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RESEARCH REPORT

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TOPIC:

The Value of Procurement Certification

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Table of Contents

Abstract.....	5
Introduction.....	6
Purpose of the Research.....	6
Methodology.....	6
<i>The Procurement Certification Survey Instrument</i>	6
<i>The Participants</i>	8
Data Analysis.....	9
<i>Demographic Data</i>	9
<i>Organizational Data</i>	10
<i>PPCM Certifications Held by Survey Participants</i>	13
Findings.....	15
Summary and Conclusion.....	22
References.....	24

List of Charts

Chart 1: Gender	9
Chart 2: Age.....	9
Chart 3: Highest Education Level Completed.....	10
Chart 4: Procurement Employees of the Participants' Organizations.....	10
Chart 5: Money Spent Annually on Procurement of the Participants' Organizations	11
Chart 6: Type of Organization of the Participants.....	11
Chart 7: Level of Purchasing Authority of the Participants.....	12
Chart 8: Procurement Working Experience of the Participants	12
Chart 9: UPPCC Designations	13
Chart 10: Other Professional Purchasing, Procurement, or Supply Chain Certifications	13
Chart 11: Years Respondents Received their Most Recent Certification	14
Chart 12: Required Certification.....	14
Chart 13: Perception of Uncertified PPCM Officials Regarding Whether Financial Rewards Would Motivate them to Pursue Certification.....	21
Chart 14: Perception of Uncertified PPCM Officials Regarding Whether Non- Financial Rewards Would Motivate them to Pursue Certification.....	22

List of Tables

Table 1: The Impact of Certification on Hiring, Promoting, Retaining, and Evaluating the Performance of PPCM Employees	15
Table 2: Incentives Provided to Promote and Encourage Certifications	16
Table 3: How Certified and Uncertified PPCM Officials Perceive the Value of Certification	17
Table 4: The Value of Certification as Perceived by the PPCM Managers.....	18
Table 5: The Value of Certification to the PPCM and the Organizations/Agencies that Employ PPCM Practitioners, as Perceived by Certified PPCM Officials.....	19
Table 6: The Value of Certification to the PPCM and the Organizations/Agencies that Employ PPCM Practitioners, as Perceived by Uncertified PPCM Officials.....	20
Table 7: Reasons Cited by PPCM Officials for not Pursuing Certification	21

Abstract

This report presents the findings of research undertaken to gain insight into how North American public procurement officials perceive the value of professional certification in public procurement and contract management (PPCM). The results of a survey distributed to members of four PPCM professional associations in 2015 indicate that most of the PPCM practitioners who participated in the research believe professional certification is beneficial for both PPCM officials and their employers. This report also presents findings related to why some PPCM officials do not seek professional certification; why public entities do or do not require or consider certification when hiring, promoting, and retaining PPCM staff; how managers who are themselves PPCM officials compare the performance of PPCM employees who are certified with the performance of PPCM employees who are not certified; and the extent to which organizations that employ PPCM officials provide support and incentives to promote and recognize certification.

Introduction

Within public procurement and contract management (PPCM), the success of the two principal PPCM certification programs in North America appears to indicate that at least some PPCM practitioners and some organizations that employ those practitioners believe certification in PPCM is beneficial. The importance of certification for individuals who work in specialized occupations in both the private and public sectors is well documented in the literature and the research. As early as 1957, Greenwood (1957) considered certification to be one of five attributes he considered essential when defining the characteristics of a profession. This research builds on the earlier research of Prier, McCue, & Behara (2010) by seeking more specific explanations for why PPCM practitioners seek or do not seek professional certification. It also supplements the earlier research by seeking to learn why some employers require or prefer certification as a qualification standard and why other employers do not.

Purpose of the Research

The purpose of this research is to explore the following (1) why some PPCM officials pursue certification by examining how they perceive the benefits of certification to themselves, to those who work in PPCM, and to the organizations/agencies that employ them; (2) why other PPCM officials do not pursue certification by looking at the reasons and barriers they cite for not pursuing certification; (3) why public entities do or do not require or consider certification when hiring, promoting, and retaining PPCM personnel; (4) how managers who work in public procurement and contract management compare the performance of PPCM employees who are certified with the performance of PPCM employees who are not certified; and (5) the extent to which organizations that employ PPCM officials provide support and incentives to promote and recognize certification. To achieve the purpose of the research, the researchers developed and tested a web-based survey, then distributed it to certified PPCM officials and noncertified PPCM officials, including PPCM officials who hire and manage other PPCM officials.

Methodology

The Procurement Certification Survey Instrument

In order to explore the value of certification in public procurement and contract management, the researchers developed, tested and employed a survey instrument to solicit needed input from public procurement practitioners who work in both managerial and non-managerial capacities. This survey instrument was distributed

to members of NIGP: the Institute for Public Procurement, the National Association of State Procurement Officials (NASPO), the Canadian Public Procurement Council (CPPC), and the National Contract Management Association (NCMA). The researchers sent a letter via e-mail asking the mentioned organizations to invite their members to participate in this research endeavor. Each organization invited its members to take the procurement certification survey by either sending an email to the members or posting the survey link with instructions on social media.

More than thirty procurement experts participated in a pilot test of the survey instrument prior to its being deployed. The purpose of the pilot test was to reduce systematic and random errors in the instrument and to gather feedback and suggestions from experts in the field. The respondents' feedback and suggestions were incorporated into the final version of the procurement certification instrument.

The procurement certification survey instrument comprises 30 questions designed to gain a better understanding of the value of PPCM certification. A review of procurement and certification literature served as a major basis for the development of the survey questions (Cegielski, 2004; Cohen, 2012; Davenport, 2006; Davison, Komarnitskaya, & Ershova, 2014; Evetts, 2009; Gordon, Zemansky, & Sekwat, 2000; Kelley & Kimball, 2001; Lengnick-Hall & Aguinis, 2012; Marcis & Bland, 2001; Niebuhr & Biel, 2007; Prier, McCue, & Behara, 2010; Redd & Alexander, 1997; Smith, 2013; Veazie, 2014; Weissman, 1996; Wierschem, Guoying, & Johnston, 2010). The instrument consists of three segments: demographic data, organizational data, and PPCM certifications data. In addition to these three segments, the survey was designed to collect data regarding a variety of issues related to procurement certification.

Survey participants were asked two questions about the perceived benefits of professional certification (Redd & Alexander, 1997). The first question includes eight statements about the intrinsic factors for certification, while the second one includes eight statements about the extrinsic factors for certification. Both questions utilize a 5-point Likert scale response labeled as strongly agree, agree, neither agree or disagree, disagree, and strongly disagree. A portion of the intrinsic and extrinsic factors was adapted from the Perceived Value of Certification Tool (PVCT) and was adjusted to fit the procurement and contract management occupational categoryⁱ. The PVCT tool defines intrinsic factors as “motivators internal to an individual and linked to personal development and self-concept values”(Niebuhr & Biel, 2007, p. 177), and extrinsic factors as those “external to an individual and are defined by others”(Niebuhr & Biel, 2007, p. 177).

