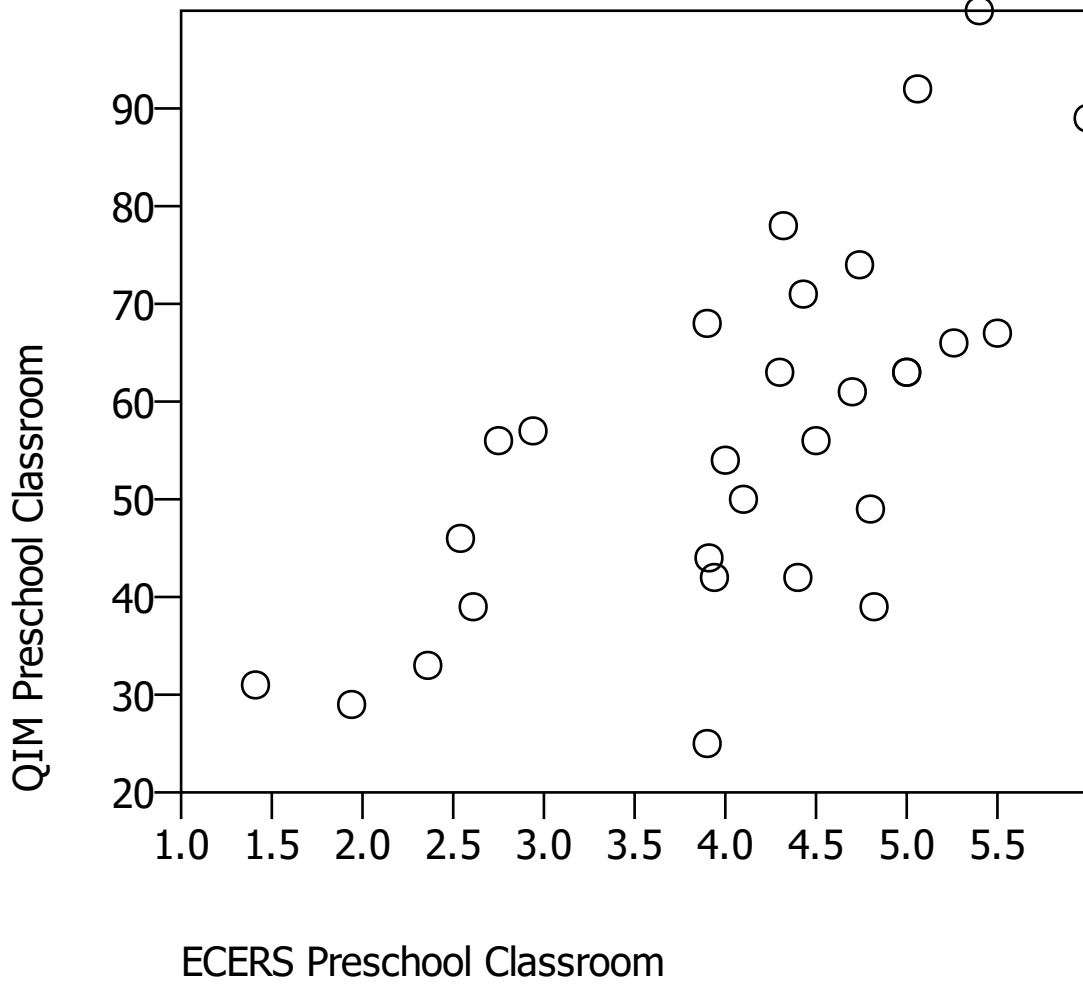
# Scatterplot QIM Inf/Todd Classroom vs. ITERS I



