

## EPiC Series in Built Environment

Volume 5, 2024, Pages 111–121

Proceedings of 60th Annual Associated Schools of Construction International Conference



# Parents' Motivation for their Child's Participation in the "Construct My Future" Summer Camp

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An ongoing concern in the construction industry is the lack of trained skilled workers. Attracting young people to the industry will be vital as the current workforce ages out of the industry. Understanding the younger population's motivation regarding career choice is important in developing opportunities to expose them to the field. One element to be considered is how parents or guardians might influence their children's choice to learn about careers in construction. This study used surveys and a grounded theory design to identify reasons or motivations why a parent or guardian chose to send their child to a summer camp focusing on the construction industry. A three-step coding process was used. Open coding identified the reasons the parents/guardians registered their children for the camp. Axial coding identified three themes with two specifically related to the construction industry. Selective coding further identified directly related to a career in construction: 1) "Spark Interest in Construction Career Option" with an introduction to the construction industry and 2) to provide a better understanding of the "Specific Construction Field and Trades."

Key Words: Parents, Motivation, Construction, Student Recruitment, Trades

## Introduction

The construction industry is growing. According to the Bureau of Labor Statistics, an estimated 252,900 construction jobs will be created between 2021 and 2031 in the United States, with the number of construction managers needed increasing by 7% (U.S. Bureau of Labor Statistics 2023). The demand for projects over the past two years has also added to the number of skilled workers needed to keep the construction industry going and there is concern that past methods of recruitment are no longer effective. In the U.S. Construction Outlook for 2022, the Associated General Contractors of America showed current openings for construction jobs increasing by 52% with some 364,000 jobs being open in February 2022 compared to February 2021 (Simonson, 2022).

One of the critical shortfalls in the industry is availability of a skilled and knowledgeable workforce to meet the demand for projects which will only increase over the second half of 2022 (Sisson, 2022). To address the critical labor shortfall the construction industry must first increase the number of

individuals entering the field. One place to start is to examine the factors influencing an individual's choice to enter the industry (Guggemos & Khattab, 2016). The construction industry does not rank high when individuals are considering desirable career pathways. Of the top one hundred pathways, construction managers ranked forty-fourth (44<sup>th</sup>) according to Career Profiles. The first of the skilled trades making the list was Electrician, at eightieth (80<sup>th</sup>) (Top 100 Careers n.d).

Outdated perceptions of the trades and what is involved in construction career pathways are holding young people back (Cision, 2022). To improve the perception, the industry must educate both the next generation of young people who might consider these career pathways along with their parents and community who influence them. This could be done by showing them as high-paying career opportunities, based on specific knowledge and training, that require an increased understanding of technology and critical thinking. It is not just about educating young people regarding career opportunities and benefits but also reaching those around them who have a voice influencing their choices. (Escamilla, E., Ostadalimakhmalbaf, M., & Bigelow, B., 2016)

In an effort to attract more young people to the construction industry, a construction summer camp entitled "Construct My Future" was held in the summer of 2022. The camp was again offered the summer of 2023. The weeklong camp was created, organized, and executed by a combination of faculty and industry professionals. These professionals included representatives of a variety of construction careers and skilled trade fields, including owners of small businesses, commercial general contractors, homebuilders, designers and material and equipment suppliers.

Camp participants were 7<sup>th</sup> and 8<sup>th</sup> grade students from all across the Oklahoma City metro area as well as surrounding rural communities. The camp was intended to help increase the number of young people interested in pursuing career pathways in the building and construction field and to educate participants and families about the opportunities available to them. The camp was free the first year and required a fifty-dollar (\$50) fee the second year (to ensure those who registered showed up). All other costs were funded by sponsorships and donations from companies, construction industry organizations and educational entities in the area. The fundraising conducted to pay for the camp was to ensure that cost was not a barrier to participation.

The camp included representatives from skilled trades speaking with the students and providing hands-on experiences with equipment and tools which might otherwise not be available to a 7th or 8th grade student. Campers also visited active commercial and residential job sites and heard from project team members about their career pathways and personal experiences within the construction industry. The camp allowed unprecedented access for young people to see and learn about career pathways within the construction industry.

