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The Wisconsin Council on Children and Families is a multi-issue policy research and advocacy organization promoting statewide policies that ensure a safe and healthy future for every child in Wisconsin. For more information, visit www.wccf.org
Introduction by David Riley, Ph.D.
Emeritus Professor, University of Wisconsin-Madison Extension

Do government policies work as they are supposed to? This is not just a hypothetical question, but a question we can actually answer by collecting careful data. Some few states around the U.S. are beginning to do just that—test whether their policies are actually working—and the current report is about one of Wisconsin’s efforts in this direction.

The current report tells us about the effectiveness of one program of Wisconsin state government, the YoungStar system which provides consumers with a simple 5 Star rating system for the quality of early care and education (ECE) programs for children ages 0 to 5. The study goes beyond asking if the program was delivered as promised, and asks a much more difficult question: were the lives of citizens changed in the ways we hoped because of this program?

The study was well done, rigorous. The evaluation was led by Dr. Katherine Magnuson of UW-Madison, and she is one of our nation’s leaders in research on ECE programs (we are fortunate to have her here in our state). This wasn’t a study of opinions. Magnuson’s team conducted observations in ECE programs across the state to rate the quality of their teaching interactions with young children, and they also directly tested the child development gains of young children in such areas as vocabulary growth, impulse control, behavior problems, and their general readiness for school.

The summary that follows, prepared by David Edie at the Wisconsin Council on Children and Families, accurately pinpoints the key findings and their implications. The most important finding was that the state’s YoungStar system really does reflect differences in quality: programs with more stars were doing a much better job with young children. To give an idea of what this means in practice, take the area of language and reasoning. In the average 5 Star program you would observe teachers introducing logical concepts (for example over/under, before/after) into conversations with children, and you would also see that children are encouraged to talk through or explain their own reasoning when solving problems. Some 2 Star programs also did these practices with children, but the average 2 Star program did not. These are the kinds of practices, of course, that help children developing their thinking skills so they will later succeed in school and in life. In other words, these differences make a big difference in the children’s lives.

But another of the findings seems disappointing. Children in higher quality programs did not gain substantially more from fall to spring than did children in lower rated programs. This certainly flies in the face of hundreds of studies, which show really dramatic impacts of high quality ECE upon children’s development. These impacts are so well researched, and so dramatic, that even economists from our nation’s Federal Reserve Bank are saying we should invest more in high quality ECE programs because they save the government more than they cost in the long run (especially in reduced costs of crime and public supports).

But in two ways the current findings are really not that surprising. First, this evaluation observed the children in the middle of their child care careers. Presumably, those who had been in higher quality programs for a year or two before this study would have gained more in their child development prior to the study, and the data are consistent with that idea. In the fall, when the children were first tested, those in higher quality programs were doing significantly better in their language and math skills, and then the children in all programs gained in ability at similar rates across the year.
Second, many other studies have found that ECE enrichment programs have effects that appear very small at first, but if you continue to follow the children the impacts become quite dramatic by the late teenage and early adult years. A small deflection in one’s life course at this early age, especially in the areas of intellectual development and self-control, can add up to quite different life outcomes over the course of many years. So the fact that lower and higher quality programs produce similar changes in child development across the year is not really that much of a surprise. We need to follow the children for more years to really see the impacts of different programs.

One impact that was not studied in this evaluation, but will interest policy makers, is the impact of YoungStar on the marketplace for early care and education. The YoungStar program was designed in part to accentuate the naturally occurring forces of the free market economy. Prior research showed us that parents want to trust their children only to high quality settings, but parents don’t know how to gauge the quality of programs. The YoungStar program, by providing an easy measuring stick of quality, was designed to help parents and thus to create consumer pressure upon programs, to raise their number of stars so that more parents would want to purchase their services. In turn, waiting lists at the highest quality programs should allow them to raise their fees and pay their teachers better, which should reduce the problem of worker turnover and keep well trained teachers in the profession longer. In this way, YoungStar should help the marketplace work more efficiently to raise the quality of early care and education programs across the state. Indeed, other studies have already shown this to be happening.