graph/scatterplot=ecers with qimp

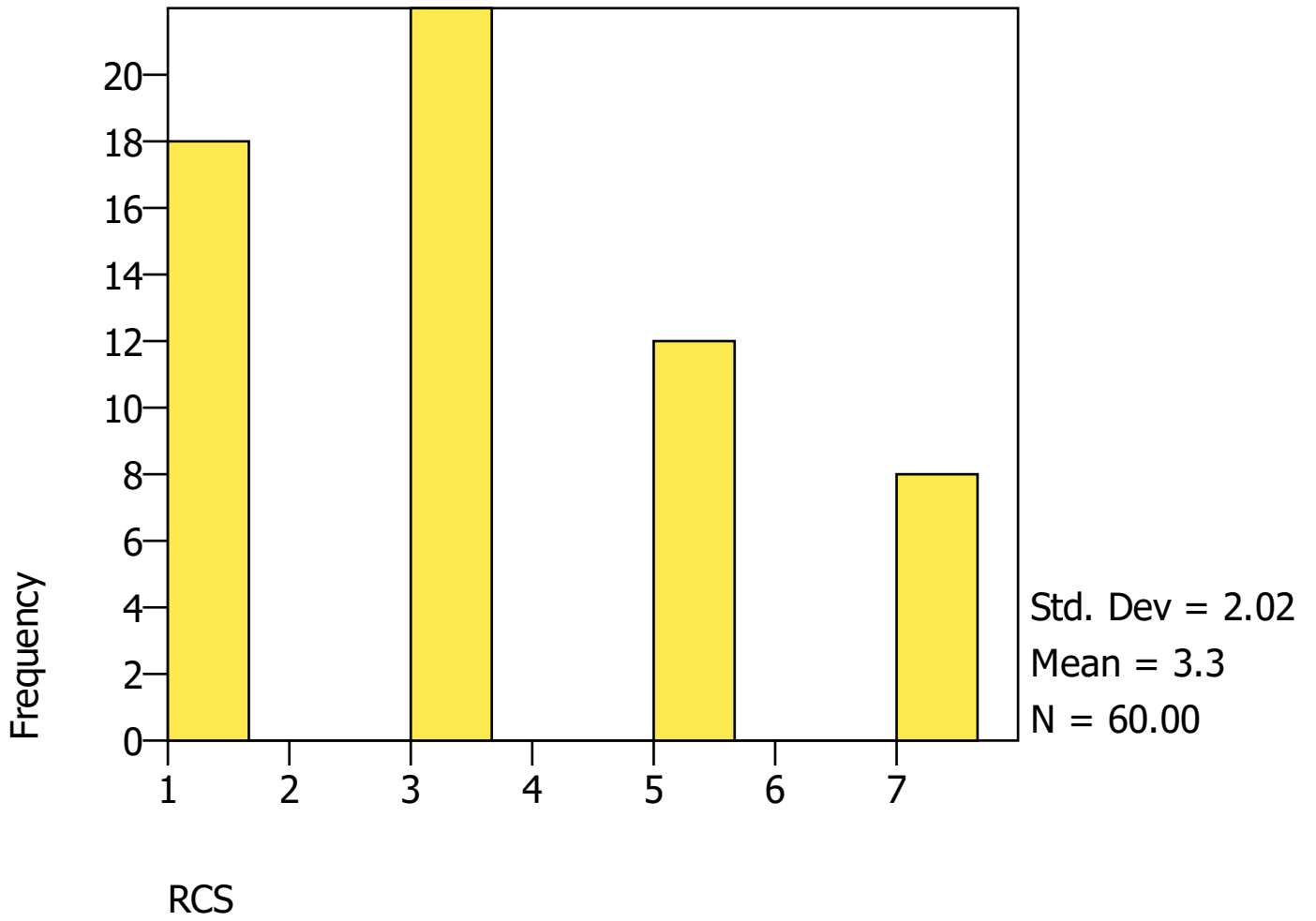


# Scatterplot QIM Preschool Classroom vs. ECERS



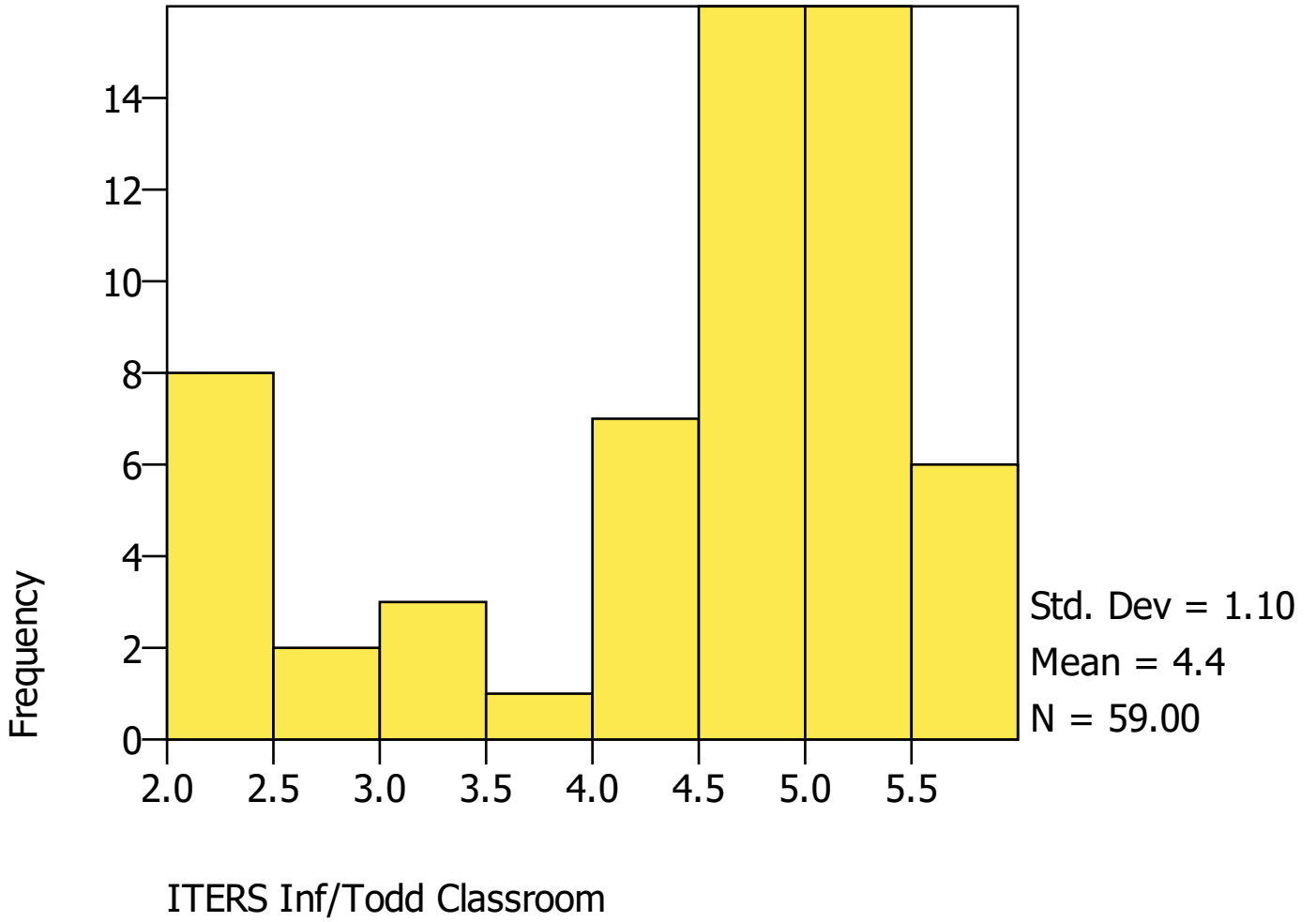
graph/histogram=rank

# HISTOGRAM



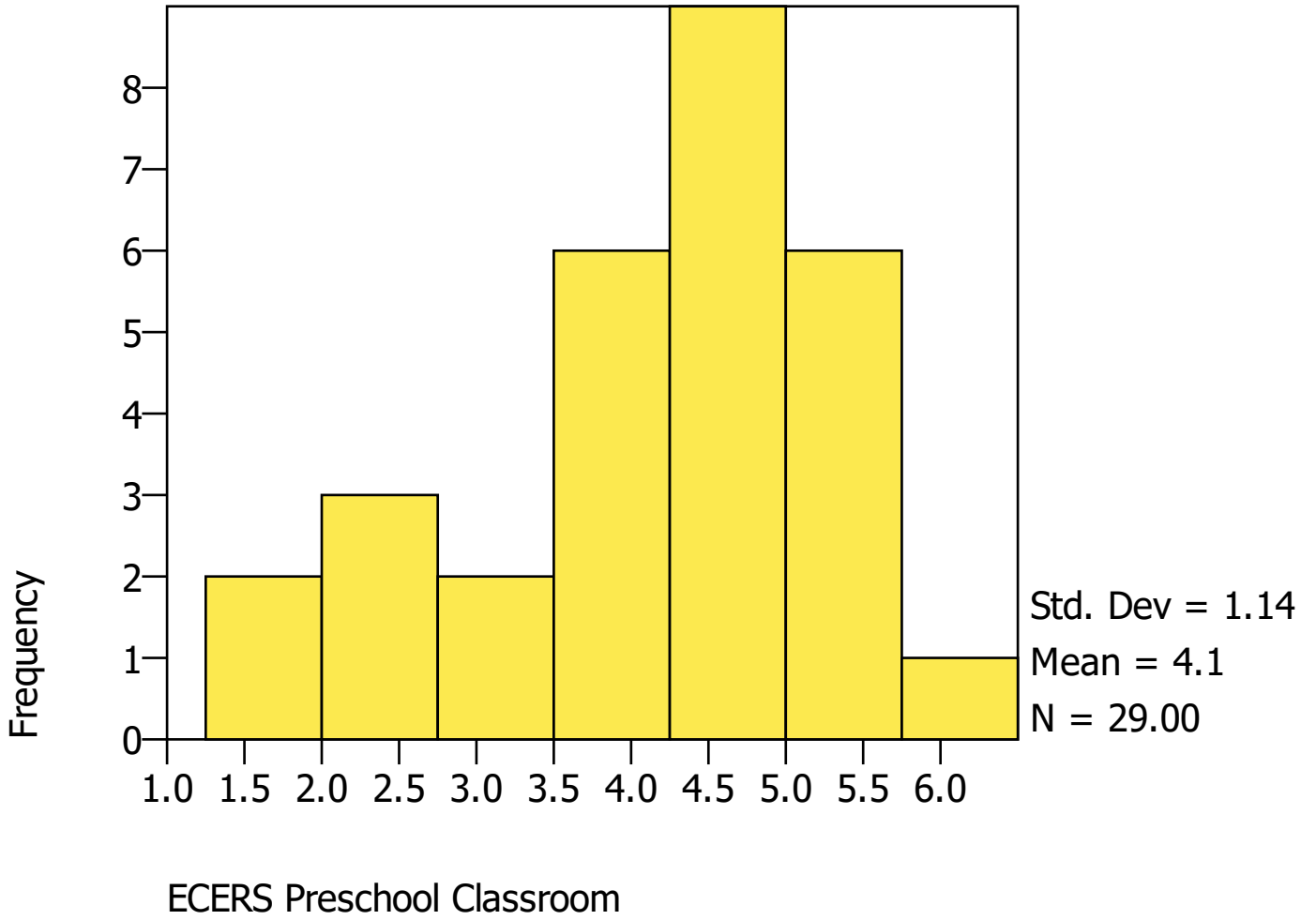
graph/histogram=itersi

# HISTOGRAM



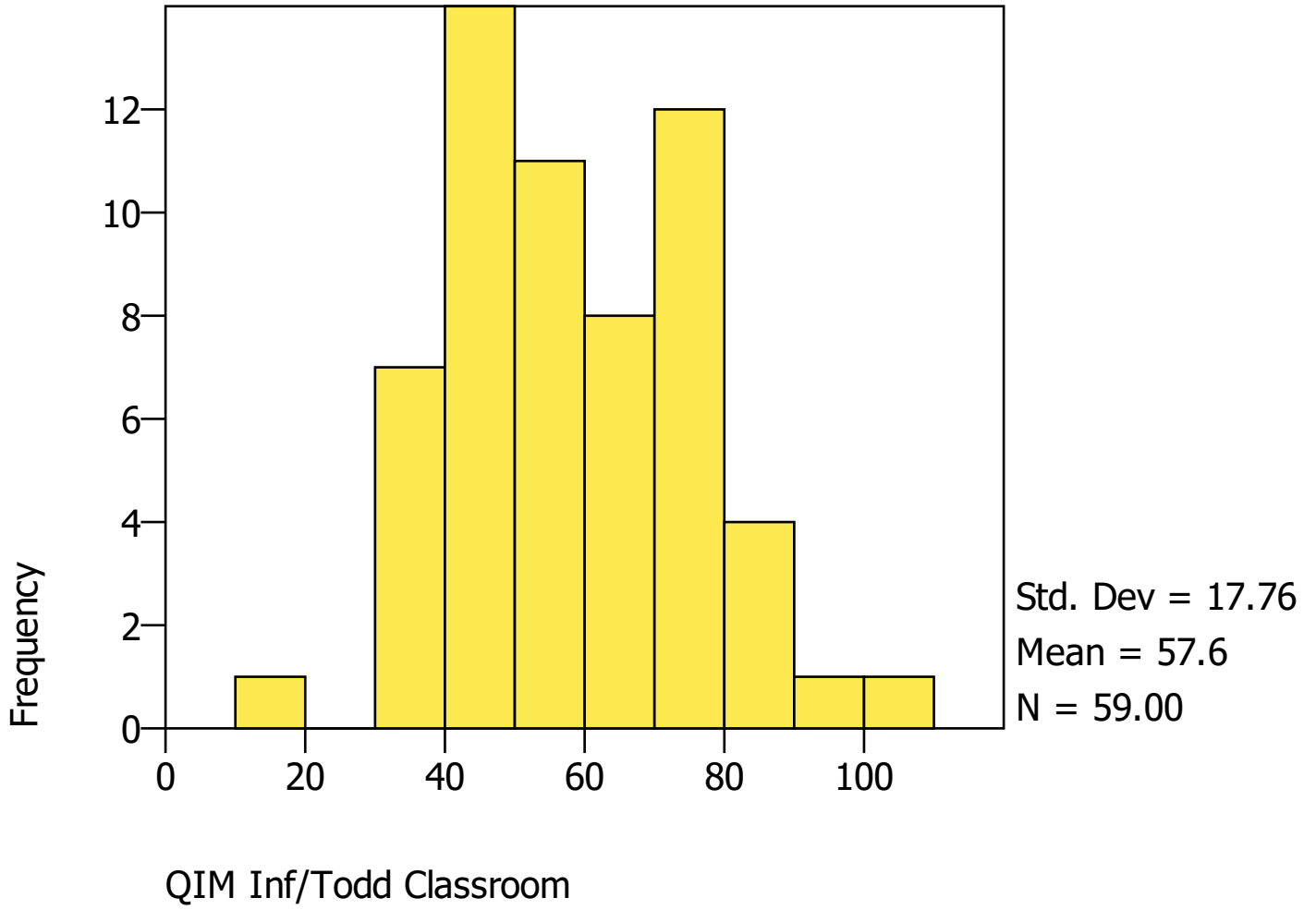
graph/histogram=ecers

# HISTOGRAM



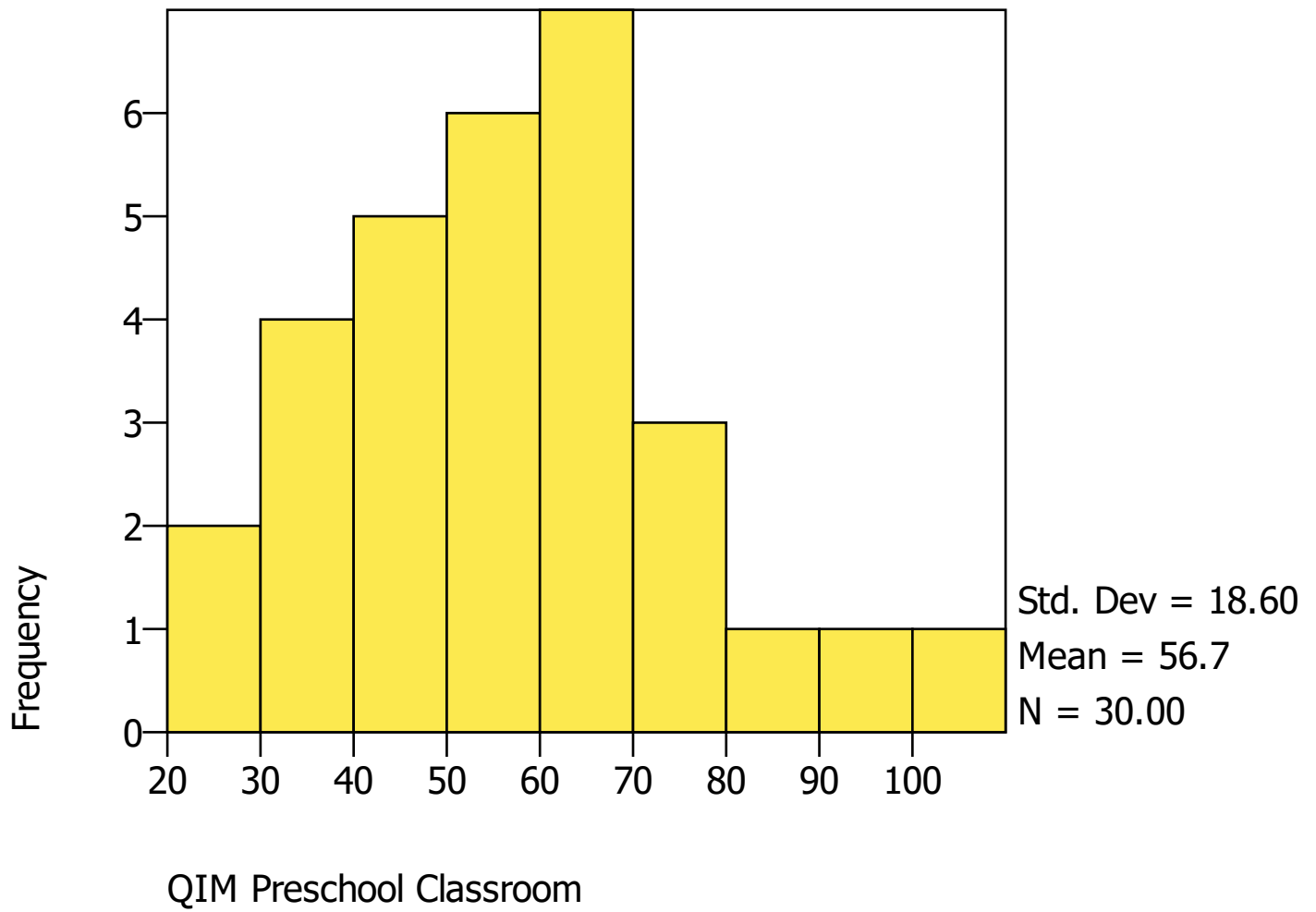
graph/histogram=qimi

# HISTOGRAM



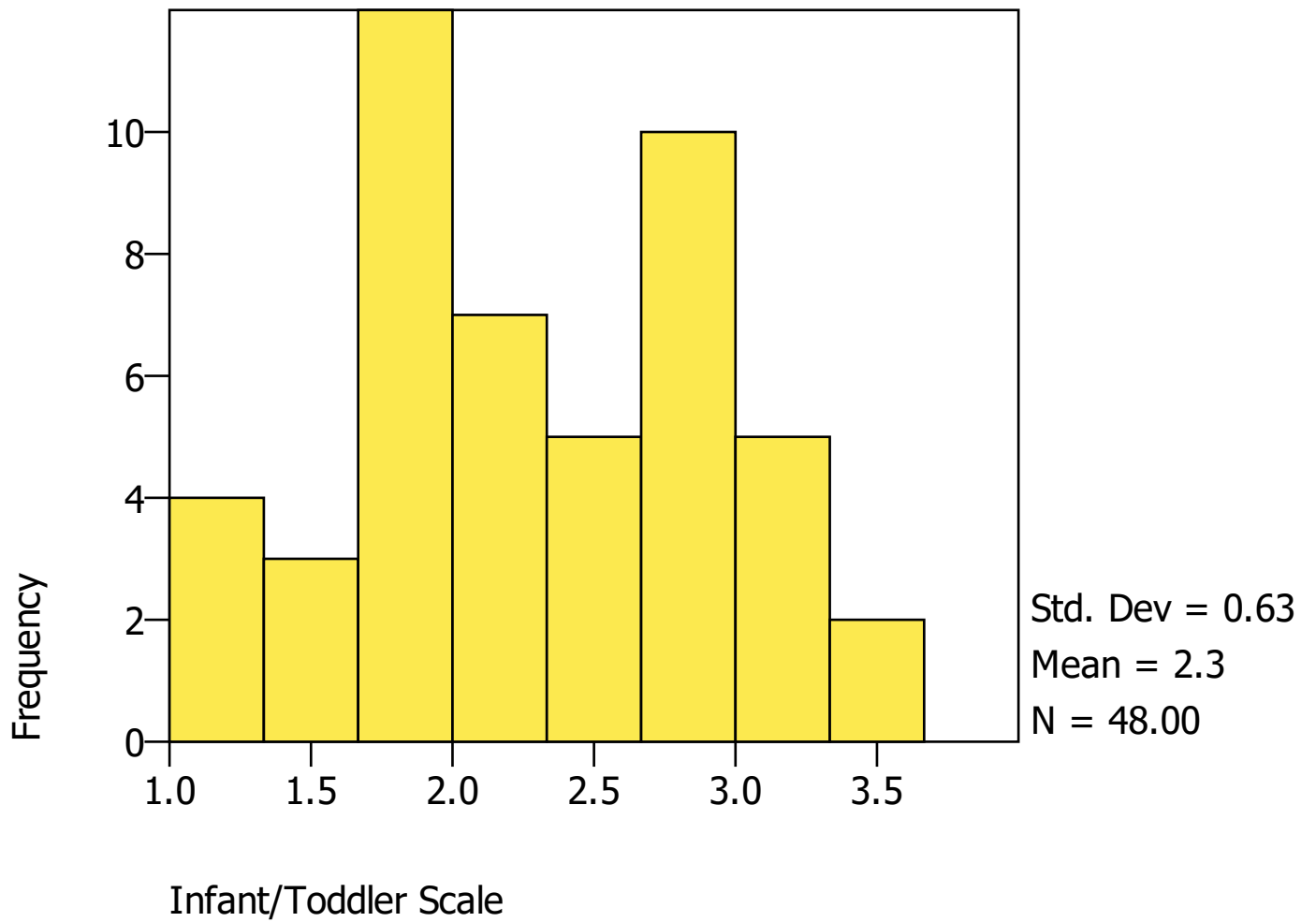
graph/histogram=qimp

# HISTOGRAM



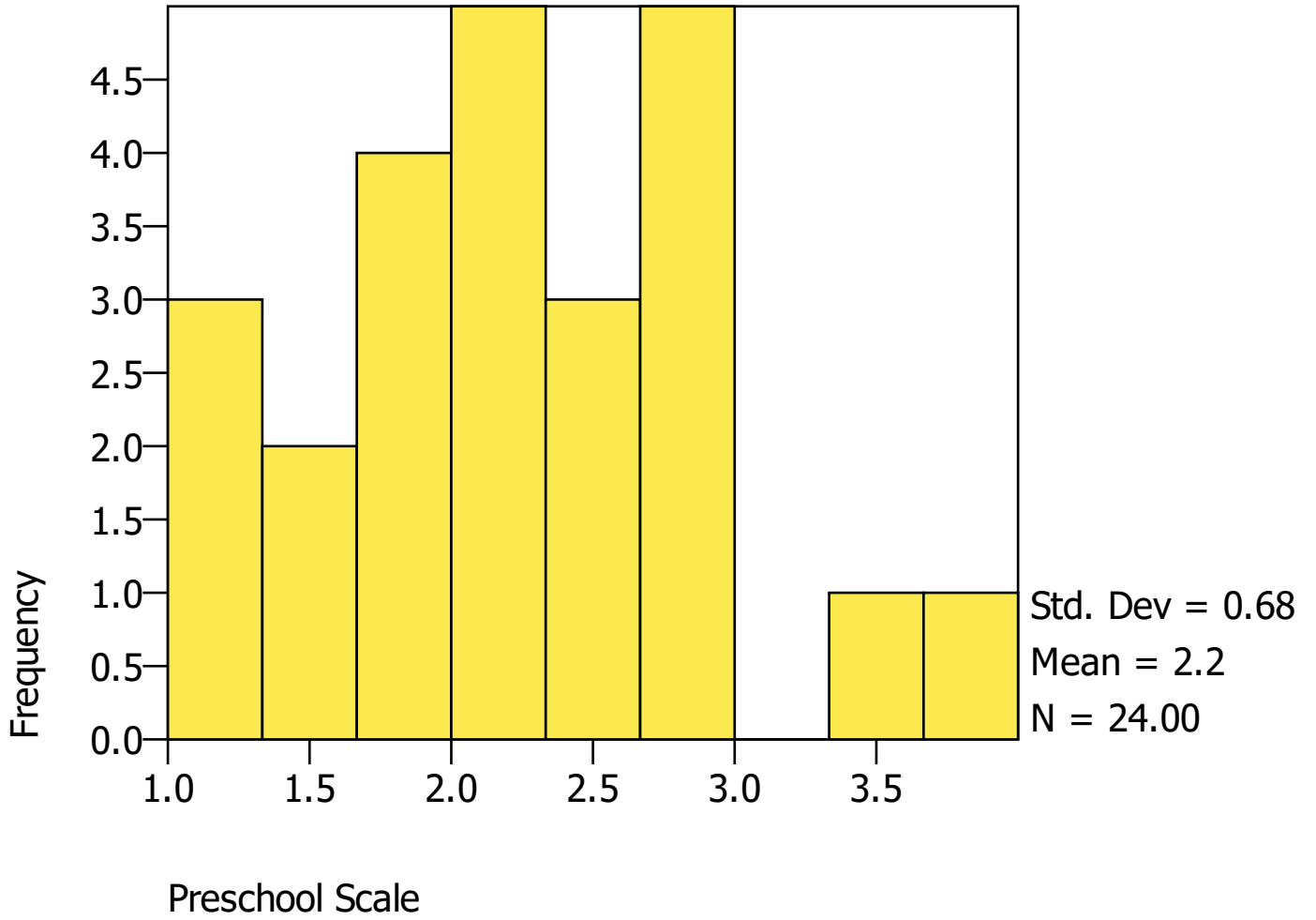
graph/histogram=qimi#

# HISTOGRAM



graph/histogram=qimp#

