



also examined the concept of how professional associations are associated with increased professionalism (Hall, 1982; Wynd, 2003) that, according to the definition of the concept offered by Bruhn (2001), expands the benefit for individuals to the quality of the profession itself by fostering competence and ongoing skill development. Wynia, Papadakis, Sullivan, and Hafferty (2014) have described professionalism as “the motivating force for an occupational group to come together and create, publicly profess, and develop reliable mechanisms to enforce shared promises—all with the purpose of ensuring that practitioners are worthy of patients’ and the public’s trust” (p. 712). In 2008, Wynia (2008) went further by warning that “consequences of decreased professionalism include an eroding social contract, fragmentation, lack of cohesion and integrity, and loss of the public’s confidence” (p.565).

In 2003, understanding professionalism’s value in developing competent, safe, and honest health care professionals, Wynd endeavored to determine the professionalism of nurses using Hall’s Professionalism Inventory Scale (Hall, 1982), finding that professionals tend to hold a concept of belief in public service, autonomy, belief in self-regulation, and a sense of calling. Wynd also found that, when compared with nonmembers, members of professional nursing associations scored significantly higher on total professionalism (2003). Although her study connected professional association membership and increased professionalism (competence, honesty, safety, etc.) for nurses, Wynd’s work undergirds the importance of professional membership on patient outcomes through retention of qualified and dedicated nurses.

Notwithstanding the evidence of benefits to professional association membership, not all health professionals are members of their respective professional associations (Deleskey, 2003; Esmaeili et al., 2013; Farina, Wilson, & FitzSimmons, 2016; Goolsby & DuBois, 2017; White & Olson, 2004). One theory used to understand why health professionals are not joining professional associations is the Exchange Theory (Alotaibi, 2007; Deleskey, 2003; Esmaeili et al., 2013; Walton, 2017). Exchange Theory proposes that individuals compare the benefits of a relationship against the cost of a relationship (Yeager, 1983). In this case, that would be the benefit of being a member of a professional association against the cost of membership. From this work, Yeager went on to develop a Professional Association Membership Questionnaire (PAMQ), which has been widely used in research to identify factors for joining professional associations. In studies applying the PAMQ to identify factors influencing nurses’ (registered nurse [RN]) decisions to join professional associations, common facilitators for joining professional associations include continuing education, professional and leadership development, networking, mentorship, and improvement of the profession, whereas

most common barriers include lack of time, cost, and family responsibilities (Deleskey, 2003; Esmaeili et al., 2013; Farina et al., 2016; White & Olson, 2004).

With less than 50% membership in professional associations, more individually practicing NPs who choose not to join professional associations must rely on their own social contacts and skills to remain competent in their profession, with no standard to guide practice or mentors outside of an individual NP’s network. This likely limits their ability for professional development and leadership opportunities that may lead to decreased retention of qualified professionals in the field that, in turn, is associated with reduced access to health services and worse patient outcomes. As such, the purpose of this study was to apply the PAMQ to better identify factors differentiating nurse practitioners (NP vs. RN) who are members of their professional association from those who are not members.

## Methods

### Study design

The study used a cross-sectional, state-level survey distributed to professional NPs. This study received a non-Human Subjects determination from the University of Utah’s Institutional Review Board.

### Sample

Data for this study came from a registry of individuals currently licensed as advanced practice registered nurses (APRN) through the Utah Department of Occupational and Professional Licensing. Utah APRN licensure includes the roles of nurse midwife, nurse anesthetist, clinical nurse specialist, and NP. Eligibility for this survey included only those who identified themselves as NPs.

### Survey

The PAMQ was used in this study because of its validity (Henderson, 2013) and reliability (Cronbach’s alpha 0.95), and it has been well vetted for over 30 years (Yeager, 1983). The PAMQ assesses 29 items to determine factors affecting an individual’s decision to join professional associations (Yeager, 1983) by using a 7-point Likert scale, where 0 = *Not at all* and 6 = *Very Much*. Yeager further separated the items into subscales, which include the desire for professional programs, social benefits, monetary benefits, improvement of the profession, personal development, and membership benefits. Yeager named the subscales based on the items that were included in the subscales.

With the permission of the survey creator, an additional question was added to determine which PAMQ data point(s) was/were most important to the participant. This did not alter the existing PAMQ questions and was added to see if any particular data point was most important to respondents. In addition, a demographic

portion of the survey that was adaptive and contained up to 25 questions depending how the participant responded were added.

The survey was distributed through the survey function in Research Electronic Data Capture (REDCap) (Harris et al., 2009). The survey comprised eight screens (pages). Participants were allowed to go back and change their answers. Research Electronic Data Capture software detected if a participant fully or partially completed the survey. All questions (except for eligibility and consent questions) included a nonresponse option "Prefer not to answer." The usability and technical functionality of the electronic questionnaire was pilot tested with three collaborators using a smart phone, computer, and tablet on different internet browsers. No technical issues were identified during the 2-week trial release. The survey for this study was designed to meet criteria for Checklist for Reporting Results of Internet E-Surveys guidelines, which is used to guide the development and implementation of research using online surveys (Eysenbach, 2004).