One of the instrument's questions specifically asked participants about their perception of the value of professional certification to both the officials who practice PPCM and their organizations/agencies. To discover the barriers to certification and the reasons for not pursuing certifications, uncertified participants were asked a question that includes twelve statements related to the reasons for not pursuing certifications (Niebuhr & Biel, 2007; Redd & Alexander, 1997; Weissman, 1996). The uncertified participants were then asked a follow-up question to see if they are currently pursuing certification or intend to pursue certification but have not begun that pursuit.

Two questions were targeted to the PPCM officials who hire and manage other PPCM officials. The first question asked the hiring and management authorities about their perceptions of the certified PPCM officials' job performance compared to the performance of PPCM officials who are not certified. The second question asked the hiring and management authorities whether a practitioner being certified impacts hiring, promotion, and retention in their organizations (Niebuhr & Biel, 2007; Redd & Alexander, 1997; Weissman, 1996). The hiring and management authorities also were asked about the support and/or incentives their organizations/agencies provide to promote and recognize professional certification of PPCM employees.

The Participants

A total of 1,705 PPCM officials participated in the procurement certification survey. Eighty-six percent of the participants are members of at least NIGP; twenty-nine percent of the participants are members of at least one or more state/provincial/regional procurement associations. Some of the participants are members of more than one organization. Of the 1,705 participants, 471 (28%) identified themselves as uncertified PPCM officials; 1,130 (66%) identified themselves as certified PPCM officials. Of the 1,705 participants, 607 (36%) were PPCM officials who have a responsibility for hiring procurement officials. Forty-three percent (N=1,564) of the respondents to the question regarding current position were either procurement managers, directors of procurement, contract managers, or in positions with similar responsibilities. In this report, such individuals are collectively referred to as "PPCM managers" and "procurement managers". It is important to note that participants had the option to skip any question(s) that are inapplicable or uncomfortable to them.

Data Analysis

The survey instrument asked the participants for personal demographic data, organizational data, and data regarding professional certifications. Charts are used to illustrate the patterns in the dataset. The charts below represent selected data.

Demographic Data:

Chart 1 shows the distribution of males and females in the sample. Thirty-six percent who answered the gender question are male, and 64% are female.

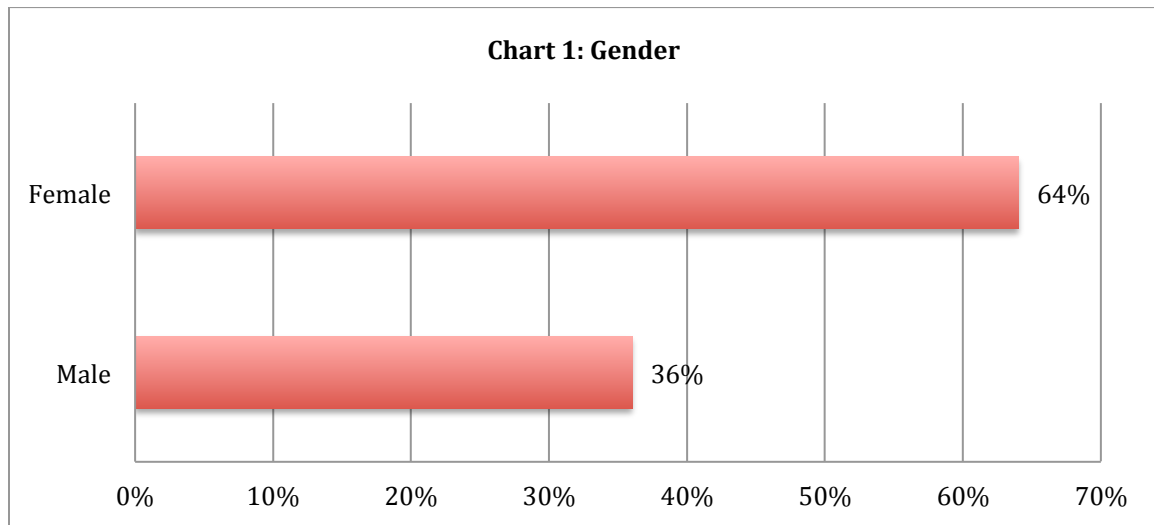


Chart 2 shows that approximately 40% of the participants are between the ages of 46 and 55. Less than 3% of the participants are 66 years or older.

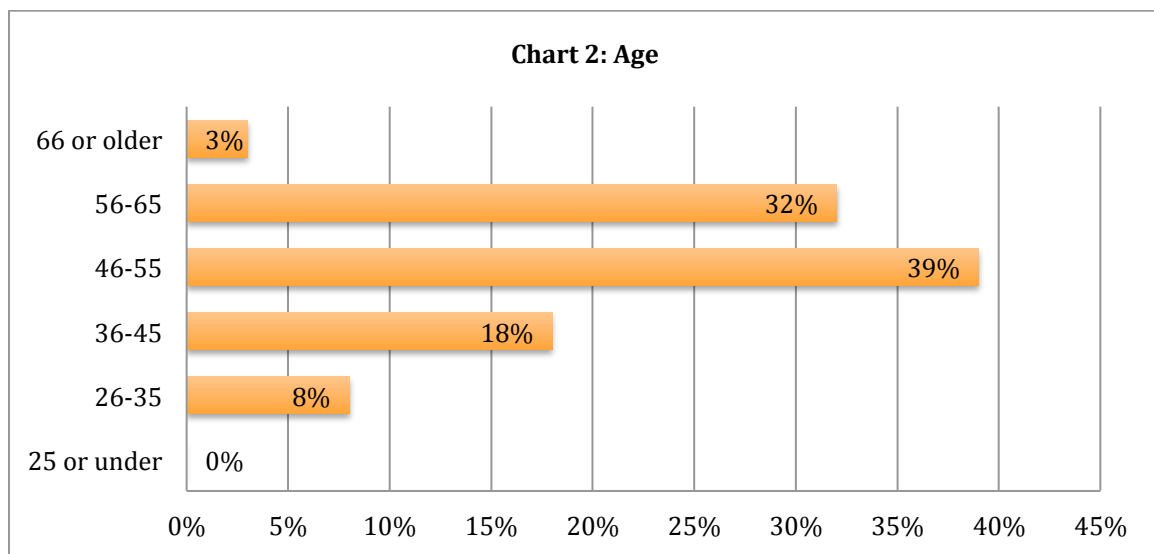
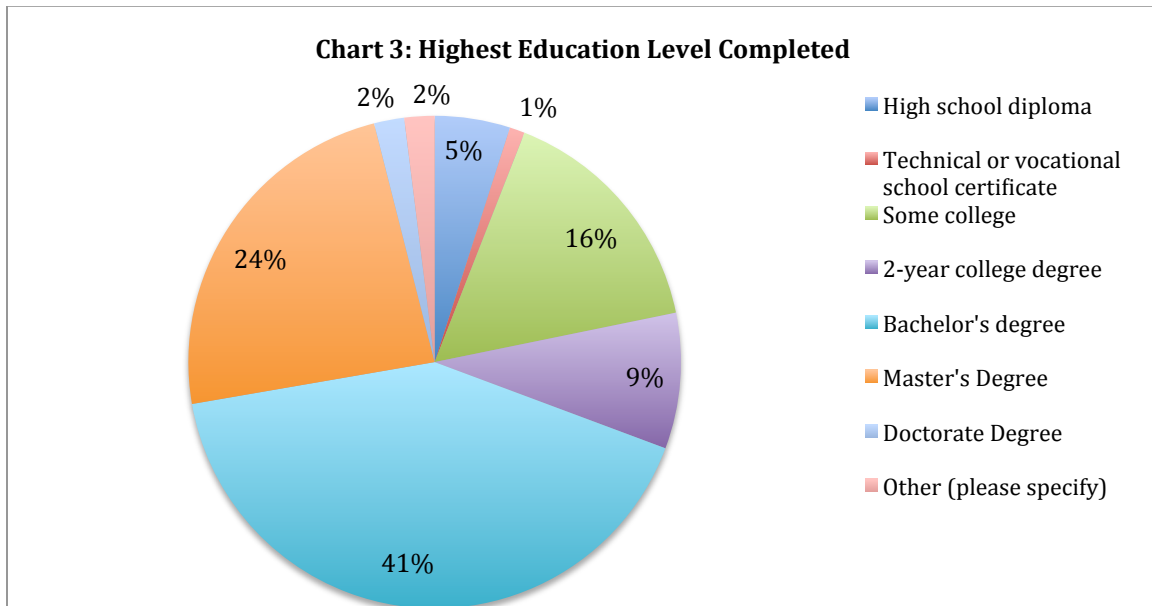