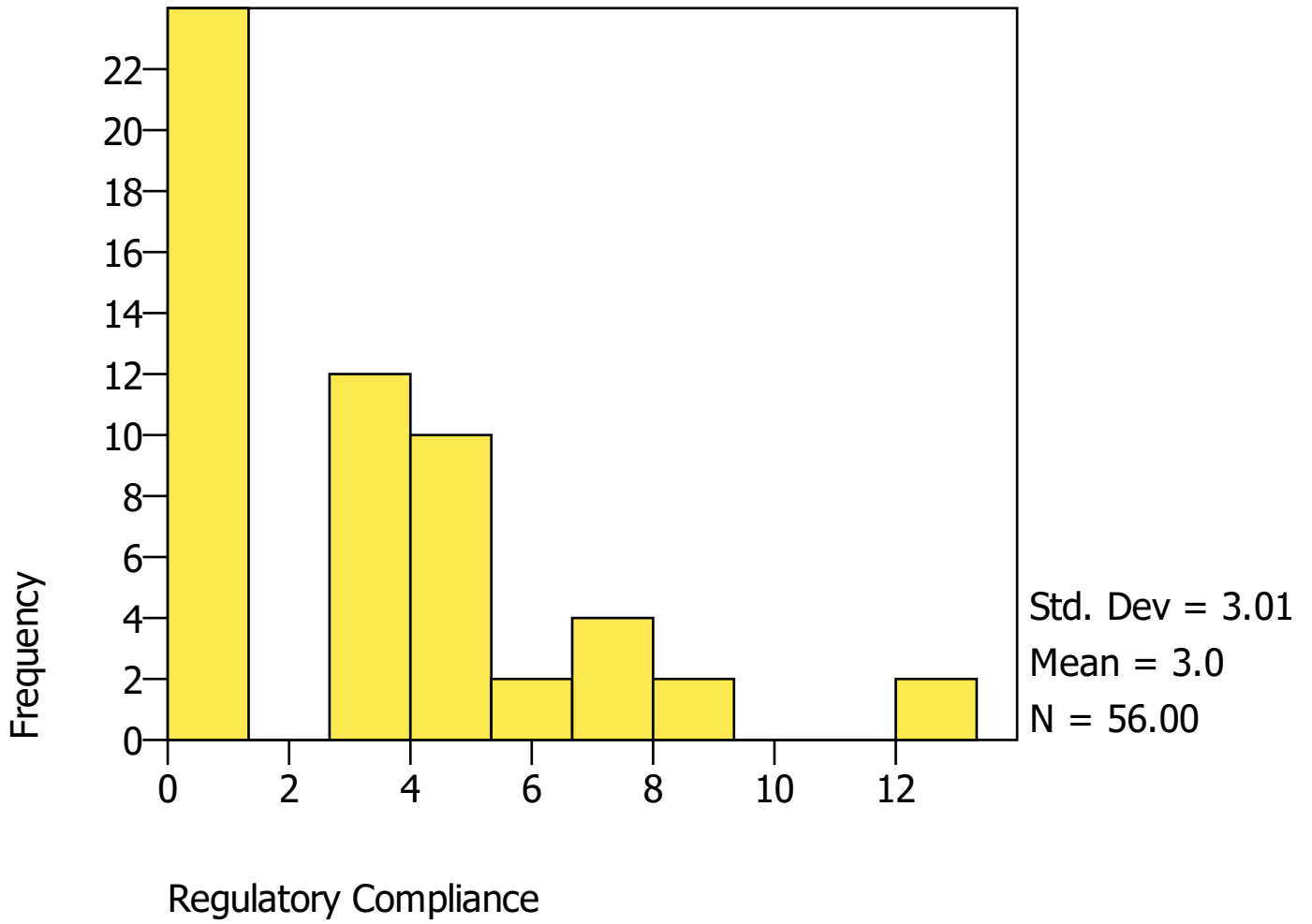
# HISTOGRAM



graph/histogram=rc

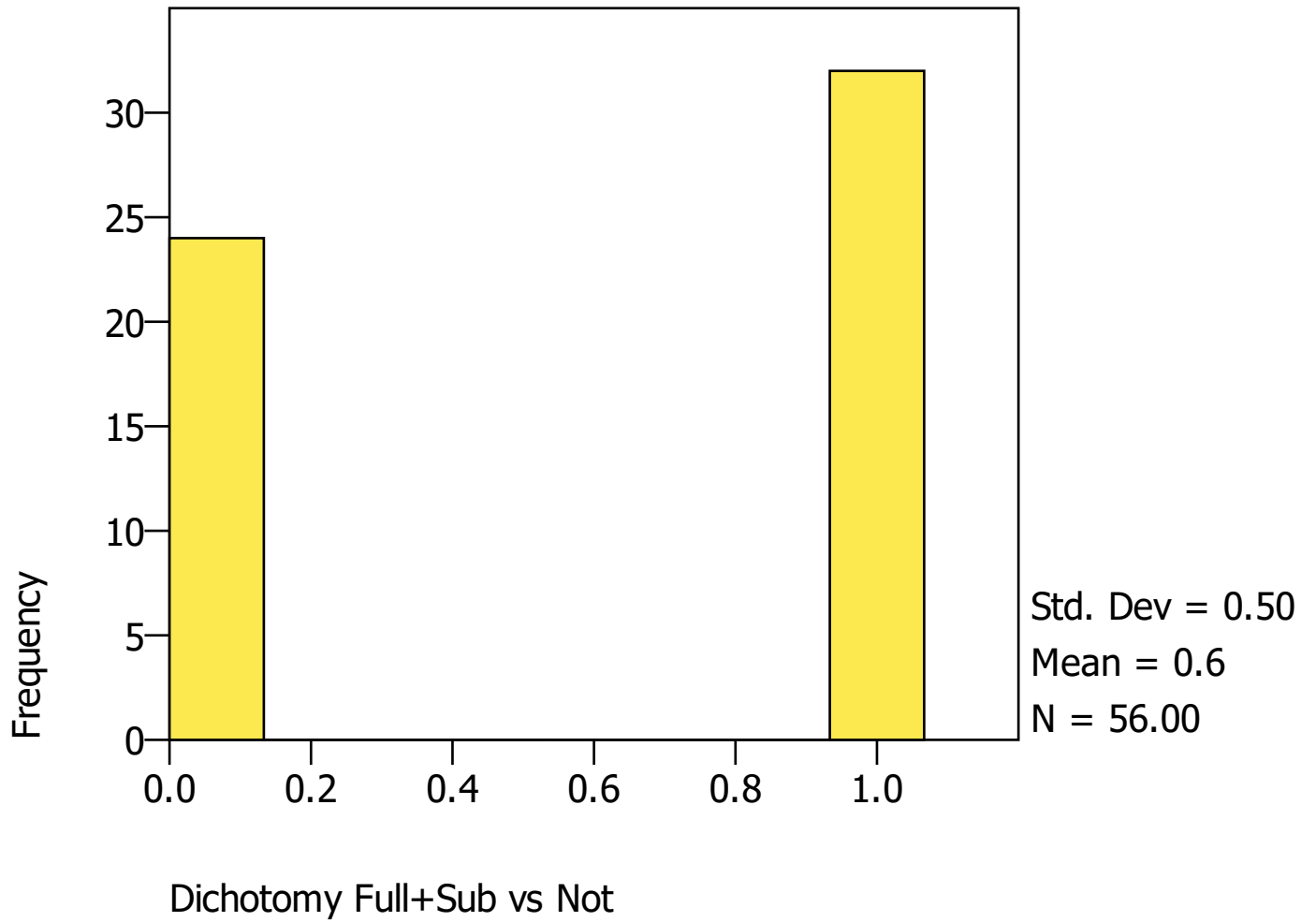


# HISTOGRAM



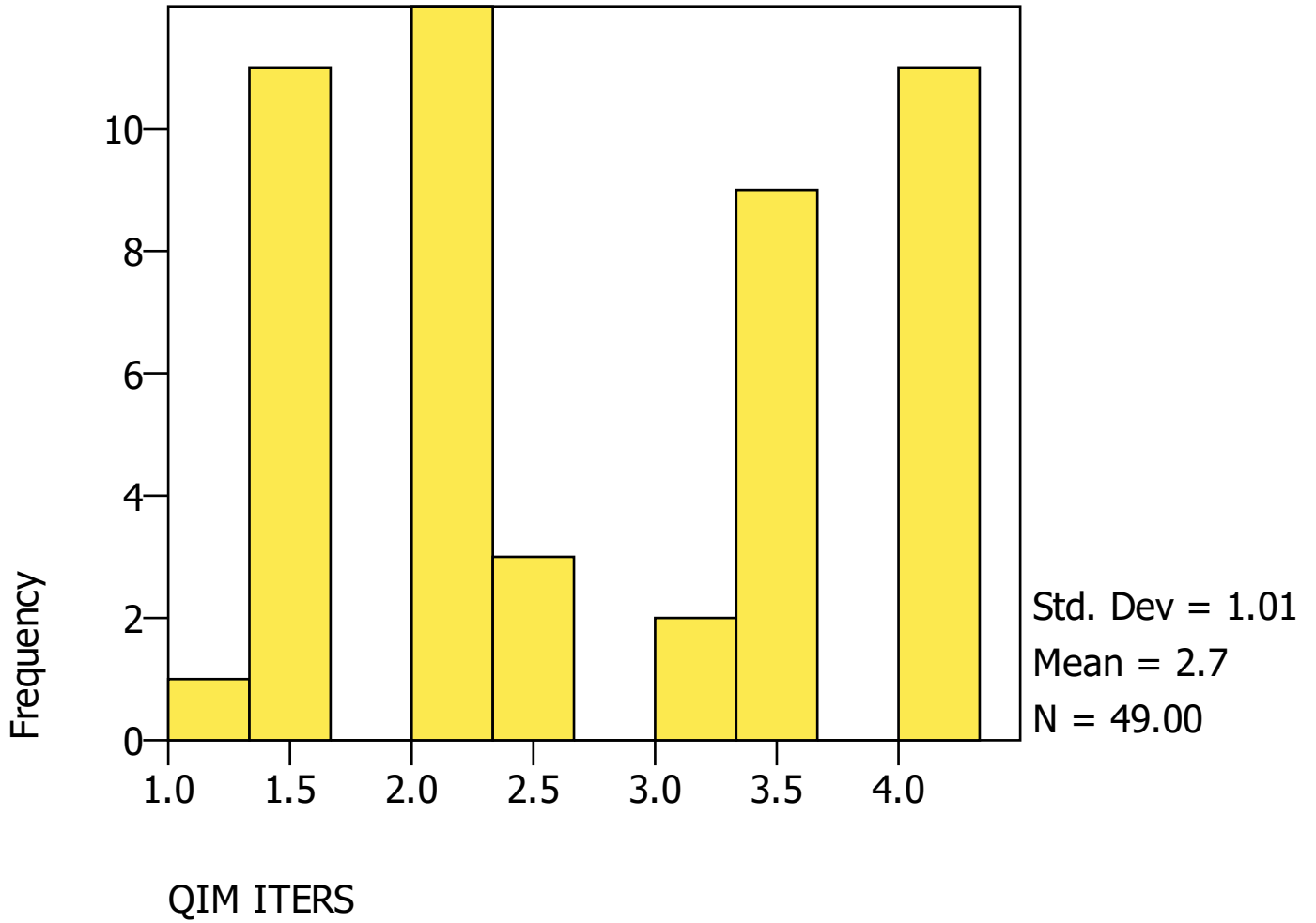
graph/histogram=dich

# HISTOGRAM



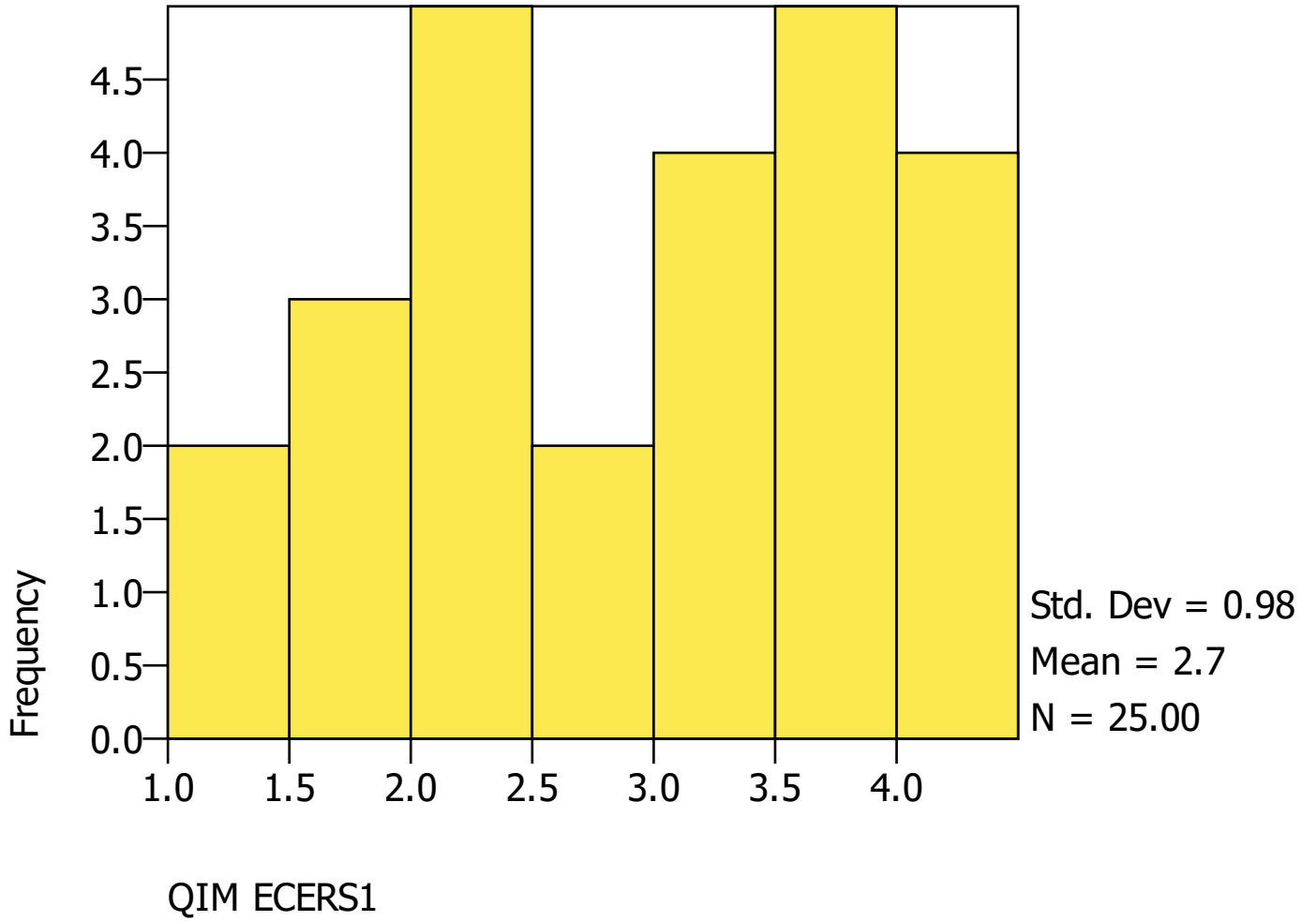
graph/histogram=qiters

# HISTOGRAM



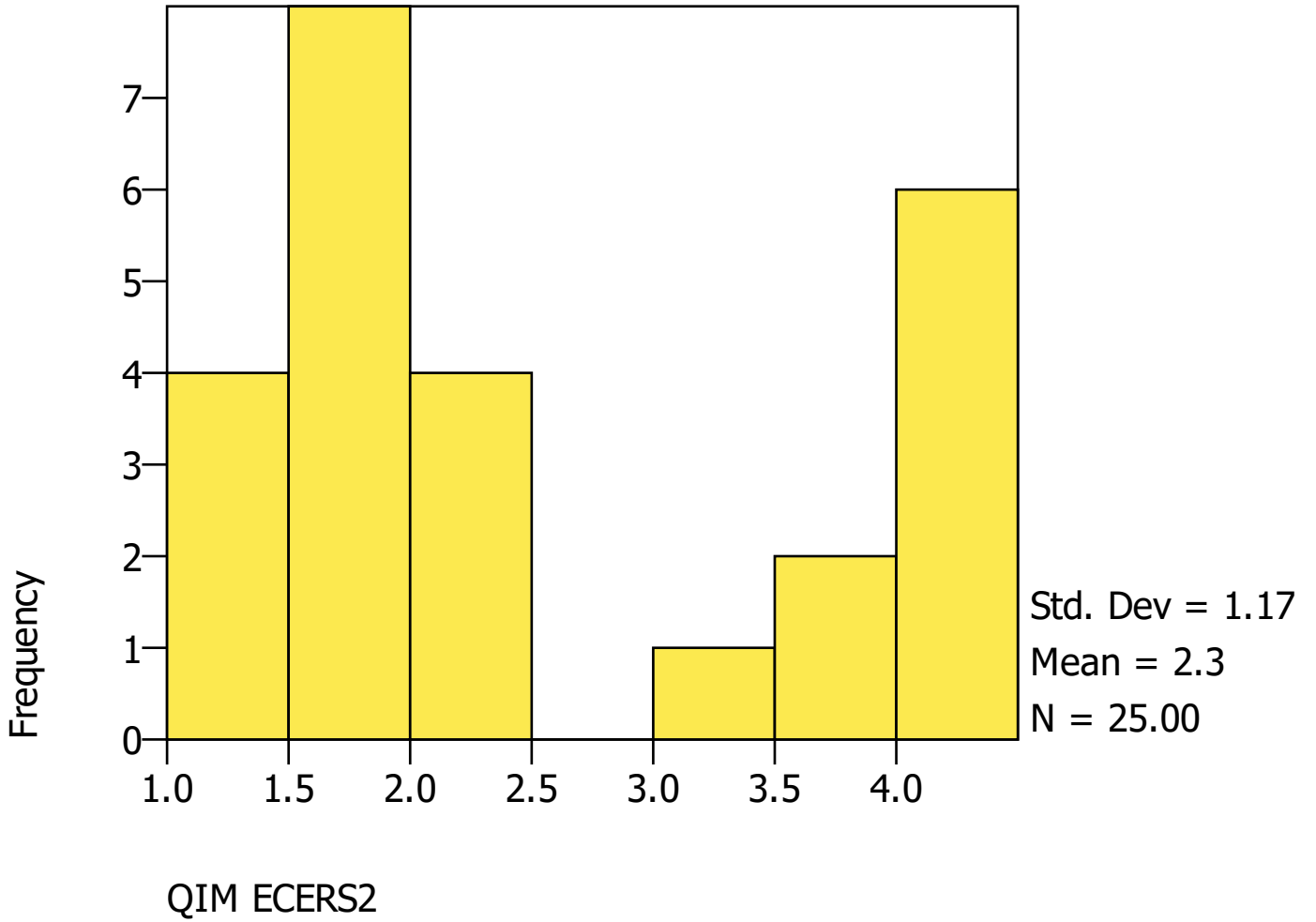
graph/histogram=qecers1

# HISTOGRAM



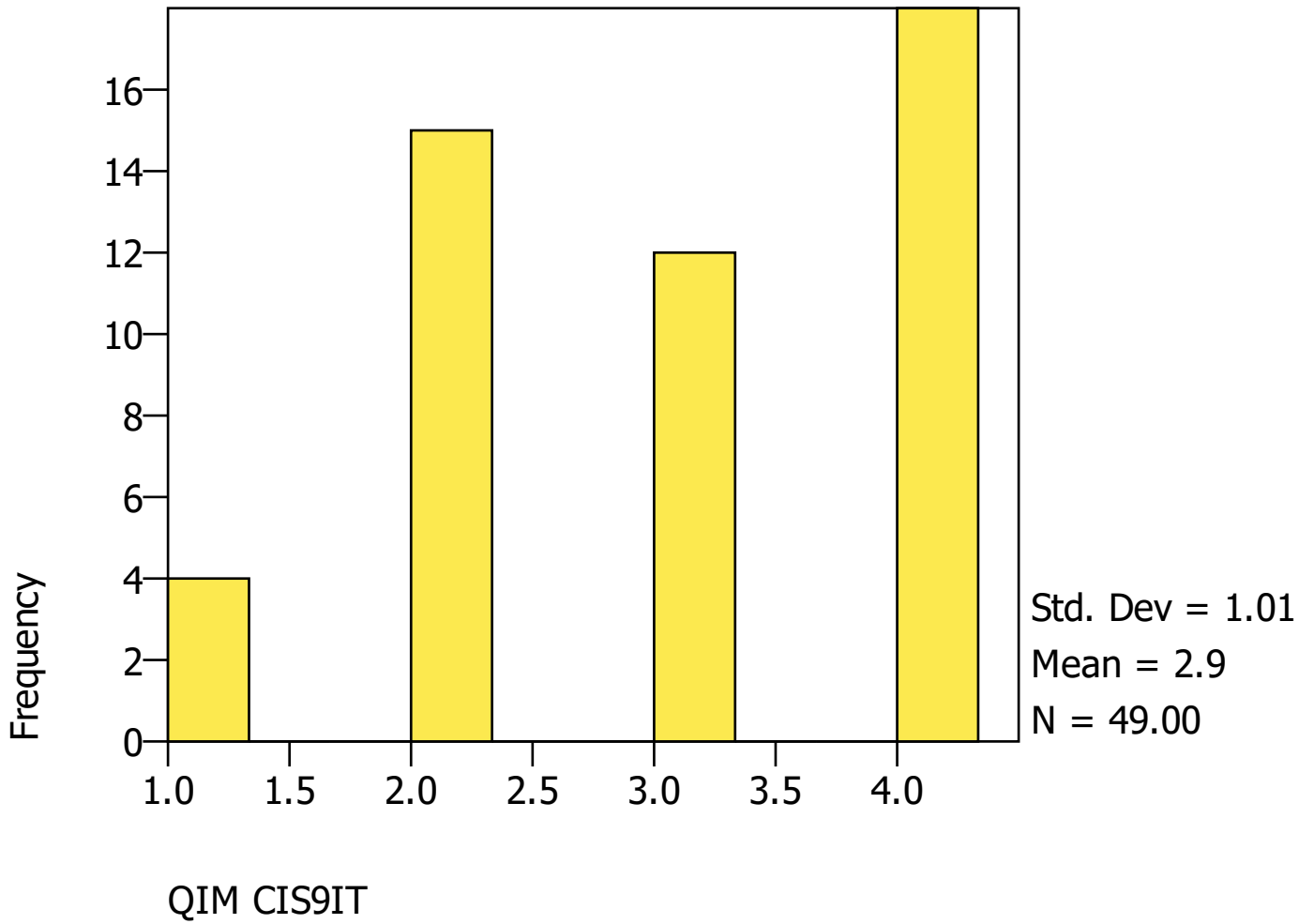
graph/histogram=qecers2

# HISTOGRAM



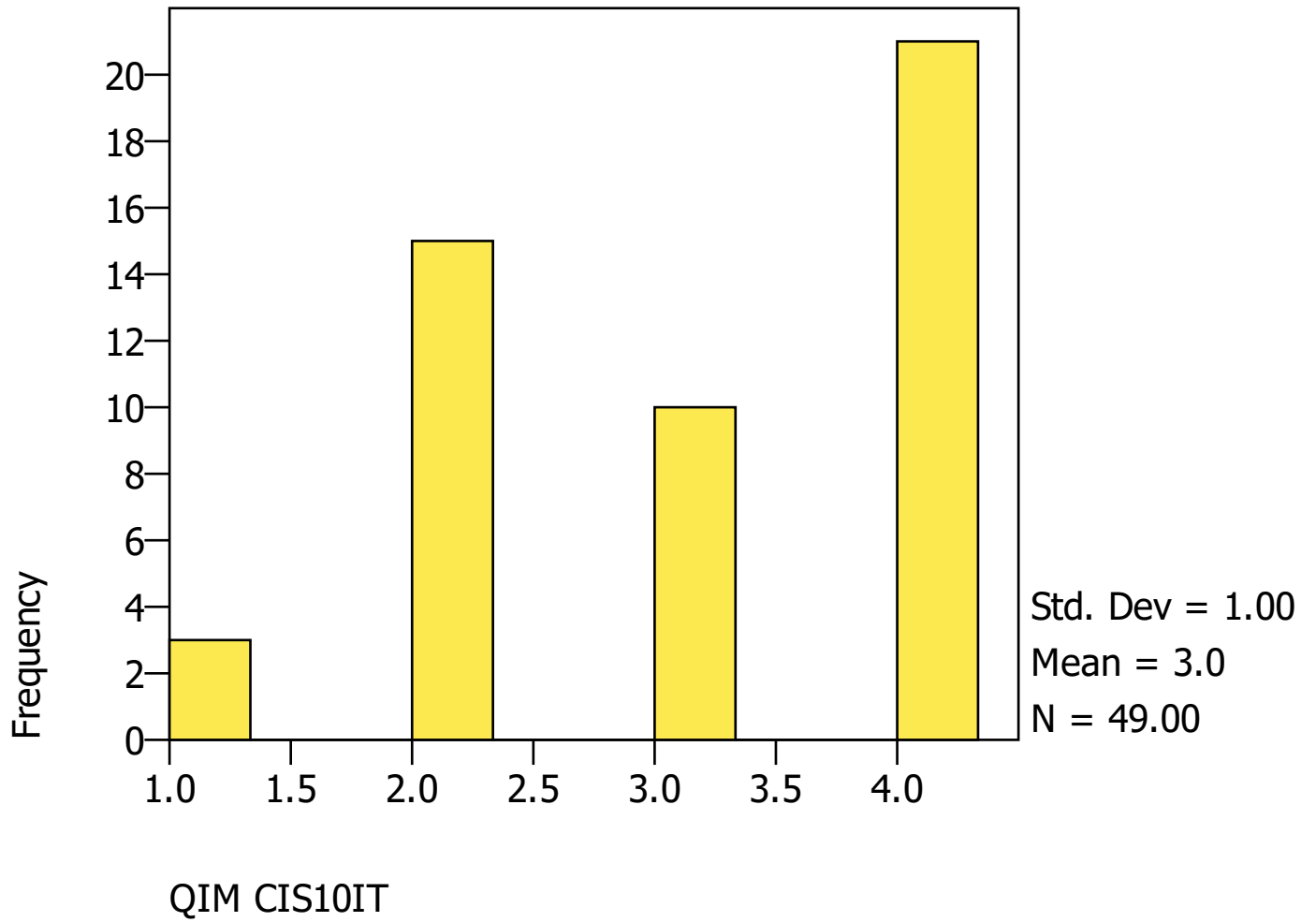
graph/histogram=cis9it

# HISTOGRAM



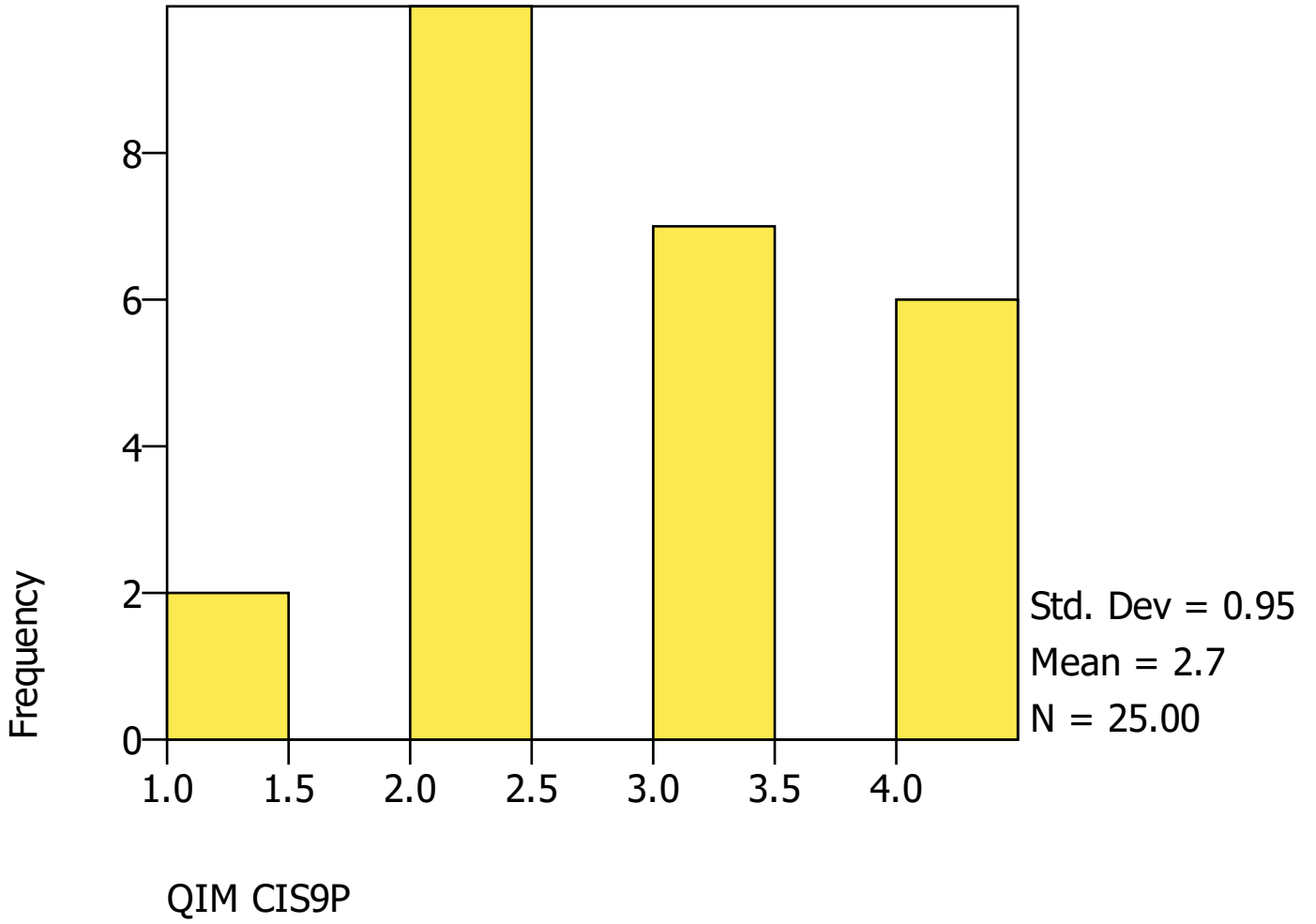
graph/histogram=cis10it