YoungStar works. But could we improve it? Yes, we certainly could, but it is not clear that we should. The current YoungStar system was designed to be easy and inexpensive for government to administer, and in this it has succeeded. For example, it does not include the rigorous but expensive direct observations that Dr. Magnuson used in her evaluation study. Inevitably, we will need to choose a Quality Rating System that compromises between accuracy and cost, and the current version is not bad on that score. Nonetheless, the state should periodically consider fine-tuning the YoungStar system of awarding stars for quality. For example, if the state wished to emphasize pre-reading skills, or math foundations, or the prevention of problem behaviors in young children, then the YoungStar system could be adapted to each priority. Behavioral scientists already have the expertise to do this—it is just a matter of policy makers setting the priorities for the development of our next generation of Wisconsin citizens.

David Riley is a retired professor in Human Development and Family Studies at the University of Wisconsin-Madison and UW-Extension. Dr. Riley was recently honored for “exceptional contributions to the fields of early childhood and parenting, particularly by producing a measurable, positive impact on issues of concern to Wisconsin citizens,” by the Board of Human Sciences. A major part of his work focused on high quality child care and effective parenting.
This report will explore what was learned from a recent research study of YoungStar, Wisconsin’s child care quality rating and improvement system. The report will address key questions, including:

- Is the 5 Star quality rating system valid?
- Do program ratings improve over time?
- Do programs with higher quality ratings produce better outcomes?
- How well has Wisconsin done in its effort to build a strong Quality Rating and Improvement System (QRIS)?

**YoungStar Purpose, Structure, and Scope**

In the last six years Wisconsin has been building a new system to increase the quality of child care, with a particular focus on children from low-income working families. The new system is called YoungStar, a Quality Rating and Improvement System (QRIS) and rolled out in the beginning of 2010. YoungStar is a program of the Wisconsin Department of Children and Families (DCF) created to improve the quality of child care for Wisconsin children, with these key objectives:

- Evaluate and rate the quality of care given by child care providers;
- Help parents choose the best child care for their kids;
- Support providers with tools and training to deliver high-quality early care; and
- Set a consistent standard for child care quality.

Decades of research have emphasized the importance of early childhood development. The hope was that YoungStar would harness marketplace forces to increase the quality of child care programs statewide. YoungStar evaluates the quality of care given by regulated child care providers and rates them at 1 to 5 Stars, with 5 Stars being the highest rating, similar to ratings for hotels, restaurants, or other types of businesses.

A provider’s star rating is based on these four domains:

1. Educational Qualifications and Training
2. Learning Environment and Curriculum
3. Professional and Business Practices

In each domain programs can earn “points” to reach higher ratings.

**Department of Children and Families YoungStar Rating Guide**

<table>
<thead>
<tr>
<th>Level of Provider</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Star</td>
<td>Meets highest levels of quality standards</td>
</tr>
<tr>
<td>4 Star</td>
<td>Meets elevated levels of quality standards</td>
</tr>
<tr>
<td>3 Star</td>
<td>Meets proficient levels of quality standards</td>
</tr>
<tr>
<td>2 Star</td>
<td>Meets health and safety standards</td>
</tr>
<tr>
<td>1 Star</td>
<td>Does not meet health and safety standards</td>
</tr>
</tbody>
</table>

YoungStar is one of the most developed quality rating systems in the country, with 3,800 programs participating, and serving 43,000 low-income children. Many states’ QRIS programs reach only a fraction of their child care providers. In Wisconsin, over 70 percent of licensed child care programs are participating in YoungStar, and all children subsidized by Wisconsin Shares are in YoungStar. Since most programs serving subsidized low-income children also serve non-subsidized children, it is likely that YoungStar has an impact far more than 43,000 low-income subsidized children, possibly as many as 100,000 children. Clearly, YoungStar has the breadth and scope to have a significant influence on young children and their families. Detailed information on YoungStar can be found on the DCF website: [http://dcf.wi.gov/youngstar/](http://dcf.wi.gov/youngstar/).