Chart 3 shows the highest education level achieved by the participants. Slightly more than two in five (41%) of the participants have earned a bachelor’s degree; less than a quarter (24%) of the participants have earned a master’s degree. A fourth of the respondents have earned an associate’s degree (9%) or have attended some college (16%).



Organizational Data

Chart 4 shows that nearly three-fourths (74%) of survey respondents work in organizations employing fewer than twenty (20) public procurement and contract management officials.

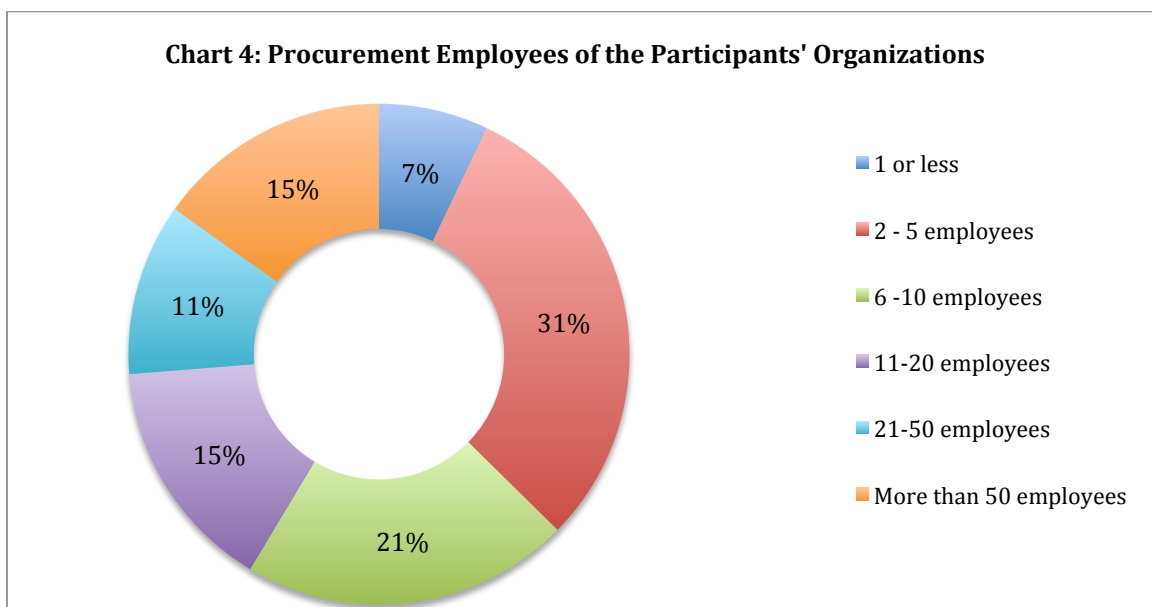
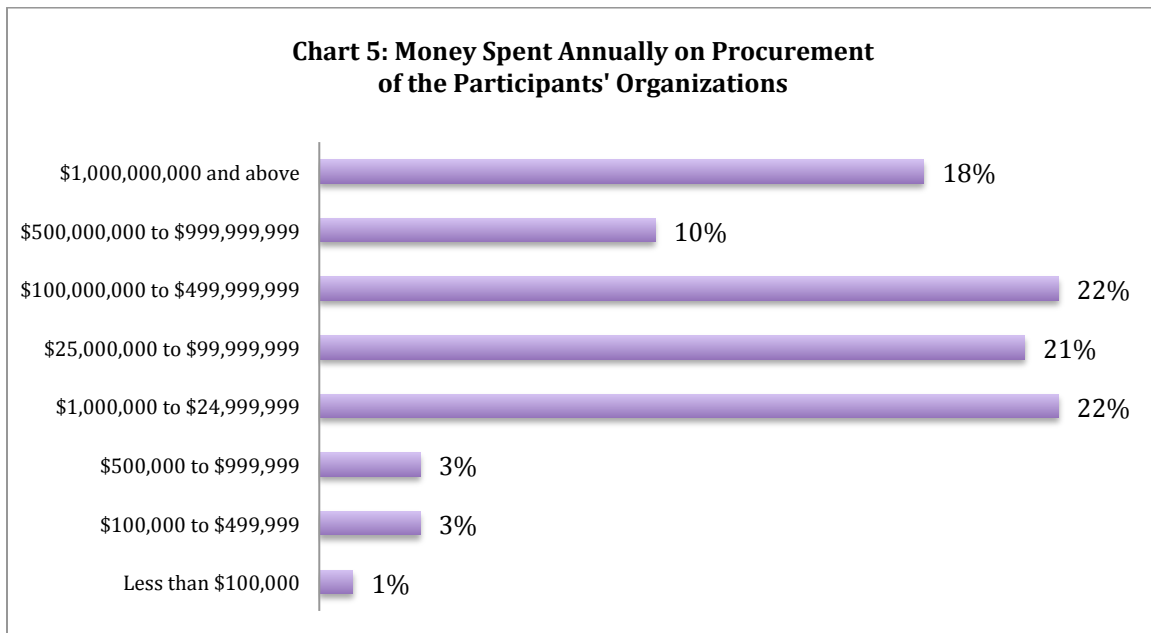


Chart 5 illustrates that nearly half of the survey participants work in organizations that spend more than 100 million dollars annually to procure goods, services, systems, and infrastructure.



As can be seen from Chart 6, seven in ten of the survey respondents work for either general local governments (44%) or U.S. state governments (26%). PPCM officials who work for K-12 schools and special districts, which also are local governments, provided more than a tenth of the responses (9% and 2%, respectively).