# HISTOGRAM



graph/histogram=cis9p

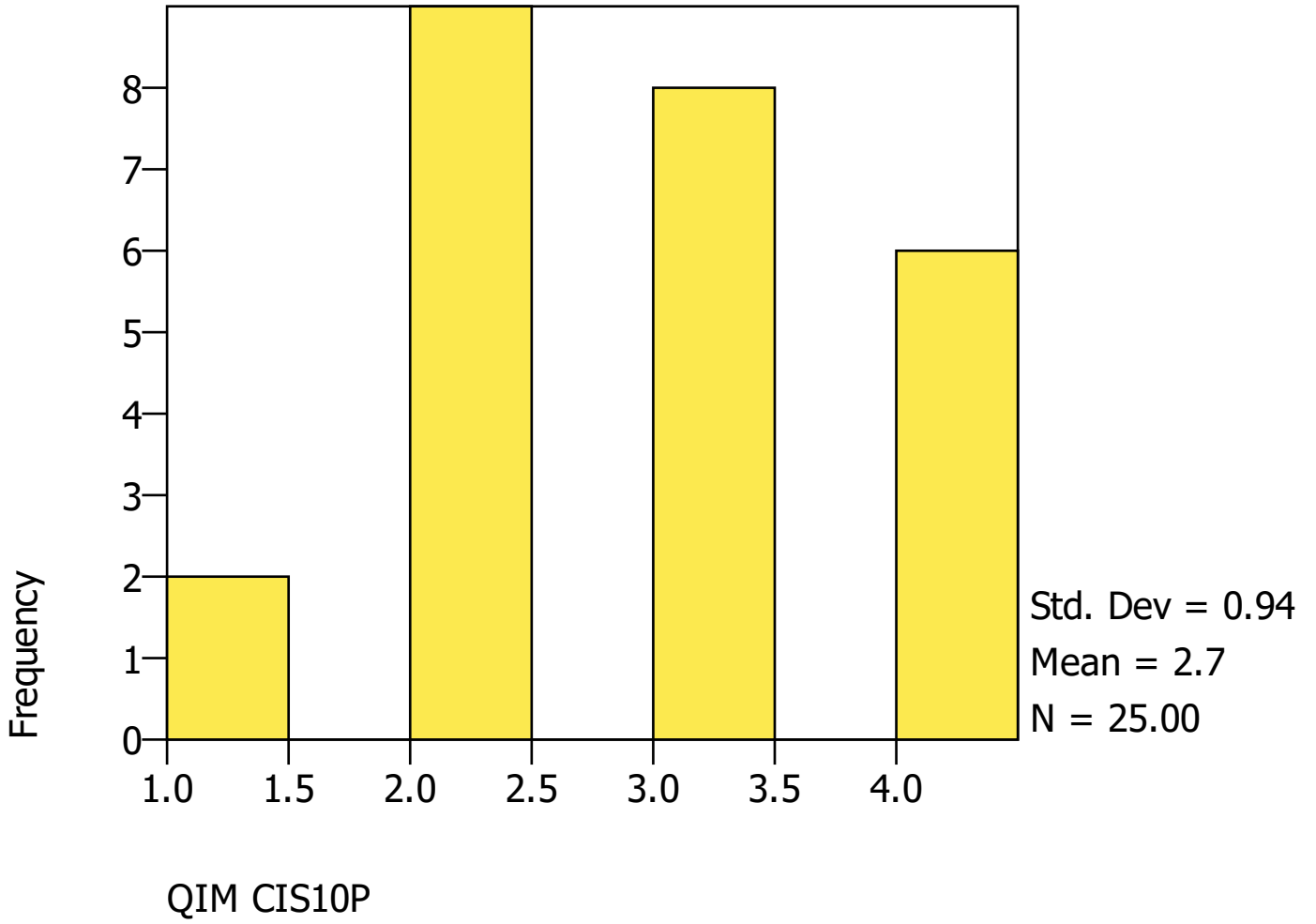
# HISTOGRAM



graph/histogram=cis10p

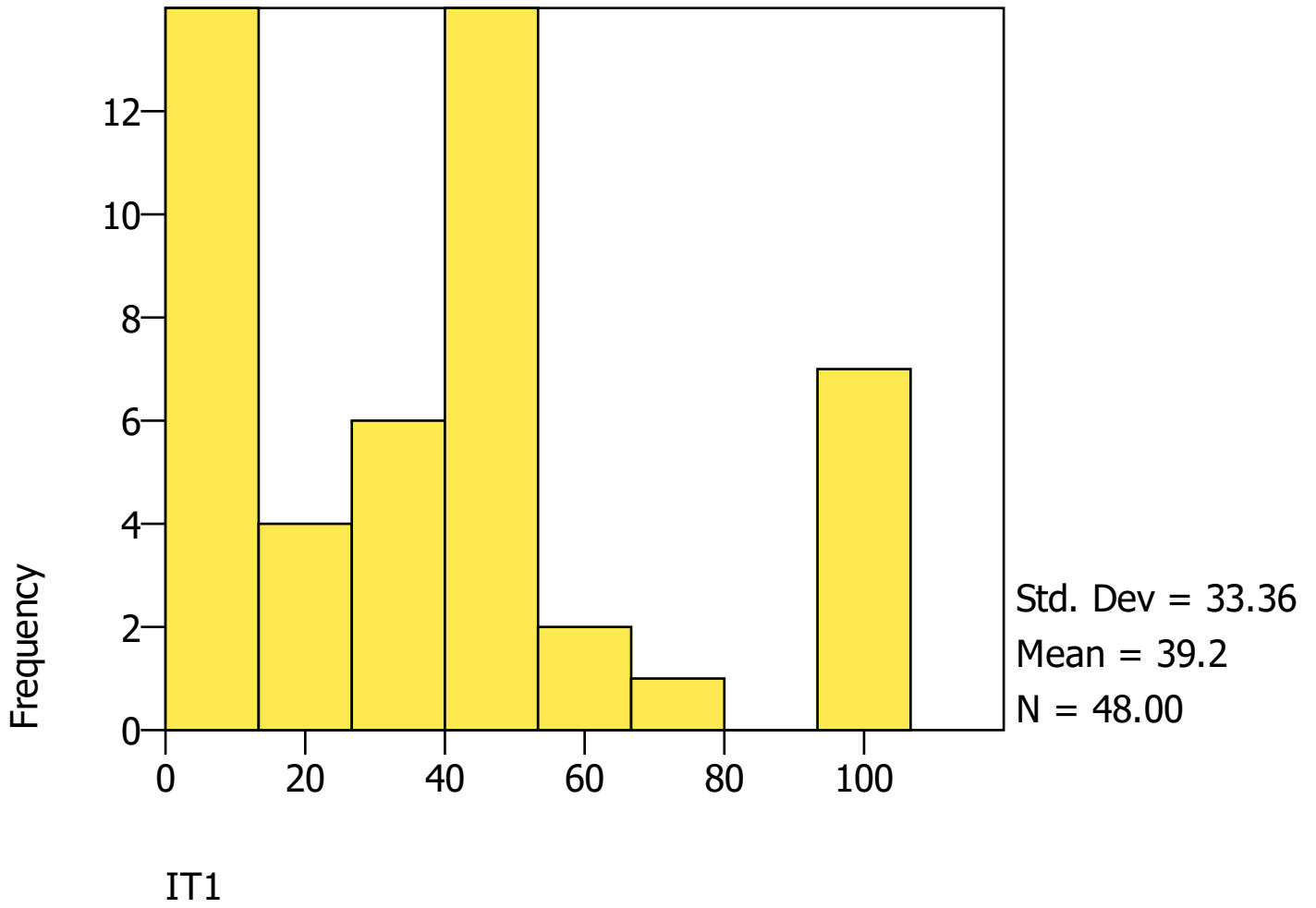


# HISTOGRAM



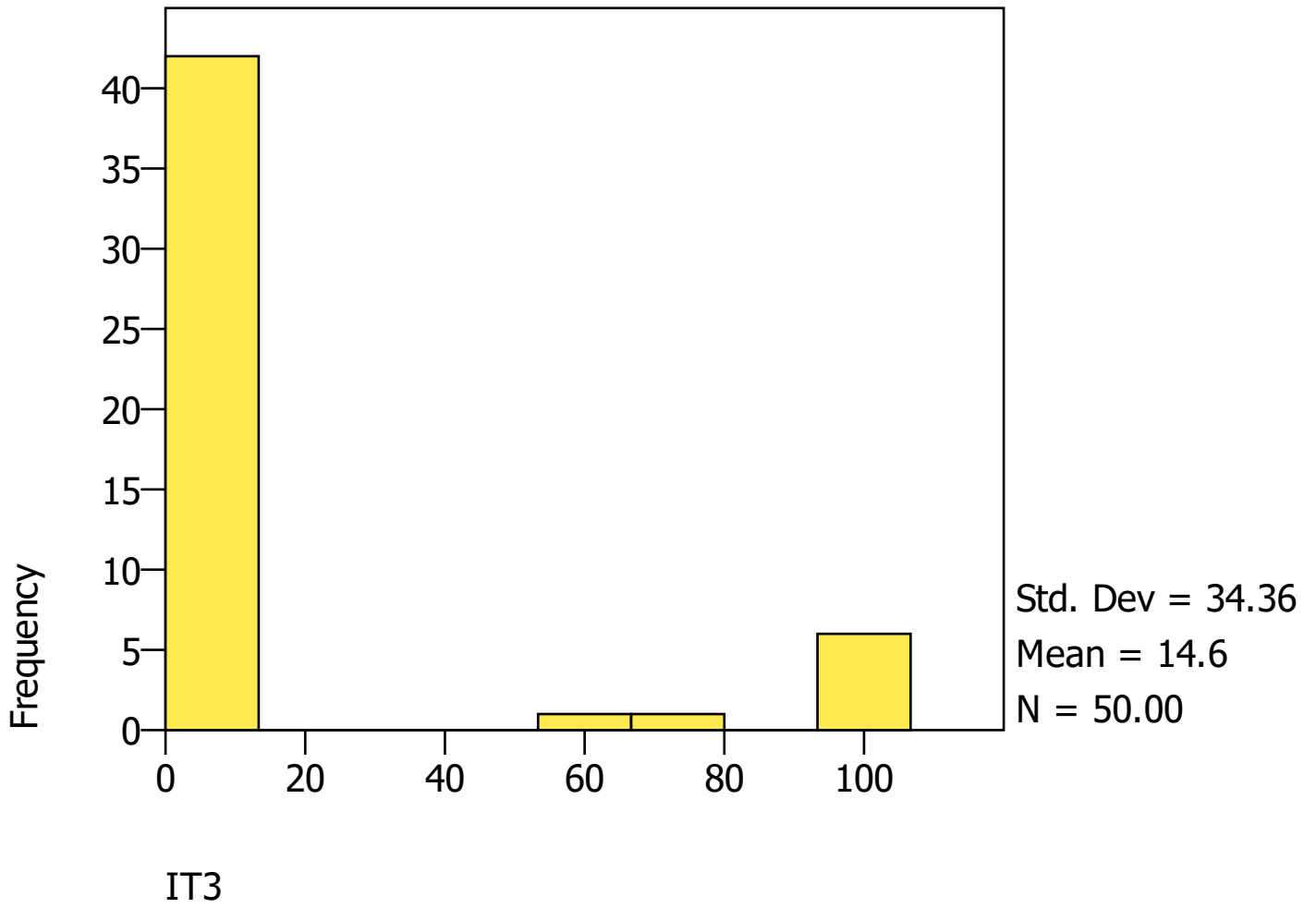
graph/histogram=i1

# HISTOGRAM



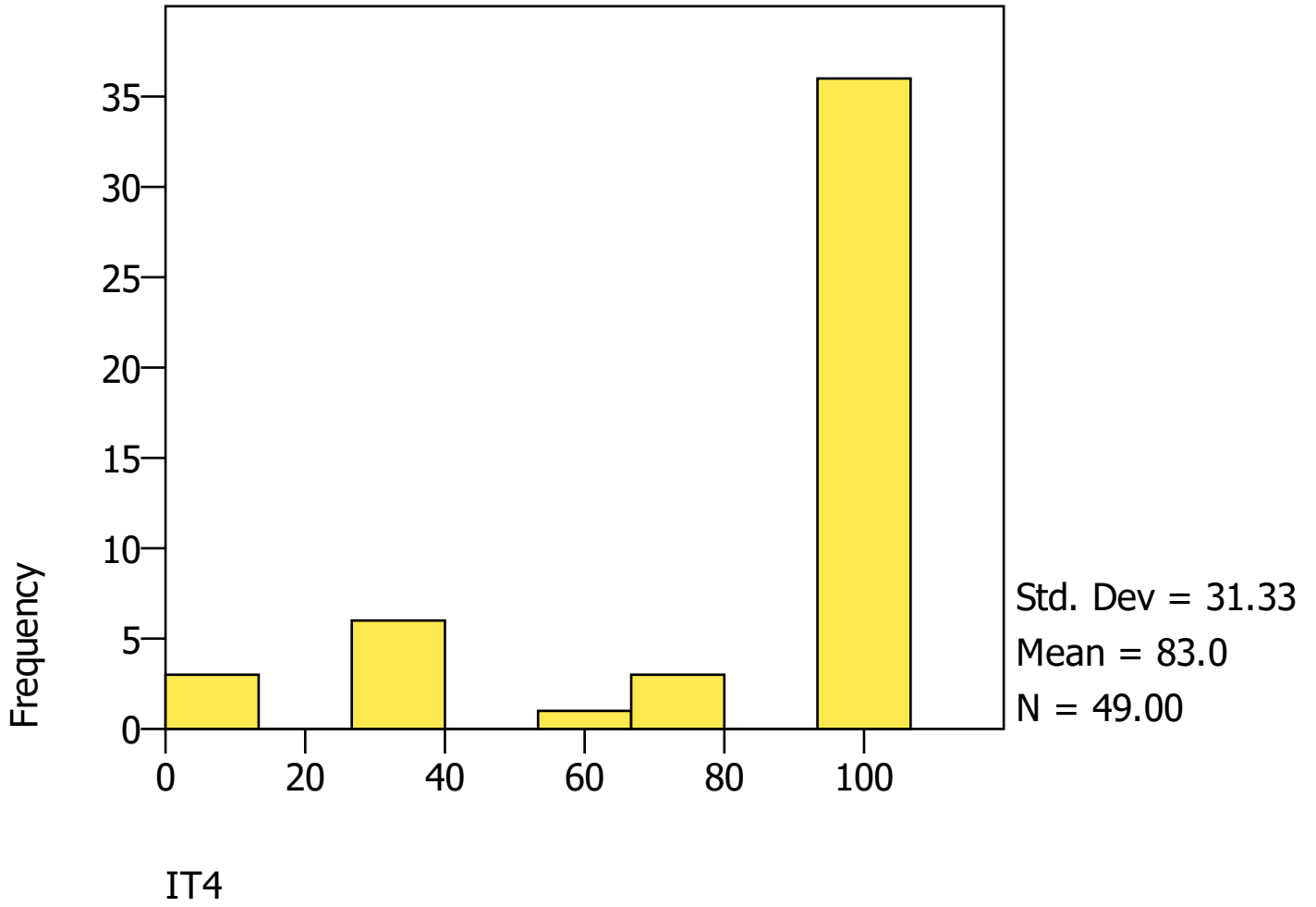
graph/histogram=i3

# HISTOGRAM



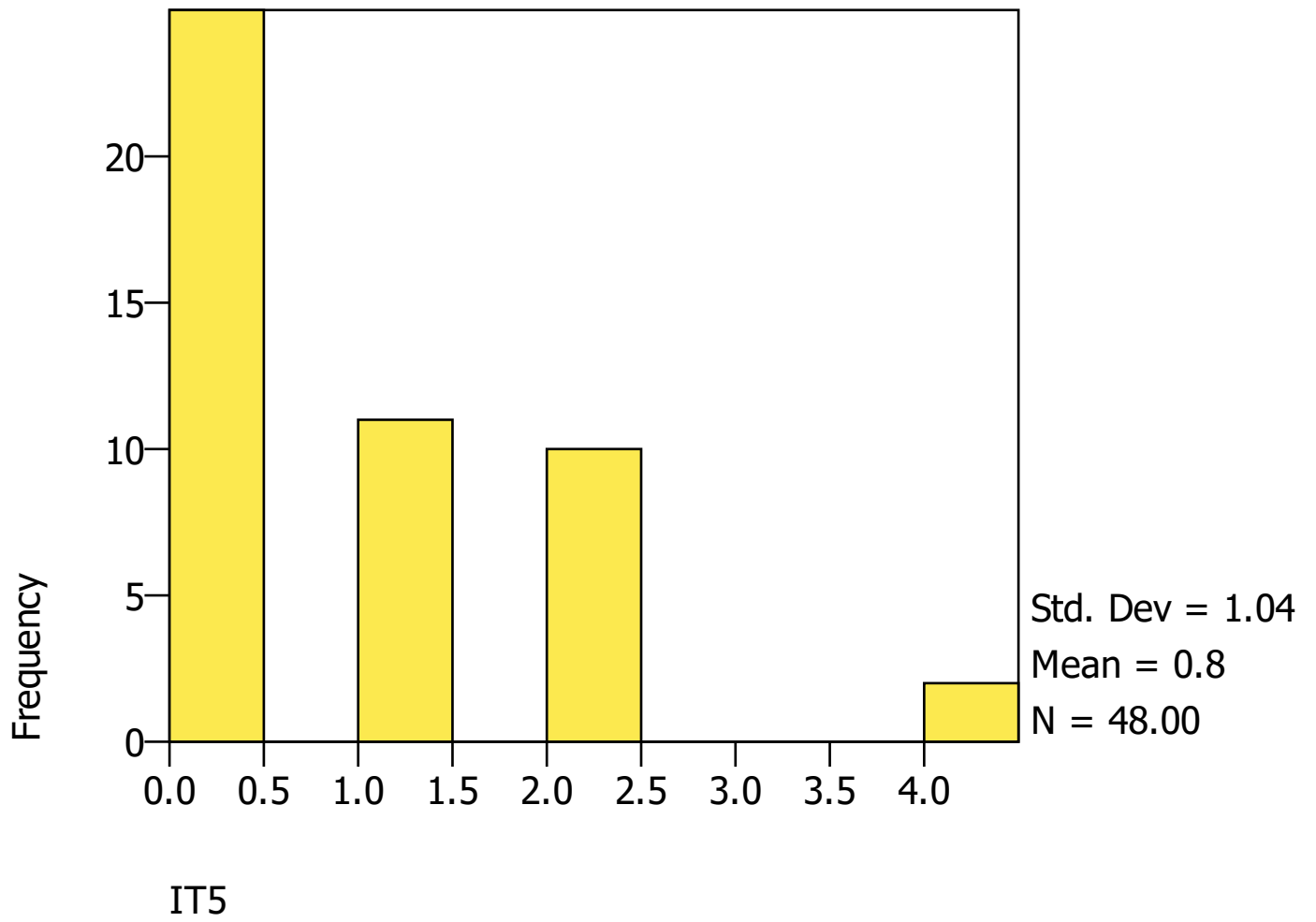
graph/histogram=i4

# HISTOGRAM



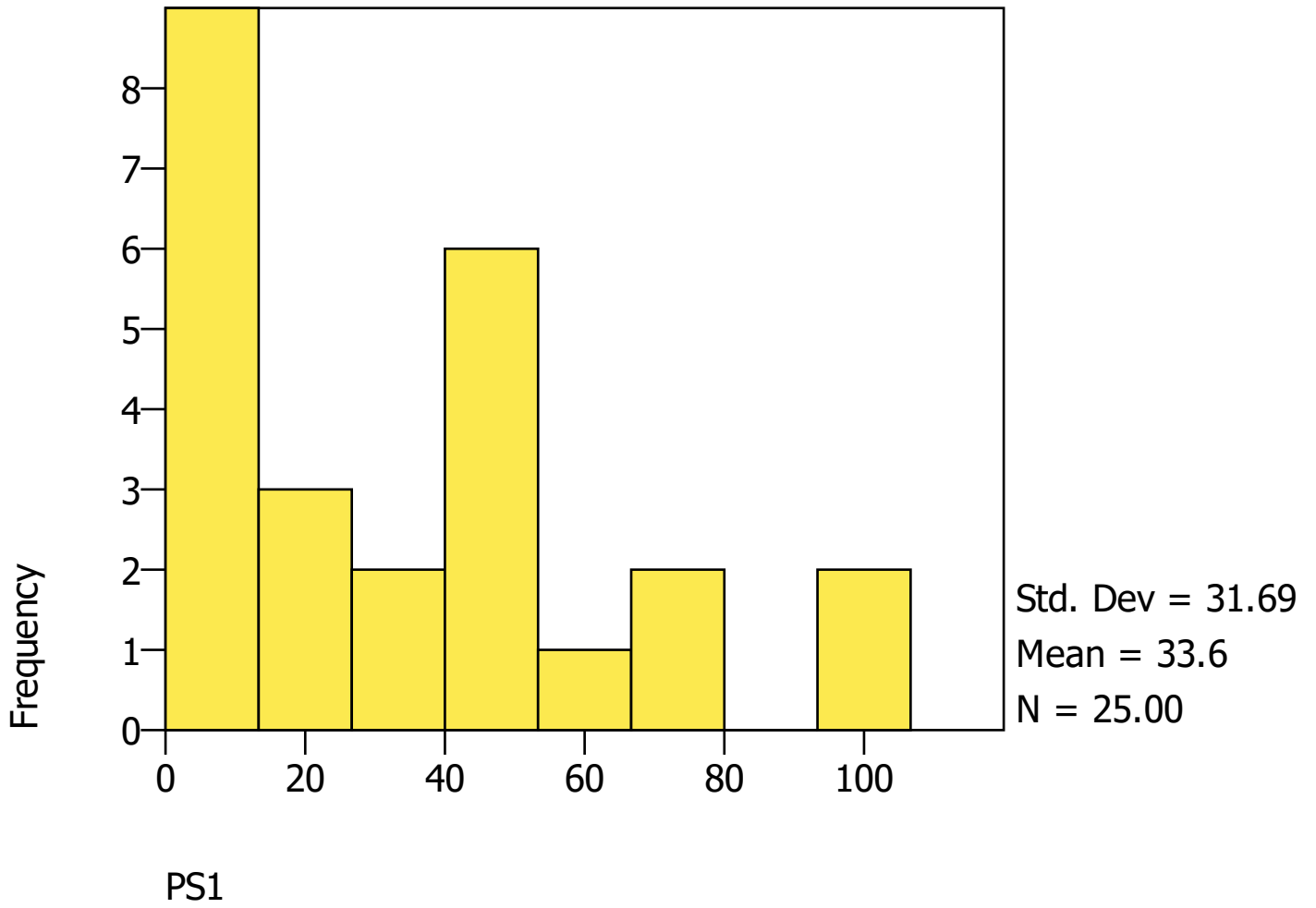
graph/histogram=i5

# HISTOGRAM



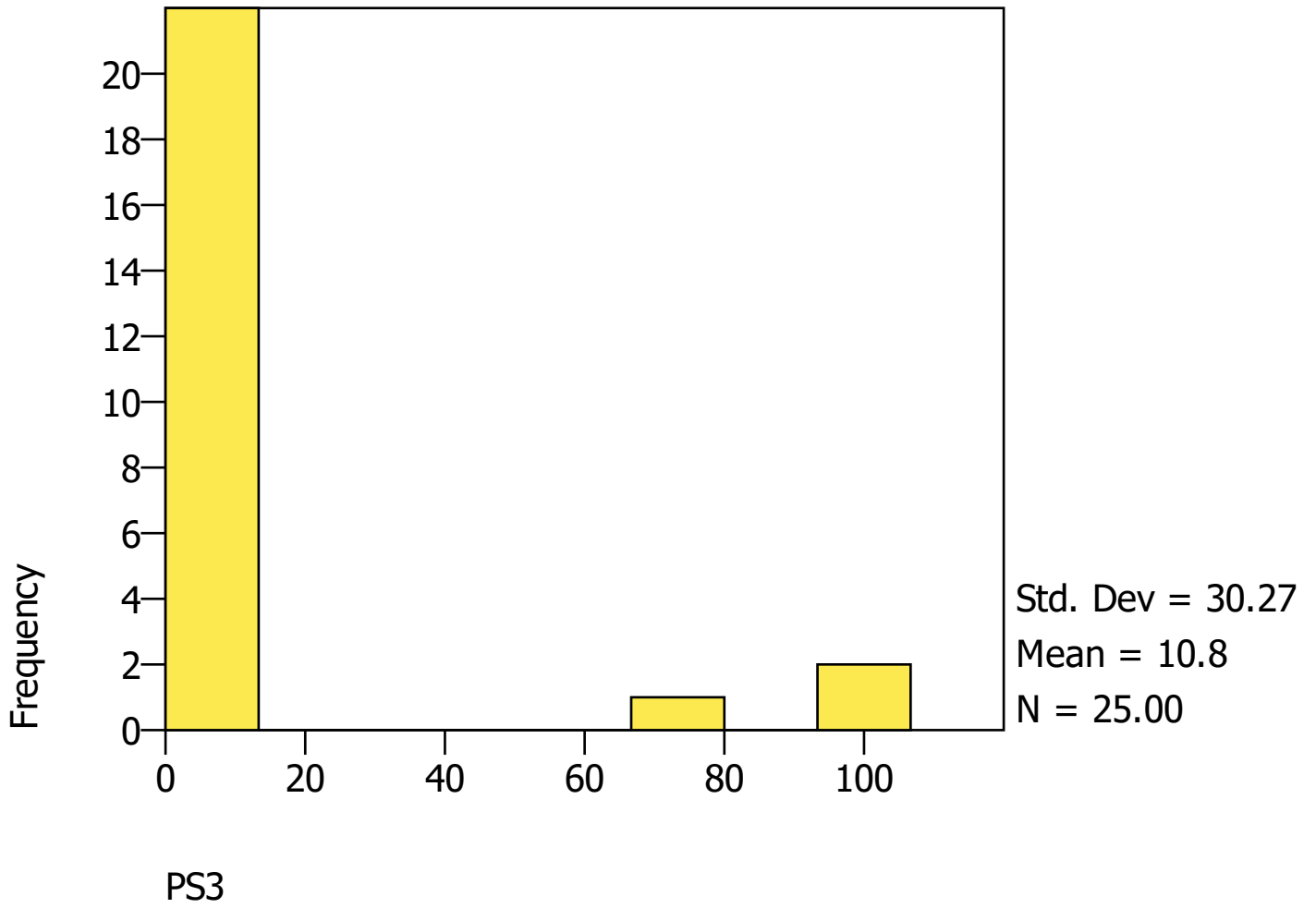
graph/histogram=p1

# HISTOGRAM



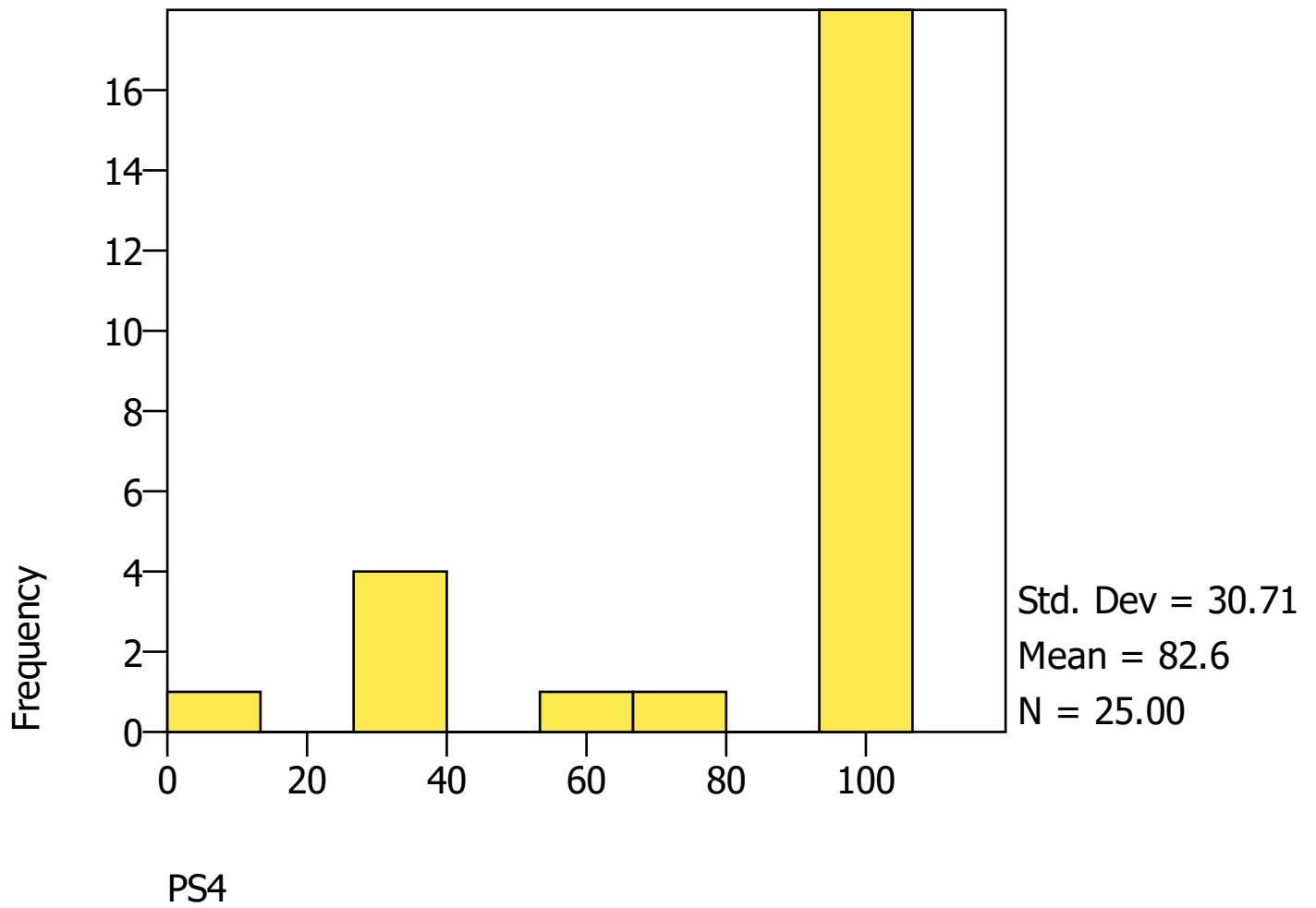
graph/histogram=p3