Camp organizers believed that introducing young people to construction career options, including the skilled trades, early is critical. In the 7<sup>th</sup> and 8<sup>th</sup> grade these young people and their parents/guardians may not know there are different career options and the camp would assist in providing a positive perception of the industry and the career pathways available to them as managers or in a skilled trade before they start making career decisions. The camp organizers also recognized that for 7<sup>th</sup> and 8<sup>th</sup> graders the perceptions of parents would be even more important, as students would not attend the camp without parents choosing to send them. As such the camp organizers sought to understand why parents or guardians were interested in the camp for their children.

A recent study found that only 66% of people had a well-founded understanding of compensation rates in construction career pathways and 32% of high-school students have a negative opinion of the construction industry (Ostadalimakhmalbaf, et al., 2021). The same study also reported that

"improved family-unit perception of the construction-related programs and careers" is a top issue to be addressed. As such, understanding the reasons or motivations influencing a parent or guardian to send their child to a summer camp focusing on the construction industry could provide valuable insight to increasing participation and thus the number of individuals pursuing a career in the skilled trades. Broadly this study sought to understand what are the reasons/motivations for parents to send their children to a construction summer camp, and more specifically what do they hope their child would learn from attending the construction camp?

#### Literature Review

The construction industry continues to grow, increasing the need for young people to enter the career pathway at all levels. Of the over 100 Construction Management (CM) programs within higher education in the U.S., the graduates from programs granting a four-year bachelor's degree enjoy a nearly 100% placement within the industry along with some of the highest salaries of students with bachelor's degree (Guggemos & Khattab, 2016). Even with high placement rates of program graduates, some CM programs face issues in attracting and developing the workforce needed by the construction industry. While these challenges are not new, they need to be overcome to ensure education programs are able to support the industry. Of these challenges the negative image of the construction industry often leads to students eliminating a construction career pathway before full and fair consideration is given. Among detractors to considering this career pathway are many teachers and K-12 counselors who lack knowledge and understanding about career paths in the construction industry for both construction managers and skilled trades. They are likely to guide students who show interest in construction into more traditional career pathway like architecture and civil engineering (Guggemos & Khattab, 2016).

Construction educational pathways are often seen as second or fallback degrees for students unaware of CM programs when applying to college (Guggemos & Khattab, 2016). Increasing the level of understanding and consideration of potential career pathways for a young individual is based on their interests and their perceptions of those pathways often established during K-12 years. Research by Hammack, et.al (2015) has shown that attitudes and perceptions of the career pathway for engineering were significantly impacted in a positive manner for participants taking part in their weeklong Engineering Camp. Further, having professionals from within the industry collaborate with educators at the K-12 level is impactful on the experiences of the participants (Hammack, et.al 2015).

A lack of understanding about the construction industry is shown to lead students to accept negative perceptions of career pathways within the industry (Bringham, et. al, 2012). Modifying this perception of the industry is a key learning objective of many summer camps which are designed to educate and inform as a way of increasing interest. Experiences such as summer camps, field trips and hands-on learning with industry professionals during events has been shown to increase the interest of the student participants attending these events in considering construction career options (Sulbaran & Langer 2022). Promoting these concepts, applicable not just to the construction industry but also other career pathways and life in general, is critical. Critical thinking, teamwork, writing, and leadership skills are all able to be developed through the use of highly diversified hands-on projects. Which were shown to be a key element in the engineering camp held on the campus of Texas A&M (Yilmaz, et. al, 2010).