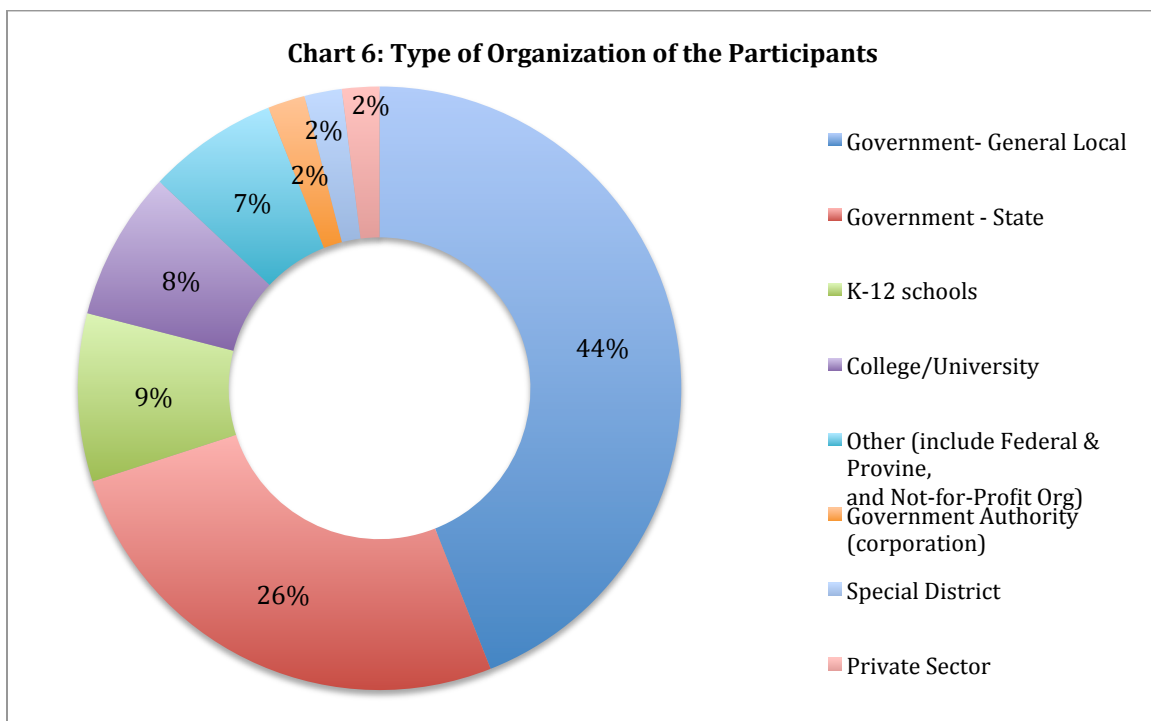


Chart 7 displays the level of purchasing authority of the participants. Almost 31% of the participants have unlimited purchasing authority. Less than 15% have no purchasing authority.

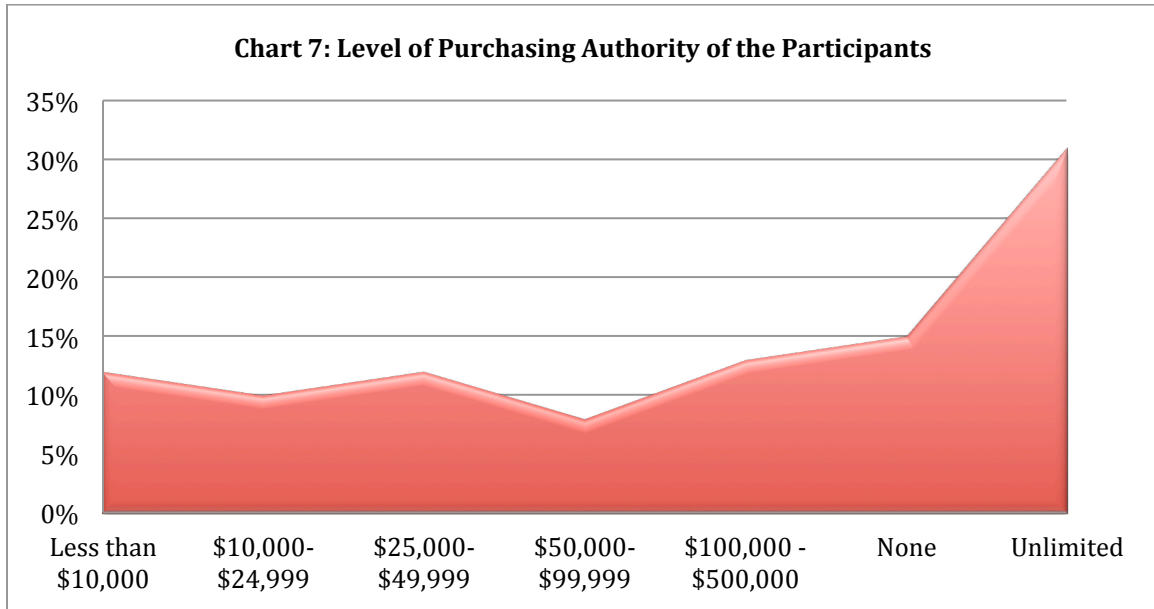
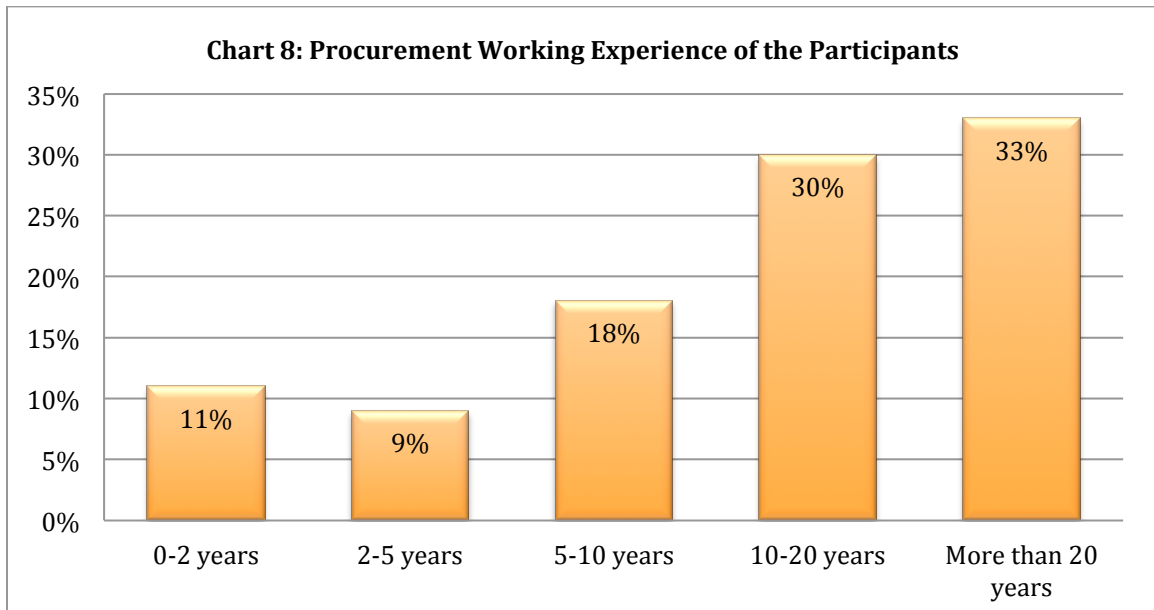


Chart 8 shows that nearly two thirds (63%) of the participants answered the question “Excluding your current position, how many years have you been working in procurement, counting time worked in other public organizations?” as more than 10 years.