# HISTOGRAM



graph/histogram=p4

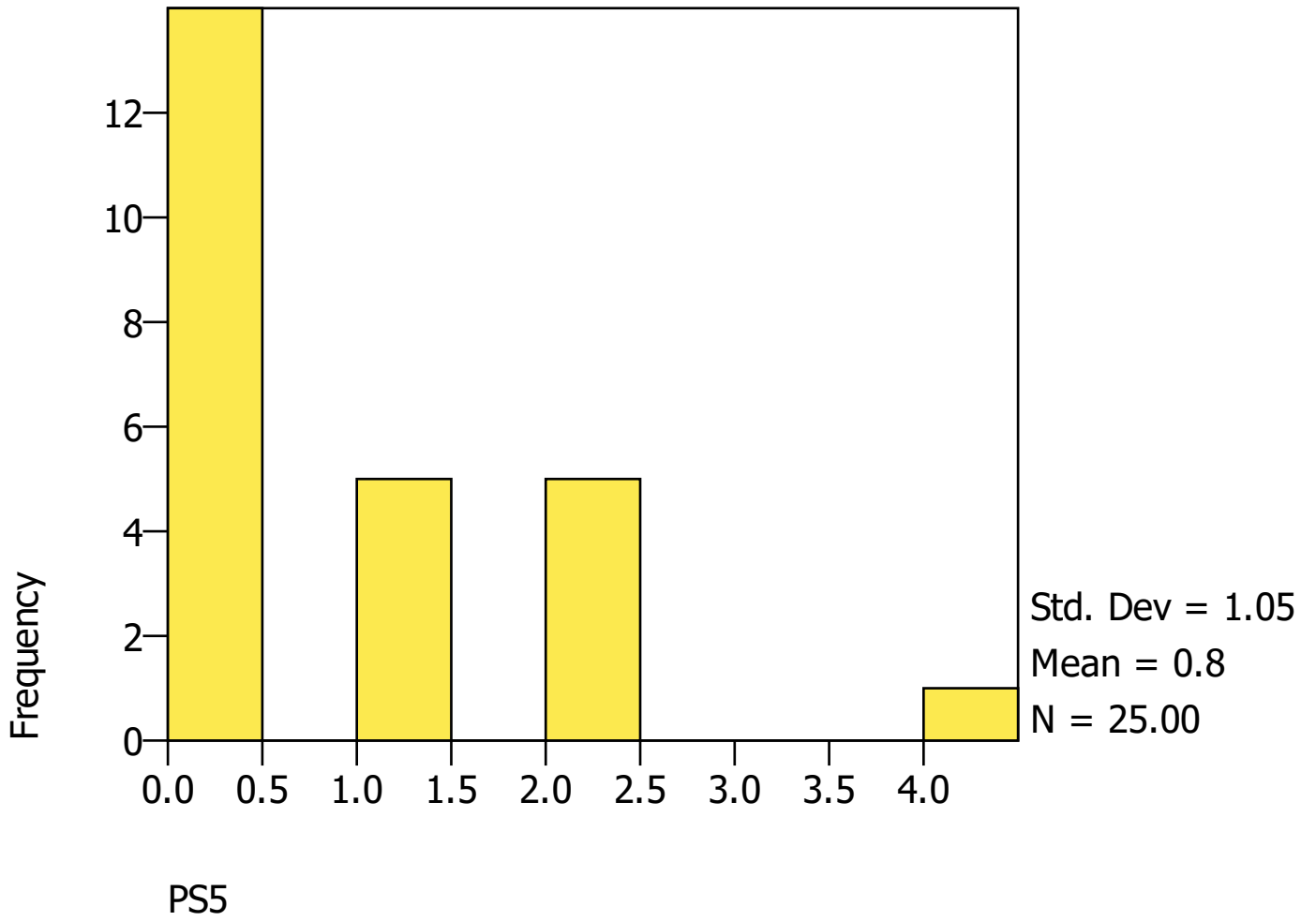
# HISTOGRAM



graph/histogram=p5

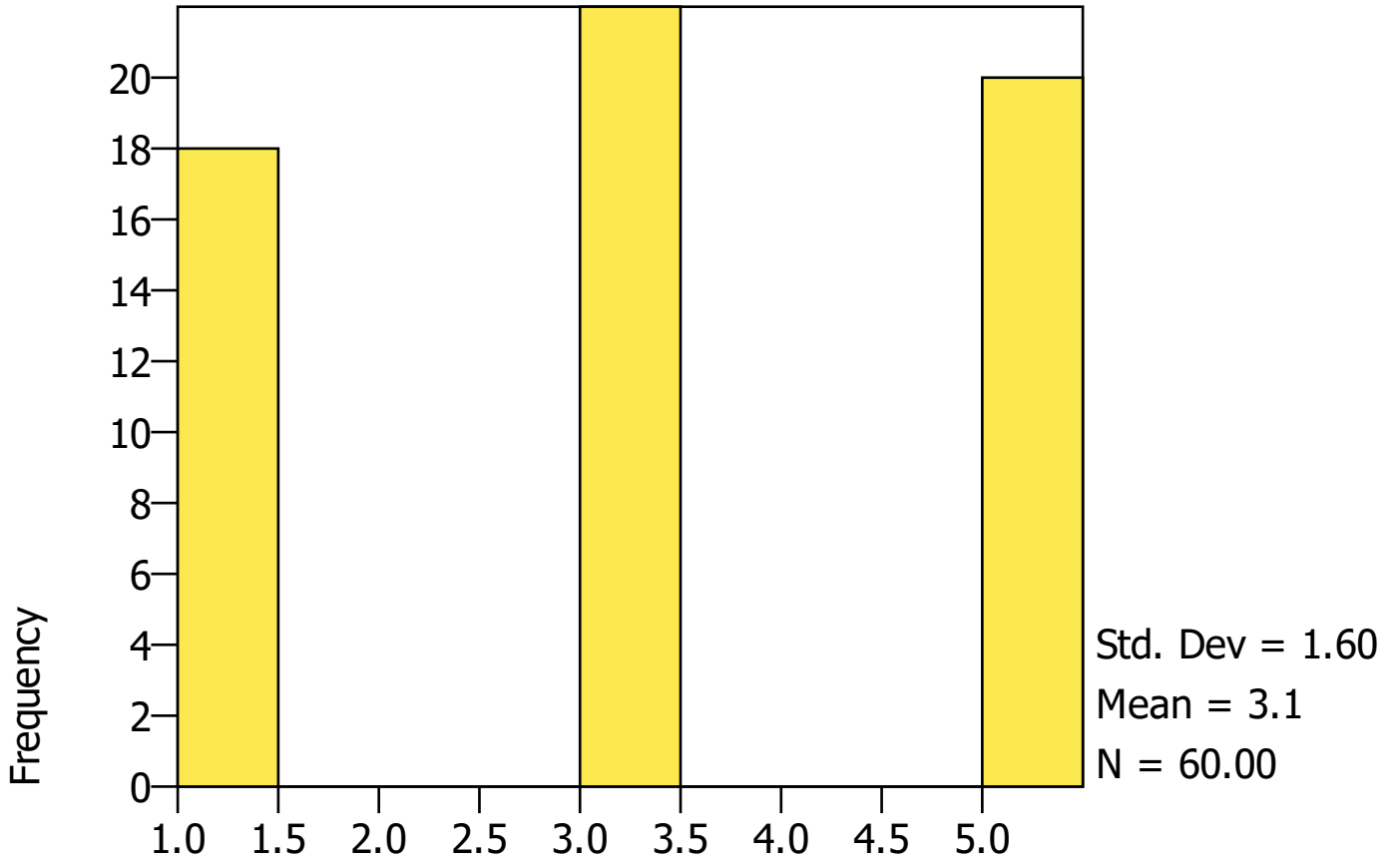


# HISTOGRAM

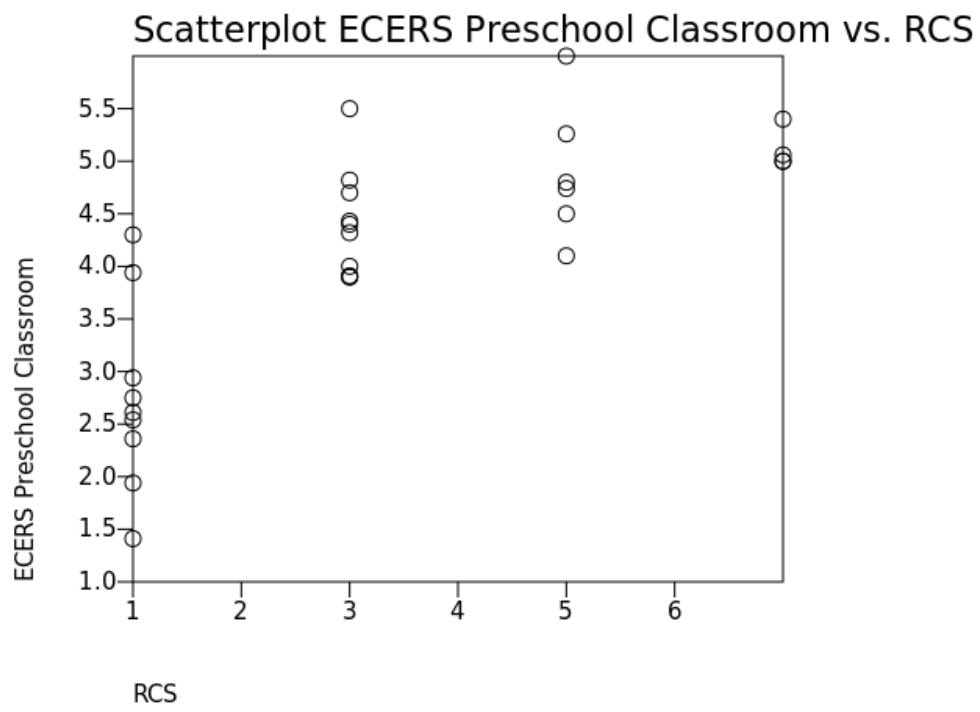


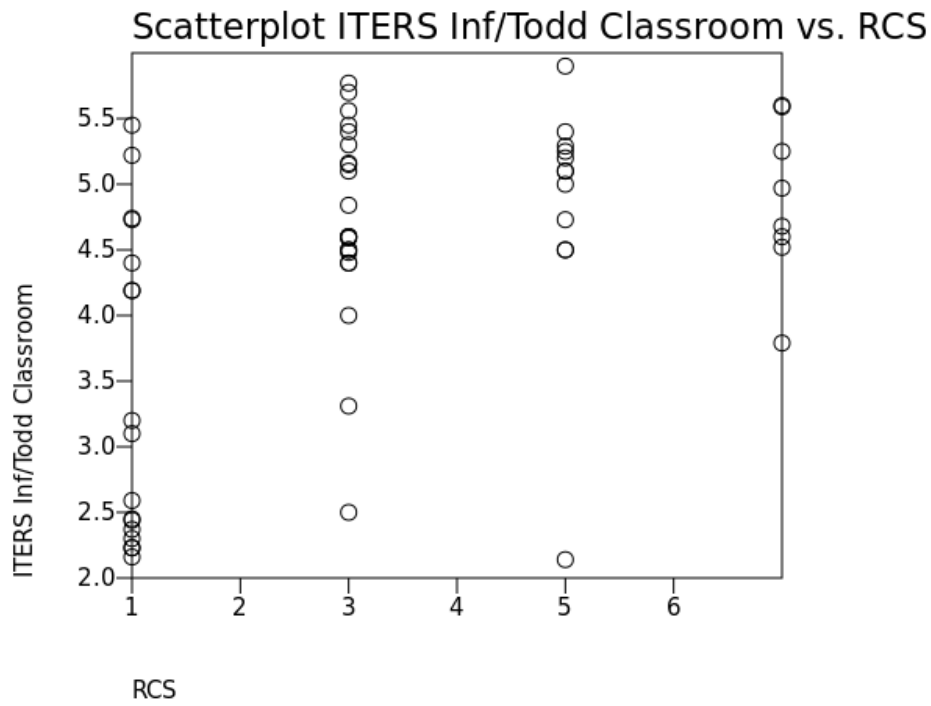
graph/histogram=rsc13

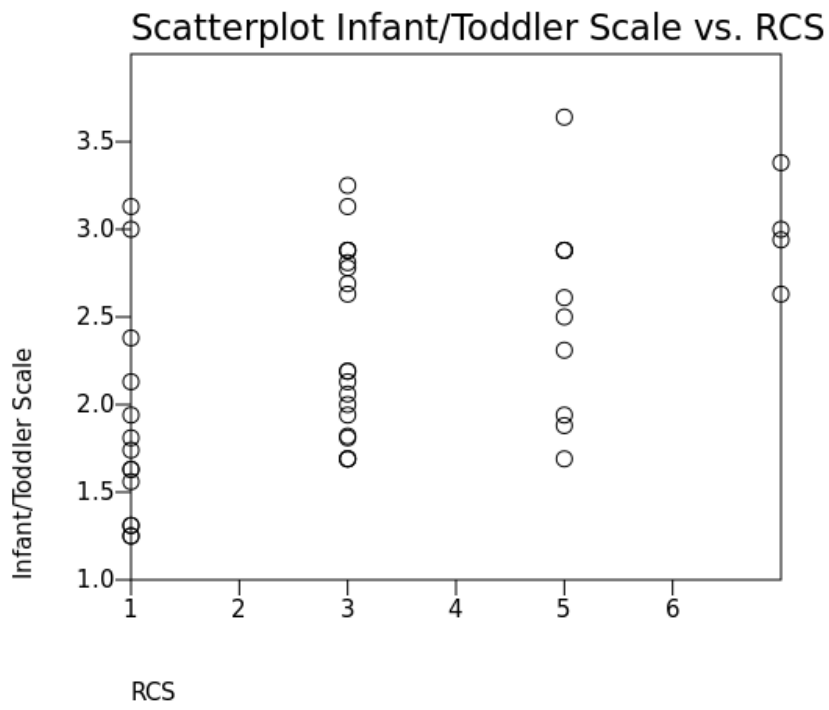
# HISTOGRAM

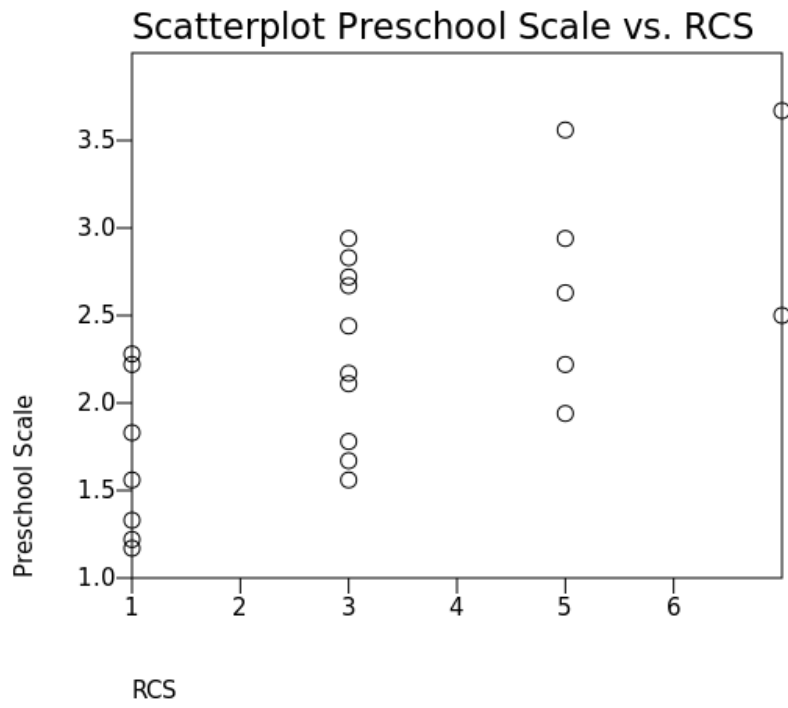


RCS 1-3: H, M, L









**ONEWAY**

oneway/variables=ecers by rank/statistics=descriptives

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
<i>ECERS Preschool Classroom</i>	1.00	9	2.75	.90	.30	2.06	3.45	1.41	4.30
	3.00	10	4.39	.51	.16	4.02	4.76	3.90	5.50