Parents and guardians have a dynamic role in the educational choices young people make. These influences, either intentionally or unintentionally, can shape a student's perceptions and cause them to

make choices based on their secondhand perceptions of career options. Children may altogether eliminate a career path due to the belief that it would not be approved by their parents or guardians (Nawabi & Javed, 2019). Parental influence over a child's perception of careers remains high, as does the influence of schoolteachers when considering career choice. Knineton (2004) showed that parents of the same gender as their children have a greater influence than the other parental unit. Meaning a daughter is more likely to hold the influence of her mother, in terms of career opportunity, in higher regard than that of her father. Parents also provide a strong influence on their children, albeit unintentionally, by serving as an example of a career pathway. By working within a given field a parent can communicate in a subtle manner to their children the value of a specific career field (Knineton, 2004). It is important to note this influence over a child's perception of the world is constantly developing as they watch, listen, and learn from their parents. Additionally the influence of both parents, when in alignment with each other, demonstrated greater value than that of either individual parent. (To, et.al 2022).

Given the influence of parents on their children's career choices, this study sought to understand why a parent would encourage their child to attend a construction focused summer day camp, a specific topic for which no literature could be found.

#### Methodology

To understand the primary reasons parents or guardians wanted to involve their children in an educational event focused on construction industry career opportunities and skilled trades, a grounded theory approach was used to interpret qualitative data. Open-ended responses were sought to reduce bias that could be introduced by the researcher's presentation of selected, pre-defined responses. Through this process, themes emerged indicating what parents and guardians hoped their children would learn by participating in a construction camp.

Data was collected from participants' parents or guardians as part of the camp application process. Answering the question did not affect whether a student was selected to participate in the camp. In the application process the specific question asked was: "What are you hoping they (your child) learn?" The answers given by the parents or guardians were important to understand the motivating factors for signing their child up for the camp and potential interest in a construction career path.

The sample consists of responses from 48 parents of campers in 2022 and 58 parents of campers in 2023. In the few cases in 2023 where a child also participated in the 2022 summer camp, only 2022 responses were used for analysis. Ultimately 110 responses were collected in response to the question. After the data was collected it was stripped of personally identifiable information and although this was ex-post facto data being analyzed, human subjects' approval through the IRB at the researcher's institution determined this study was exempt.

## Analysis

Data was analyzed using coding, specifically the process of open, axial, and selective coding was utilized. This three-step coding process was used to identify themes in the data. As a qualitative study and thus analysis, structure is important to mitigate threats to validity. With this in mind, the authors followed Strauss and Corbin's (1998) coding process. To further increase validity, triangulation was used with two researchers evaluating the data independently and categorizing it into

themes. Although this was qualitative research, descriptive statistics were used to report frequency of the themes that emerged. Further, content analysis was performed to generate a word map (Figure 1) to visualize the results.

## **Open** Coding

Open coding started with reviewing individual statements given by parents and guardians to the question asked during the application process: "What are you hoping they (your child) learn?" By using open-ended questions, an unfiltered response from the parent/guardian was captured, allowing for a better exploration of their perspectives and insights into the advantages of the camp for their child. Identifying individual elements within each of the answers provided was done to provide a clearer understanding of all reasons for participation in the camp. If a response listed more than one desired outcome of camp attendance, those individual elements were broken out into separate responses for analysis. A response statement such as "To give him the opportunity to think outside the box and learn the basics of a construction trade" was broken into "To give him the opportunity to think outside the box" and "To learn the basics of a construction trades." This allowed each statement to be used in understanding the question of what parents hope their children learn from attending a construction camp.

Of the 106 students who attended the camp, 110 responses to the question, "what are you hoping they learn?" were collected. Table 1 displays the results to this question. As can be seen, in open coding ten themes emerged, however only eight themes were reported more than once.

Themes Emerging From Open Coding		
Theme	Frequency n=110	%
Learn Construction Skills/How Things Work	28	25.5%
Learn About Specific Construction Fields/Trades	24	21.8%
Life/Social Skills	20	18.2%
Learn About Spark Interest in Construction Career Options	12	10.9%
Informed Choice of Future Careers	11	10.0%
Fun/Educational/Good Activities	6	5.5%
Explore/Learn About Future Directions	4	3.6%
Education Option to Career	3	2.7%
Creativity	1	0.9%
Hands On	1	0.9%

Table 1.