PPCM Certifications Held by Survey Participants

Approximately, 48% (N=802) of the total participants (N=1,705) possess one or both of the UPPCC designations. Chart 9 shows that 62% (N=802) of the participants hold the CPPB certification. Twenty-three of the participants possess both the CPPB and CPPO certifications.

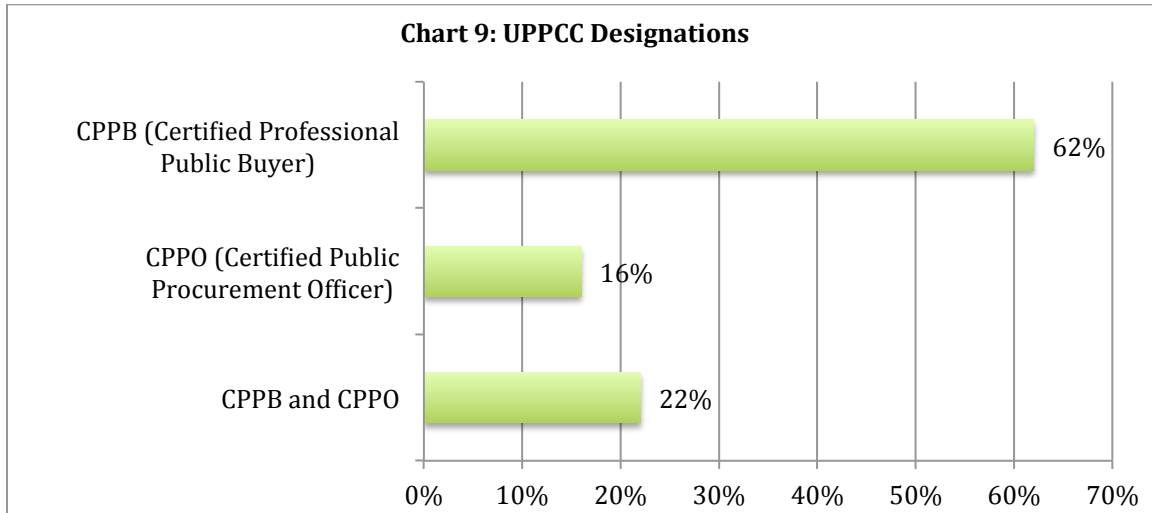
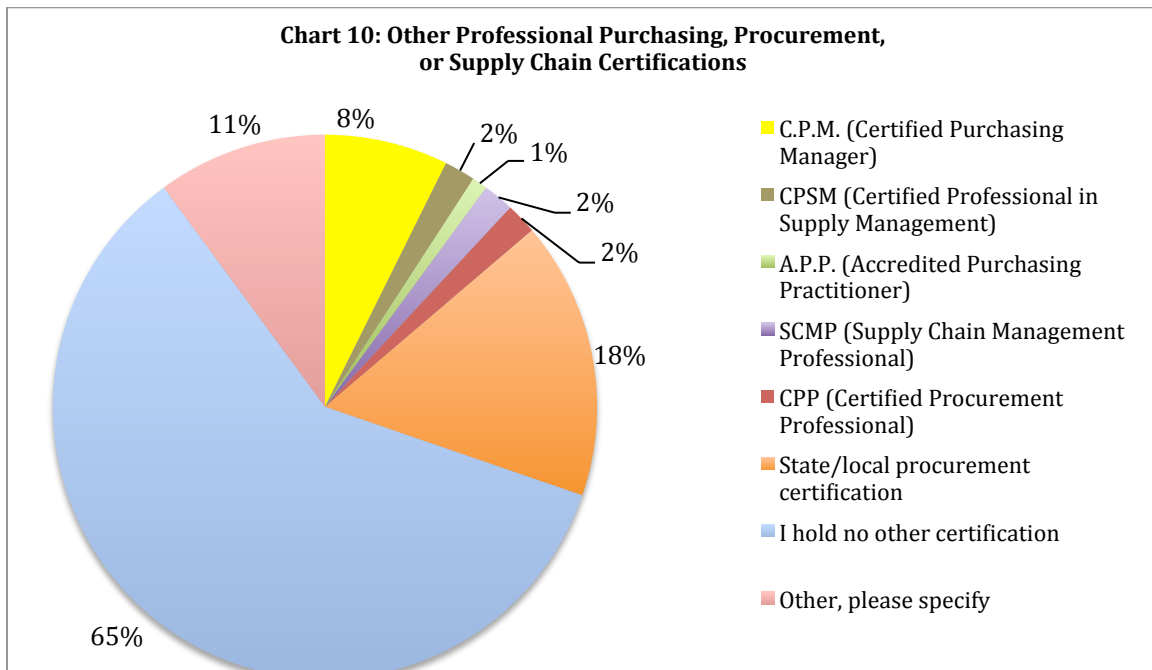
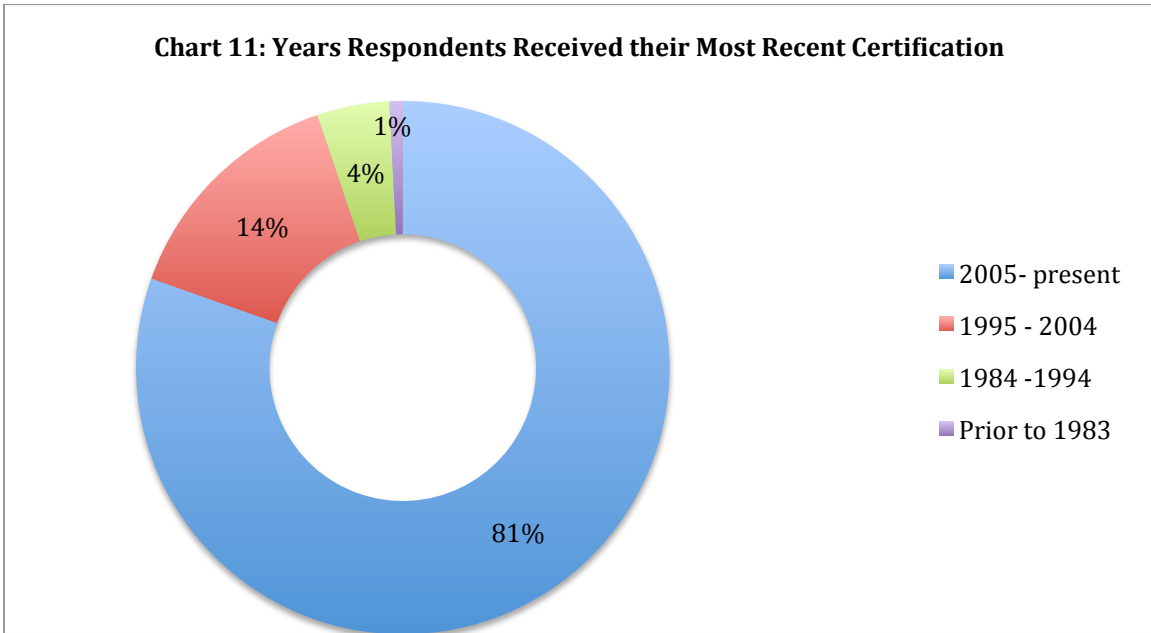