	5.00	6	4.90	.66	.27	4.21	5.59	4.10	6.00
	7.00	4	5.12	.19	.10	4.81	5.42	5.00	5.40
	Total	29	4.09	1.14	.21	3.65	4.52	1.41	6.00

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
<i>ECERS Preschool Classroom</i>	Between Groups	25.08	3	8.36	18.68	.000
	Within Groups	11.19	25	.45		
	Total	36.27	28			

**ONEWAY**

oneway/variables=itersi by rank/statistics=descriptives

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
<i>ITERS Inf/Todd Classroom</i>	1.00	17	3.41	1.19	.29	2.80	4.02	2.16	5.45
	3.00	22	4.72	.77	.16	4.38	5.07	2.50	5.77
	5.00	12	4.84	.94	.27	4.25	5.44	2.14	5.90
	7.00	8	4.88	.61	.22	4.37	5.38	3.79	5.60
	Total	59	4.39	1.10	.14	4.10	4.68	2.14	5.90

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
<i>ITERS Inf/Todd Classroom</i>	Between Groups	23.07	3	7.69	8.96	.000
	Within Groups	47.21	55	.86		
	Total	70.28	58			

**ONEWAY**

oneway/variables=qimi# by rank/statistics=descriptives

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
<i>Infant/Toddler Scale</i>	1.00	14	1.86	.61	.16	1.51	2.21	1.25	3.13
	3.00	20	2.36	.52	.12	2.11	2.60	1.69	3.25
	5.00	10	2.52	.59	.19	2.10	2.94	1.69	3.64
	7.00	4	2.99	.31	.15	2.50	3.48	2.63	3.38
	Total	48	2.30	.63	.09	2.12	2.48	1.25	3.64

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Infant/Toddler Scale	Between Groups	5.13	3	1.71	5.59	.002
	Within Groups	13.44	44	.31		
	Total	18.57	47			

ONEWAY

oneway/variables=qimp# by rank/statistics=descriptives

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Preschool Scale	1.00	7	1.66	.46	.17	1.23	2.09	1.17	2.28
	3.00	10	2.29	.50	.16	1.93	2.65	1.56	2.94
	5.00	5	2.66	.63	.28	1.87	3.44	1.94	3.56
	7.00	2	3.09	.83	.58	-4.35	10.52	2.50	3.67
	Total	24	2.25	.68	.14	1.96	2.53	1.17	3.67

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Preschool Scale	Between Groups	4.69	3	1.56	5.34	.007
	Within Groups	5.86	20	.29		
	Total	10.55	23			