**What Have We Learned from Recent Research on Quality Rating and Improvement Systems?**

Before delving into Wisconsin’s study, it is useful to understand related research to date. The most thorough overview of QRIS research to date was completed in 2014 by RAND Education and RAND Labor and Population, Validation Studies for Early Learning and Care Quality Rating and Improvement Systems. The RAND study reviewed 14 QRIS rating systems in 11 states: Colorado, Florida (two counties), Indiana, Maine, Minnesota, Missouri, North Carolina, Oklahoma, Pennsylvania, Tennessee, and Virginia. The RAND study focused on three validity questions:
1. Do programs with higher ratings have higher observed quality?
   Of 11 studies, 10 studies provided evidence that the ratings in the QRIS programs are “capturing meaningful difference in program quality.” In several QRIS programs, highly rated programs were measured higher by Environment Rating Scales (ERS), but ERS measures were embedded in the rating levels.

2. Do programs’ ratings improve over time, as would be expected with the help of technical assistance and other supports?
   In six studies focusing on this topic, there was a consistent finding that quality increased over time among participating providers.

3. Do programs that receive higher ratings produce better outcomes in child development?
   The RAND study found that “these studies are the most challenging to implement and can be costly to conduct when independent child assessments are performed.” Among seven studies, RAND finds “only limited evidence that programs rated more highly in a given QRIS are associated with larger development gains for the enrolled children.” Overall, there were mixed results about whether higher ratings predicted better child development outcomes. Two programs found significant effects in social and behavioral development, and in pre-literacy assessment (assessed by teachers).

The background from the RAND study gives us a frame as we look at Wisconsin’s study. QRIS is a fairly new public policy across the country, and the research efforts are in the early stages. In short, research to date shows that programs with higher QRIS quality ratings have higher observed quality, that QRIS ratings improve over time, but that there were mixed findings of the impact of a higher rating on producing better child development outcomes.

Wisconsin’s QRIS Validation Study
At the end of 2012 Wisconsin was one of 14 states awarded a federal Race to the Top-Early Learning Challenge (RTTT-ELC) grant, competing among dozens of states. The grant required that some of the funds should be used for building the state’s QRIS, which helped Wisconsin improve the rating system, increase technical assistance, and help programs increase their quality. Along with the federal funds came a requirement for each funded state to complete a QRIS validation study. Two federal agencies, the Department of Health and Human Services and the Department of Education, wanted to learn more about the progress of QRIS in the funded states. The grant required that each state complete an evaluation, working with an independent evaluator, with two major questions:

1. Do the tiers in the state’s tiered quality rating and improvement system accurately reflect differential levels of program quality?
2. To what extent are higher quality ratings related to progress in children’s learning, development, and school readiness?

The research reports on the validity of YoungStar’s rating scale were finalized in May 2016. The researchers were Katherine Magnuson, PhD, a prominent scholar in early child development nationwide, and Ying-Chum Lin, MSW, at University of Wisconsin-Madison, School of Social Work and the Institute for Research on Poverty. The research included 887 children in 157 early care and education programs. The research began in the fall of 2013 and went through the spring of 2014. The child care programs participating included 204 group child care centers and 34 family child care providers. Most programs and classrooms in this study were in the 2 Star and 3 Star categories. Only 12% of the classrooms were in the higher-rated programs (4 Star and 5 Star).

Because YoungStar was still in its early stages at the time data collection began, only 1% of programs in the state were at 4 Star and only 7% were at 5 Star, so there wasn’t a broad range of the highest-rated programs to participate in the study. The children involved were ages 3 to 5. The child care programs selected were in the Northeast and Milwaukee regions of the state.

The RAND QRIS Study focused on three questions:
1. Do programs with higher ratings have higher observed quality?
2. Do programs’ ratings improve over time, as would be expected with the help of technical assistance and other supports?
3. Do programs that receive higher ratings produce better outcomes in child development?
While YoungStar was designed particularly to focus on low-income children subsidized by Wisconsin Shares, only about one third of the children tracked in the study were from low-income families, mostly participating in Wisconsin Shares. Shares data shows that 92% of participating families are single-parent families in poverty or near poverty, quite different from the rest of the sample.

The validation study released three separate reports:
- The Executive Summary of the Wisconsin Early Child Care Study
- Wisconsin Early Child Care Study First Component Full Report
- Wisconsin Early Child Care Study Second Component Full Report

What Did We Learn from the Wisconsin Validation Study?