## Axial Coding

Axial coding was conducted by evaluating the themes identified in open coding and searching for broader meaning. Axial coding led to four broader themes emerging. Table 2 displays these themes and their frequencies. A great deal of alignment was seen between these themes as they are primarily distinguished from one another by the context of construction. In both cases a construction specific theme is mirrored by nearly the same theme that is not specific to construction.

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Themes Emerging From Axial Coding		
Theme	Frequency n=110	%
Learn About Work/Career Options in Construction Related Fields	36	32.7%
Learn How Things Work & Construction Skills	29	26.4
General Skill Development and Positive Experience	27	24.5%
Learn About Work/Career Options in General (not specific to	18	16.4%
Construction)		

#### Table 2.

#### Learning about work/career options in construction related fields

Responses within this category looked to expand on preexisting interest within the skilled trades career pathway or expose the camper to broader career pathways in the construction industry. Parents and guardians said things like; "He is very interested in going to a trade school after high school" and "To help him gain more skills to use for his career" highlighted the intent to move the young person toward the construction industry. Statements such as "I want him to have the opportunity to experience a variety of career options in a safe learning environment" suggested that career pathways within the construction industry are already being looked at and the ability or opportunity to increase the level of understanding about them was desired.

## Learning how things work and construction skills

This theme suggested parents wanted their children to have opportunities to work with tools and equipment or gain a better understanding of skills found within construction industry careers. Some parents noted a preexisting interest or skill, that their child already participates in projects at home and wanted to further develop those skills and learn new ones. Responses such as learn: "Tips and tricks. We do a lot of projects at home" and "He is interested in learning how to use tools and how to build with them" showed the interest in the camp was to help expand or build upon the interest, which was already present within the camper.

#### *General skill development and a positive experience*

These three themes were grouped into a category demonstrating the parent/guardian desired involvement in an overall positive environment for the young person to grow and develop. This category of interest could apply to any camp experience and highlights an important expectation for a camp focused on anything to facilitate positive experiences and development of life skills such as working with others, work ethic, and communication. Parents and guardians making statements like; "He is very bright and would thrive in such an atmosphere," "To allow him to think outside the box" and "I'm hoping he gains confidence in himself" demonstrated interest that the camp would provide a positive environment for the young person to grow and develop.

#### *Learning about work/career options in general (not specific to construction)*

Some statements did not directly cite the construction industry in their response. Statements such as "I would like him to explore other career paths before making the decision" were seen as showing a desire for young person to see and understand career options within the construction industry which may or may not have been discussed previously. Responses here also showed a desire for the camp to help create or develop an interest in the young person or help them look at what the future may hold. There was no stated desire, one way or another, to have the young person enter into the construction

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industry but rather a desire of the camper to be able to look at what might or might not interest them in their future choices.

## Selective Coding

The final step in the coding process, selective coding, is a systematic and focused approach to view the complete data set. By evaluating and refining key themes and concepts and allowing categories to develop a better understanding of the data can be had. In this study, selective coding produced two broad categories suggesting parents largely viewed the camp as an opportunity to shape their child's future.

Selective coding revealed a split of the data into two themes. Fifty one percent (56) indicated that they wanted their children to learn about future opportunities, including skilled trades and broader construction career pathways. Forty nine percent (54) of the responses indicated that they wanted their children to develop skills. It could be assumed that these desires by parents are all at least tangentially related to construction, because construction was the focus of the camp. However, because not all of the responses explicitly indicated construction that characterization should be made with caution.

### Word Mapping

Following the analysis via coding, content analysis was conducted using the data generated through the open coding process, this allowed deciphering the motivations and preferences of parents/guardians who send their children to the camp. By analyzing the textual data collected word mapping allows a visual representation (Figure 1) of the frequency and distribution of keywords or phrases related to parental motivations which helped to identify prominent terms and trends within the dataset. Identifying the frequency of terms used such as "life skills," "career," "explore trades," "spark interest," "educational experience," or "hands-on," provides insight into the underlying priorities and concerns of parents. This allows the camp organizers and the construction industry itself to better position itself to market these camps in the future, working to apply to the underlying priorities and concerns of parents and guardians who play a critical role in signing their kids up for such event but also in helping determine the career pathway a young person is exposed to or not.