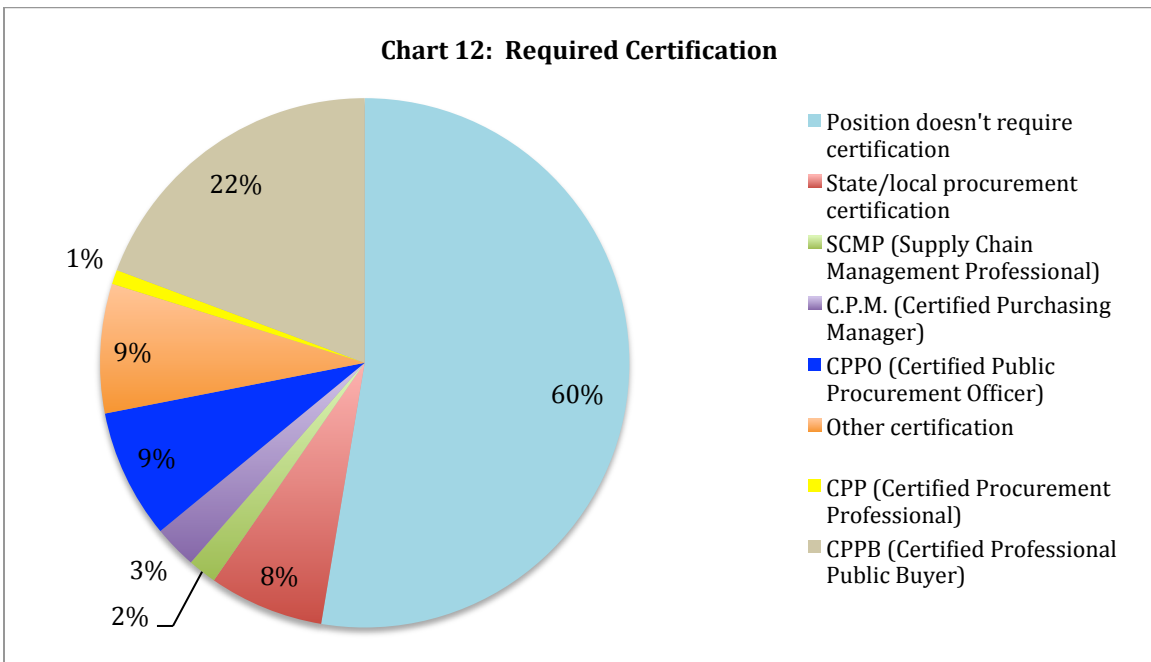
Chart 10 shows that approximately two thirds of the participants answering the question “Which of the other professional purchasing, procurement, or supply chain certifications listed below do you currently hold?” do not hold another certification. Eighteen percent of the participants possess state/local procurement certifications. Participants were asked to select as many of the certifications as apply.



As shown in Chart 11, in response to a question regarding when professional certifications had been earned, a large number of the participants said they received their certifications after 2005.



More than half of the participants reported that their positions do not require certification (Chart 12). Twenty-two percent of the respondents said their positions require CPPB certification, while nine percent said their positions require CPPO certification. Eight percent said their positions require a state or local procurement certification.



Findings

The survey focuses on three issues:

1. Perceptions of PPCM Officials Who are Managers:

Impact of Certification on Job Performance, Hiring, Promoting, and Retaining:

Seventy-four percent of the managers who work in PPCM (N=540) agree they are more likely to hire an individual if he/she holds a public procurement and contract management or related certification, but there is no clear agreement on whether they require certification to screen out less-qualified candidates for PPCM or related jobs. More than 50% agree that they are more likely to promote and retain certified PPCM officials. In addition, the results show that 71% of the PPCM managers agree that certified PPCM employees know what is required to perform their jobs better than uncertified PPCM officials (Table 1).

Table (1): The Impact of Certification on Hiring, Promoting, Retaining, and Evaluating the Performance of PPCM Employees

Impact of Certification on:	Agree and strongly agree	Neither agree nor disagree	Strongly disagree and disagree
Hiring			
Hire an individual if he/she holds a certification	74%	17%	9%
Screen out less qualified candidates	38%	26%	36%
Promoting			
Promote certified PPCM officials	63%	24%	13%
Retaining			
Retain certified PPCM officials	53%	32%	15%
Job Performance			
Certified PPCM officials know what is required to perform their jobs better than uncertified	71%	16%	13%
Certified PPCM officials perform their jobs similar to uncertified	35%	32%	34%

Supports and Incentives Provided to Promote Certification:

Participants who employ PPCM officials (N=540) answered a yes/no question related to the supports and/or incentives their organizations provide to promote and encourage the professional certification of PPCM employees. Table 2 shows that between 75% and 90% of the participants said their organizations provide support

such as paying for or reimbursing employees for certification examination fees, training fees and associated costs, and educational tuition and associated costs. However, only 17% of the participants who employ PPCM officials reported that the salaries of employees increase when they earn their first certification or if new PPCM employees are paid more when they are hired because they are certified.

Table (2): Incentives Provided to Promote and Encourage Certifications

Statements	Percentage of PPCM Managers (N=540)
Give employees paid time off for attending training and education classes	91%
Pay for or reimburse the fees/tuition for training and education in support of certification	85%
Give employees paid time off for taking certification examinations	77%
Pay for or reimburse examination fees	76%
Recognize certified employees as experts	74%
Recognize employees for earning certification at events, in publications, or in other ways	38%
Increase an employee’s salary for at least the first certification earned	17%
Pay certified employees a higher salary if they are certified	17%

2. Perceptions of Certified and Uncertified PPCM Officials:

The Perceived Value of Procurement Certification to PPCM Officials

As mentioned earlier, the survey adapted some of the PVCT statements to explore the perceptions of certified and uncertified PPCM officials on the value of certification. As shown in Table 3, the certified PPCM officials express a higher level of agreement with the intrinsic factors than the uncertified PPCM officials. However, the number of uncertified PPCM officials who responded to the survey is less than the certified PPCM officials.

The result of a t test of equality of means showed there is a significant difference between the certified and noncertified PPCM officials for the intrinsic factors ($p < .05$) and a non-significant difference between the certified and noncertified PPCM

officials for the extrinsic factors ($p > .05$). The t test of equality of means is based on assumptions that the variances of the two normal sample distributions are unknown but equal. Using a 0.05 level of significance, the corresponding p -value $< \alpha$.