1. The YoungStar ratings differentiate programs based on observed quality.
   The YoungStar star rating level does differentiate among programs of varying observed quality. The results found substantial differences between 2 Star and higher-rated programs (3 Star, 4 Star, and 5 Star). According to the researchers, the findings provide the first investigation of empirical evidence that observed quality is found to be higher among 3 Star or higher rated programs than for 2 Star programs. The research also found that the quality ratings of most child care providers are in the minimal to good range.” The study did not have a large enough sample of 4 Star and 5 Star programs to differentiate among the full range of programs (2 Star through 5 Star).

2. The YoungStar rating “points” system predicts a program’s observed classroom quality.
   The study also found that the quality points system though which programs earn “points” appears to be valid. The total number of rating points in each of the four domains (educational qualifications, learning environment/curriculum, professional and business practices, and child health) predicted program quality.

3. On average, children in YoungStar programs were meeting national norms.
   The study found that there was a clear pattern: overall, children in all types of programs were at or above the national norms of school readiness.

4. Children are making progress.
   The study concluded that on average children in YoungStar programs were learning and making age appropriate gains, and learning a range of skills during the course of the preschool year. It’s good news that overall children were making progress. The research suggests that on average these children were likely to enter formal schooling ready to learn.

5. Higher YoungStar quality ratings (on the 5 Star scale) did not predict higher levels of school readiness over the period of the study.
   The study showed that the lack of association between the YoungStar rating and children’s outcomes was found across academic skills. The researchers suggested that the “broader dimensions” of child care quality assessed by YoungStar were not the key inputs that increase children’s pre-academic skills and learning behaviors. The researchers found there was a “lack of association between YoungStar rating and child outcomes.” The researchers indicated that these findings are “consistent with most validation studies of other state or local QRIS ratings systems that have examined children’s outcomes.”

The research findings are confusing: how can higher quality not have better outcomes? The researchers suggested that “higher quality child care, within the range of moderate to good care, is necessary but not
sufficient for intentionally and specifically developing children’s early school readiness.” It is understandable that higher rated programs did not have significant child outcomes in the short timeframe, but why did children in all rated programs, even with the lowest ratings, meet national norms on average?

As the researchers indicated, this finding is not surprising based on research in other states. QRIS is fairly new for most states, and research on outcomes is in its early phases. So far most studies of QRIS have not found strong improvement in children’s outcomes based on the ratings system alone. There are several possible reasons that contributed to the finding that the quality ratings didn’t predict child outcomes:

• The small sample in programs rated 4 Star and 5 Star. Only 12% of the classrooms sampled were in programs rated at the highest levels. A larger sample of 4 Star and 5 Star programs could have resulted in different findings.

• The sample included only about one third that were low-income children or disadvantaged. YoungStar particularly focused on improving child development for children in low-income families. That’s why child care programs serving subsidized-children are required to participate in YoungStar. It’s possible that a larger sample of low-income children in 2 Star and 5 Star programs might have led to different results.

• The timeframe is less than a year. The timeline may not have been sufficient to show significant changes, especially when many of the children had already had been exposed to quality programs prior to the research project. The largest impacts of good early care and education (ECE) programs take time to accumulate. Even the studies finding the most dramatic impact of ECE programs have tended to find minimal differences after one year. But small differences early in life can add up to very large eventual difference in schooling and life.

• Quality ratings may be necessary but not sufficient. It is hard enough to find solid child outcomes with a consistent early learning program with highly qualified teachers. But when there are various child care programs using a wide range of approaches and curricula, it is difficult to get consistent results in child outcomes. QRIS provides a broad framework for quality, but it may be that “broad dimensions of child care quality assessed by YoungStar are not the key inputs,” as the researchers suggest. As the researchers indicate, solid quality ratings are necessary (as in YoungStar), but not sufficient, to get the child outcomes desired. For instance, some researchers believe that the key to early child development is warm interactions and rich conversation between adults and young children, along with good instructional practice. There are now new ways to measure those critical interactions that set the foundation for children to thrive (for instance, CLASS measures the effectiveness of teacher-child interaction). But of course, more assessments can be costly to implement.

QRIS: A Framework for Quality
One way to think about a QRIS like YoungStar is that it provides a scaffolding or frame for quality. But within that framework is where the real daily work is done: well-qualified teachers and engaged parents building warm relationships with positive interaction with children, encouraging rich language, sparking curiosity, and making learning an exciting part of their lives.