Figure 1. Word Map

#### **Discussion/Conclusion**

Although there are different efforts to address the need for more tradesmen and construction managers, there doesn't seem to be a "silver bullet". However, to work toward a goal of increasing awareness of career pathways many different types of industries have identified summer camps as effective means to educate young people about potential career paths. Camps allow participants to learn and have experience with potential careers in a positive environment, usually hands-on and enjoyable. Events with this type of interaction between industry and the community allow for young people who may not have another opportunity, such as through a family member or friend within the industry, to learn about the options available to them and how to go about accessing them. But to have this event be effective young people first have to sign up, and the gatekeeper to this opportunity for the 7<sup>th</sup> and 8<sup>th</sup> grade age group is generally the parent or the guardian. Understanding the desired learning outcome and why parents and guardians would want their child to take part in such an event is valuable information for creating communication to increase interest and participation. Knowing the predominant themes that resonate with public events could more productively increase the level of awareness about career pathways by answering the questions that parents have.

Within this research, the findings show that the primary reasons given by parents and guardians as to what they wanted their child to learn from camp are a better understanding of career pathways and skills that will benefit their children in their future. This desire for their children to be educated about career pathways in construction is encouraging because it suggests parents are not only focused on traditional education pathways but also on the skilled trades. The interest of parents in non-traditional pathways also suggests that these career pathways are seen as valuable by the these gatekeepers or influencers of young people. It should be noted however that parents may not know what skills or learning outcomes are needed for their children to be open to and educated about these career pathways. To that point, the two themes that emerged in selective coding show a desire to educate and expose youth to future careers and skillsets that will benefit them. However, the researchers recognize that because these responses only include parents who sent their child to the construction camp this outcome occurred in a vacuum, and don't include parents who would not choose this summer activity for their child.

The idea of introducing construction career pathways including those within the skilled trades to parents and younger students has not been the traditional approach the construction industry and educational community has taken in the past. Efforts have been focused on older students. As such these results suggest parents are interested in these questions at younger ages.

The literature has not spoken to the idea of parents being interested in these career pathways for their kids while unaware of the skills or knowledge needed to access them. The desire of parents for their children to develop skills and learn about career pathways represents an important finding. This information should be used by camp organizers and the construction industry itself to develop and refine events and outreach to speak to these desires, not just that there are lots of jobs available and good pay. Expanding the knowledge that these careers require the development and use of technical and soft skills is important in developing interest not only in the skilled trades, but also in construction management and other career options. This should allow for the construction industry to work to solve one of its leading issues which is an overall decrease in the availability of skilled labor, and work to increase the understanding of other construction career pathways, attracting young people into its labor force.

Future camp initiatives currently under consideration involve expanding the camp to host additional sessions in various communities within the state, thereby increasing participant numbers. As the camp model undergoes refinement, its adaptability to different settings could amplify the educational outreach to a broader audience of young individuals. The camp serves as a valuable educational platform for exploring career pathways within the construction industry, encompassing diverse roles such as skilled trades, traditional construction management, and others, providing participants with examples of various career pathways. The concept of introducing additional camps for older participants, specifically 8th-12th graders, aims to focus on distinct career pathways, acknowledging that students in these later grades may have a clearer understanding of their career and educational direction. Enabling previous campers to return and assume roles as group leaders and camp foremen fosters the development of leadership skills among participants. It is crucial for educational opportunities and events like this to emphasize a central message: the significance lies not in the specific career pathway chosen within the construction industry but in considering the industry in the first place.

## Future Research

Because this study focused on the desired learning outcomes parents and guardians had for their children coming into a construction summer camp, future research is recommended to look at collecting data from the students about their desired learning outcomes from such a camp and see if there is alignment between parents and children in this area. Further investigation comparing parents who send their children to a focused camp with those who do not or who send their child to another camp should be compared. Finally, there should be exploration of if the desired learning outcomes conveyed at the start of the camp were achieved by the end of the camp.

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