Table (3): How Certified and Uncertified PPCM Officials Perceive the Value of Certification

Statements	Percent of Certified PPCM Officials who Strongly Agree and Agree	Total Responses (N)	Percent of Uncertified PPCM Officials who Strongly Agree and Agree	Total Responses (N)
Intrinsic factors				
Enhances sense of personal accomplishment	89%	1,071	64%	435
Affirms the employee from a personal perspective	87%	1,070	59%	434
Validates specialized knowledge	85%	1,073	53%	433
Enhances professional growth	85%	1,072	69%	431
Increases the sense of the value I add	83%	1,071	55%	434
Strengthens professional commitment	76%	1,071	46%	434
Extrinsic factors				
Increases the respect of peers	75%	1,061	50%	428
Increases the respect of superiors	59%	1,064	42%	428
Increases the likelihood of being retained	39%	1,064	28%	430
Increases non-financial rewards or recognition	36%	1,066	29%	429
Increases the likelihood of being promoted	34%	1,064	34%	430
Increases salary, bonuses, or other forms of financial rewards or recognition	24%	1,064	24%	429

Table 4 provides insight into how certified and uncertified PPCM managers perceive the value of certification. Generally, PPCM managers support the positive perceptions of the intrinsic factors of certification. The certified PPCM managers express a higher level of agreement with the intrinsic and extrinsic factors than the uncertified PPCM managers. However, the number of uncertified PPCM officials who responded to the survey is less than the certified PPCM officials.

The result of a t test of equality of means showed there is a significant difference between the certified and noncertified PPCM managers for the intrinsic factors ($p < .05$) and a non-significant difference between the certified and noncertified PPCM managers for the extrinsic factors ($p > .05$).

Table (4): The Value of Certification as Perceived by Certified and Uncertified PPCM Managers

Statements	Percent of Certified PPCM Managers who Strongly Agree and Agree	Total Responses (N)	Percent of Uncertified PPCM Managers who Strongly Agree and Agree	Total Responses (N)
Intrinsic factors				
Enhances personal accomplishment	93%	453	59%	110
Affirms the employee from a personal perspective	92%	453	61%	110
Enhances professional growth	89%	454	65%	110
Validates specialized knowledge	88%	455	47%	110
Increases the sense of the value I add	85%	453	47%	109
Strengthens professional commitment	80%	453	43%	110
Extrinsic factors				
Increases the respect of peers	83%	453	51%	106
Increases the respect of superiors	64%	455	31%	106
Increases the likelihood of being retained	40%	455	11%	107
Increases non-financial rewards and/or recognition	37%	455	22%	108
Increases the likelihood of being promoted	35%	455	9%	107
Increases salary, bonuses, or other forms of financial rewards or recognition	22%	454	6%	108

The Value of Certification to the Profession and Organization

There is agreement among the certified and uncertified PPCM officials on the importance of certification to practitioners of PPCM and the organizations/agencies that employ PPCM practitioners. As shown in Table 5 and 6, both the certified and uncertified PPCM officials indicate a high percentage of agreement with the statements. The certified PPCM officials show a higher percentage of agreement (20% higher).

For example, 84% of certified PPCM officials agree with the statement “Certification helps to define the profession” and 61% of uncertified PPCM officials agreed with the same statement. However, the number of uncertified PPCM officials who responded to the survey is less than the certified PPCM officials. The result of a t test of equality of means showed that there is a significant difference between the certified and noncertified PPCM officials for all the statements ($p < .05$).

Table (5): The Value of Certification to the PPCM and the Organizations/Agencies that Employ PPCM Practitioners, as Perceived by Certified PPCM Officials

Statements	Percent of Certified PPCM Officials who Strongly Agree and Agree	Total Responses (N)
Profession		
Certification helps to define the profession	84%	1,054
Certification provides a more capable workforce	78%	1,051
Certification enables employees to work at an advanced strategic level	65%	1,056
Organization		
Certification demonstrates the commitment of the individual to the success of her/his organization	77%	1,055
Certification encourages ethical behavior	73%	1,055
Certification of employees enhances organizational effectiveness	65%	1,054
Certification increases the likelihood that employees will demonstrate leadership skills	55%	1,054

Table (6): The Value of Certification to the PPCM and the Organizations/Agencies that Employ PPCM Practitioners, as Perceived by Uncertified PPCM Officials

Statements	Percent of Uncertified PPCM Officials who Strongly Agree and Agree	Total Responses (N)
Profession		
Certification helps to define the profession	61%	417
Certification provides a more capable workforce	52%	416
Certification enables employees to work at an advanced strategic level	46%	416
Organization		
Certification demonstrates the commitment of the individual to the success of her/his organization	53%	416
Certification encourages ethical behavior	43%	416
Certification of employees enhances organizational effectiveness	45%	414
Certification increases the likelihood that employees will demonstrate leadership skills	40%	416

3. Reasons for not Pursuing Certifications

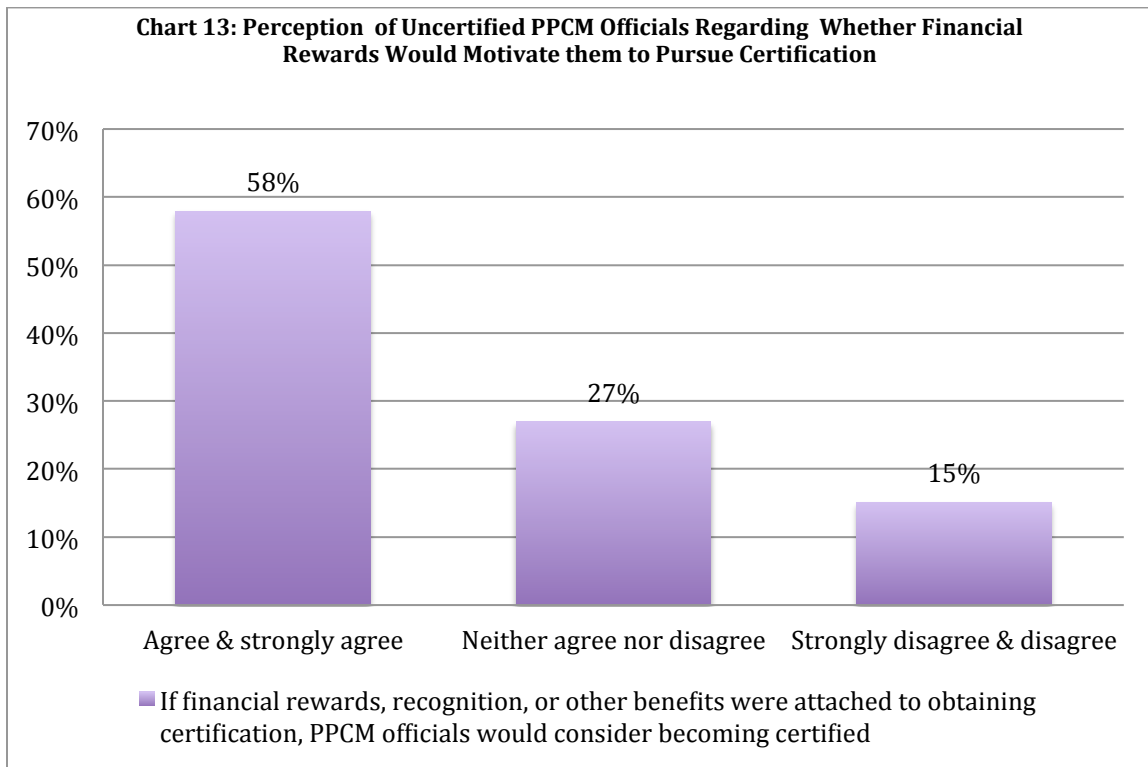
For the uncertified participants, the reasons most frequently selected for not pursuing certifications are: getting certified is a challenging process, certification is not necessary for the performance of their duties, and there is no need to get certified because they have enough practical and educational experiences.