Erika Christakis, an early childhood educator, wrote in a recent article in the Atlantic about the core of a high-quality early care and education program:

“In a high-quality program, adults are building relationships with the children and paying close attention to their thought processes and, by extension, their communication. They’re finding ways to make the children think out loud.”

“Conversation is gold. It’s the most efficient early-learning system we have.”

“The real focus in the preschool years should be not just on vocabulary and reading, but on talking and listening. We forget how vital spontaneous, unstructured conversation is to young children’s understanding. By talking with adults, and one another, they pick up information.”
A Balancing Act for the State: High Validity Versus Low Cost
The current QRIS developed by Wisconsin strikes an efficient balance between low cost and high validity. If we change YoungStar so that it requires direct observations of the interactions between teachers and children, which is the key to child development, we could make much stronger predictions of child development gains. But this would be at a great cost to government. The current QRIS, while imperfect, might strike the best balance between efficiency and validity.

Difficulty in Attracting and Retaining Excellent Teachers and Administrators
Child care programs nationwide continue to struggle to attract and retain excellent teachers. While YoungStar resources and scholarships help, well-trained Wisconsin child care teachers (with an associate degree or a bachelor’s degree) on average make only $10 to $12 per hour, according to a 2015 Wisconsin’s Child Care Workforce study by the Wisconsin Early Childhood Association. One in three employees in child care centers leave their jobs each year, so any effects of staff training are reduced through attrition each year. A stable, well compensated workforce is key to quality in child care. Most researchers would agree that effective, experienced teachers and their interaction with children and their families are essential for positive child outcomes.

What Are the Implications for YoungStar?
Wisconsin Should be Proud of Building a Strong, Robust, Valid YoungStar Foundation
After the careful planning to create a rating system that was evidence-based, it is encouraging that YoungStar differentiates observed quality. Since YoungStar is using the 5 Star system to inform parents, and the state provides different levels of payments based on the ratings, the study validates YoungStar’s structure. It also confirms the effort many public and private individuals put into launching YoungStar. The rating system, with its points system, has been validated by the study. While we don’t know exactly what is helping children to be at and above national norms for school readiness, it is comforting to know that the children in YoungStar have a solid start. The Department of Children and Families, the private agencies that implemented much of the QRIS, and the early care and education programs across the state have helped Wisconsin meet its original four goals:

1. YoungStar has evaluated and rated the quality of 3,800 child care providers, a tremendous achievement.
2. YoungStar has created a system that helps thousands of parents choose the best child care for their children, with access to a website with quality information on all YoungStar programs.
3. YoungStar has supported providers with extensive technical assistance, quality achievement grants, and scholarships for thousands of teachers to increase their proficiency.
4. YoungStar has set a consistent standard for child care quality statewide, providing quality benchmarks that programs and communities can strive to meet.

YoungStar has created a strong foundation to build on. It has made excellent programs, but it is not likely that the child care programs participating in YoungStar can be transformed into model early learning programs without ongoing resources to sustain well-trained, well-paid teachers.

Next Challenge for YoungStar: Focus on Child Outcomes
Wisconsin and states across the country with a QRIS are focusing on child outcomes and school readiness. YoungStar has set up a solid, valid system to build on. Wisconsin needs a mechanism to measure progress in school readiness. For instance:

- KEA: Unlike many states, Wisconsin has not developed a statewide Kindergarten Entrance Assessment (KEA) to have a broad view of children’s school readiness. Solid data might help the State focus resources where they are most needed. Wisconsin has looked at several options for KEA, but current policy leaves this up to each school district.
Data System: Wisconsin has been building an early childhood longitudinal data system that could track children from early childhood into public schools to help indicate what programs are most effective.

The challenge for Wisconsin and most other states is to improve the quality of child care sufficiently to result in positive child outcomes, particularly for children from low-income backgrounds or with high needs. To reach that goal, more public and private investment will undoubtedly be needed. The good news is that children in YoungStar child care programs appear to be already meeting national school norms on average. Wisconsin should particularly focus on potentially vulnerable children from low-income families and children of color, and their access to 4 Star and 5 Star child care programs, and ensure opportunity for those that need it most. To make progress, Wisconsin can learn from many other states and from additional research, as YoungStar moves ahead toward 2020.