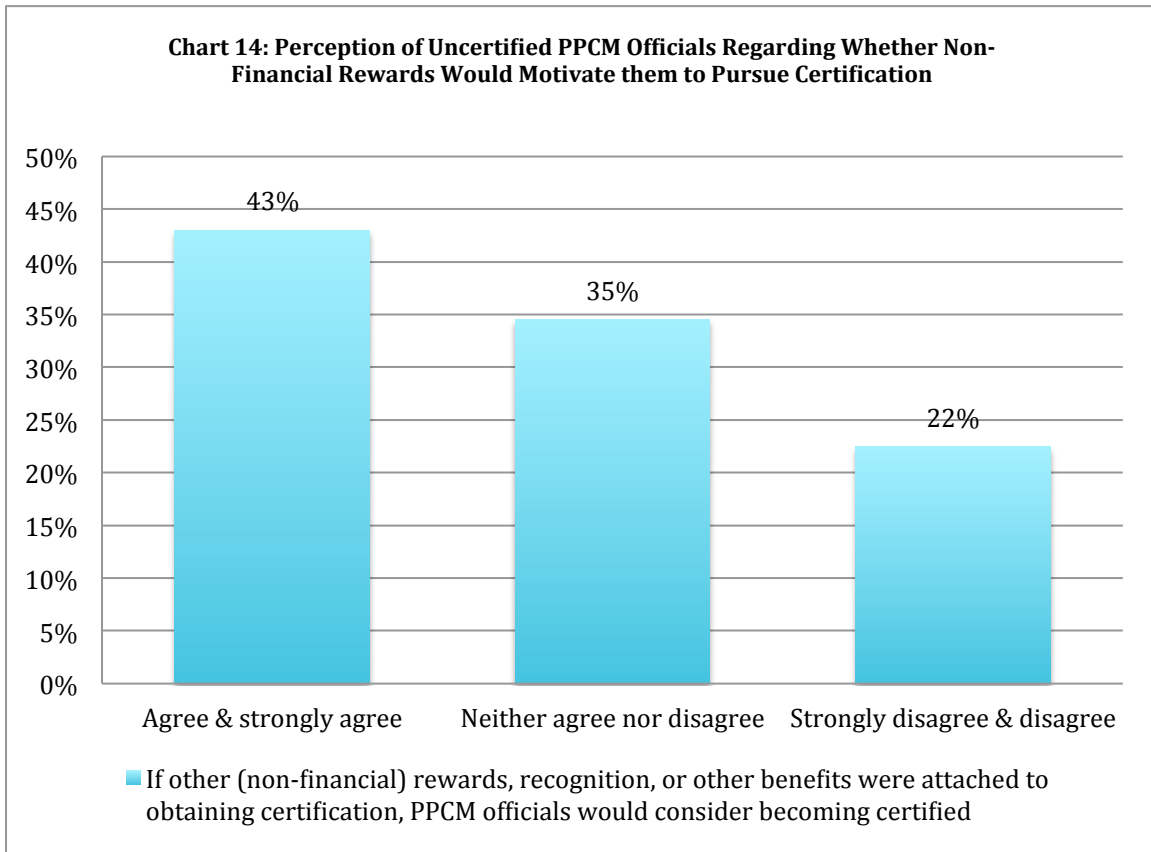
Approximately 50% of the participants agree with statements related to the cost of the examination, the discomfort with taking tests to get certified, and the limited value, desire, or interest in certification as barriers to obtaining certifications. Only 27% of the participants consider lack of institutional support by their employers for not reimbursing the costs (training, education, and examination fees) associated with certification and lack of time to pursue certification as reasons for not pursuing certifications. Forty-five percent of the uncertified participants indicate that they are currently pursuing certification or intend to pursue certification but have not begun.

Table (7): Reasons Cited by PPCM Officials for not Pursuing Certification

Statements	Agree and strongly agree (N=423)	Neither agree nor disagree (N=423)	Strongly disagree and disagree (N=423)
Not necessary for the performance of duties	62%	27%	12%
No need to get certified/have enough practical and educational experiences	62%	23%	15%
Challenging process	60%	25%	15%
No time to pursue certification	27%	30%	43%
Lack of institutional support	27%	30%	43%
High cost	26%	22%	51%
Discomfort with taking tests	19%	26%	55%
No desire/ interest in certification	13%	23%	65%

Although, 43% of the participants do not consider institutional support as a reason for not pursuing certification, Charts 13 and 14 show that participants mostly agree that if financial rewards or non-financial rewards, recognition, or other benefits were attached to obtaining certification, they would consider becoming certified.





Summary and Conclusion

In summary, the findings of this research should be useful for a variety of audiences, including those bodies that certify public procurement and contract management officials, the organizations and agencies that employ public procurement and contract management officials, and individuals who either are already engaged in the practice of public procurement and contract management or intend to pursue a career in the field.

The many useful findings include:

- Most of the PPCM practitioners who participated in the research believe professional certification is beneficial for both PPCM officials and their employers.
- Nearly three-fourths of the managers who work in PPCM are more likely to hire an individual if he or she is certified in PPCM or a related field.
- Three of five of these managers believe certified PPCM employees know what is required to perform their jobs better than uncertified PPCM officials.

- A very large percentage of the public entities for whom these managers work pay for or reimburse the costs to PPCM employees of preparing for and taking certification examinations.
- Intrinsic factors such as PPCM employees' need for a sense of personal accomplishment, desire for personal growth, and professional commitment motivate them to pursue professional certification much more so than do extrinsic factors such as financial and non-financial recognition and rewards.
- The top three reasons cited by PPCM practitioners for not getting certified included the challenging nature of the certification process, a belief that certification is not necessary for the performance of their duties, and a belief there is no need to get certified because they have sufficient practical and educational experiences to do their jobs well.
- Forty-five percent of the uncertified participants indicated they are currently pursuing certification or intend to pursue certification but have not begun.

The authors intend to further analyze the data generated through this research in the interest of providing maximum practicable support for the strategic goals of all stakeholders in public procurement and contract management.

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