### Data collection

Potential participants were sent an email containing a brief introduction, background, and instructions with a link to the electronic survey. Responses were automatically captured by REDCap software as participants entered data. The survey created a unique link for each participant to prevent multiple entries from the same participant. If the email was forwarded to additional individuals, the link allowed for only one submission per unique link. Informed consent was provided to study participants before initiating the survey, and instructions contained background information on the study, the study length, and primary investigator contact information.

To increase survey completion, the first 80 eligible participants who completed the survey within the 2-week timeframe received a \$5 gift card. In addition, UNPs, a local NP association, contacted its members through email and social media to encourage them to complete the survey.

Furthermore, reminder emails were sent out 1 week after the initial survey was distributed to all participants regardless of previous or current membership to UNPs.

No personal identifying information was stored for this study and responses to the questionnaire were anonymous and confidential.

### Data analysis

Statistical Package for the Social Sciences (SPSS) version 24.0 was used for analyses. Descriptive statistics were used to evaluate the study sample, including frequency, mean, SD, and range. Chi-squared tests and independent sample *t*-tests were used to analyze differences between groups (member vs. nonmember). Frequency testing was used to determine what participants thought were the

most important PAMQ items. For the purpose of this project, all entries were included that were eligible even if they were not completed. Before conducting the independent *t*-test, the assumption for conducting *t*-test was examined, such as equal variance and normality.

### Results

Of the 2,353 APRNs in Utah who were identified as having an active license as of December 2017, 2,178 (93%) had an email address to which to send the invitation to participate. After the survey was sent, 156 email accounts were not active, resulting in 2,022 participants who received an invitation to participate in the study in January 2018. Three APRNs were ineligible for the survey because they reported that they were not NPs. The participation rate for this study was 26.6%, with 537 eligible NP participants who provided consent. Missing data in the partially completed surveys were between 0% and 10%, with an overall completeness rate of 93.1%.

A total of 537 surveys were included in the data analysis, which reflected that 328 (61.1%) participants were NPs with a current membership in a professional association, and 209 (38.9%) NPs had no membership in a professional association (**Table 1**). The age range was 26–77 with a mean age of 45.5 years. An additional analysis was used to make sure the study captured any potential differences due to the aging of the nursing workforce. The study found that no age group had significantly more members than other age groups ( $\chi^2 = 2.11, p = .55$ ) (**Table 1**).

Most participants were women (63%), white (94%), and non-Hispanic (98%). Most participants (70.2%) reported a salary between \$75,000 and \$125,000. Most commonly, (41.0%) participants selected "Family" as a specialty. Almost one third (20%) of the participants had a doctorate degree in nursing practice. For data analysis, the dichotomous categories were created for race (white vs. non-white), marital status (In a relationship vs. not in a relationship), and specialty (family nurse practitioner versus non-family nurse practitioner) (**Table 1**).

Bivariate comparisons revealed no significant differences in age, gender, ethnicity, race, relationship status, and education of association members versus nonmembers. There were significant differences in salary ( $p = .04$ ) and specialty ( $p = .002$ ). However, the Cramer's V effect size for both were 0.14, indicating weak associations.

The PAMQ is separated into six subscales that include the desire for professional programs, social benefits, monetary benefits, improvement of the profession, personal development, and membership benefits. Members and nonmembers of professional associations were compared (**Table 2**), revealing that members and nonmembers were similar in their desire for social benefits, monetary benefits, and membership benefits. Members scored significantly higher in desire for professional programs ( $p < .001$ ), improvement of the profession

**Table 1. Demographic characteristics of participants (N = 537), members (n = 328), and nonmembers (n = 209)**

Characteristics	Total, n (%)	Member, n (%)	Nonmember, n (%)	$\chi^2$ (df)	p-Value	Phi or Cramer's V
Gender				1.86 (1)	.17	0.06
Male	86 (17)	50 (15)	36 (20)			
Female	419 (83)	276 (85)	143 (80)			
Race				6.26 (5)	.28	0.11
American Indian or Alaska native	1 (0.2)	1 (0.3)	0 (0)			
Asian	10 (2)	9 (3)	1 (0.6)			
Black or African American	3 (1)	2 (0.6)	1 (0.6)			
White	464 (86)	297 (93)	167 (96)			
Other	7 (1)	3 (0.9)	4 (2)			
More than one race	7 (1)	6 (2)	1 (0.6)			
Race (collapsed)				1.4 (1)	.24	0.05
White	464 (86)	297 (93)	167 (96)			
Non-white	28 (5)	21 (7)	7 (4)			
Ethnicity				0.53 (1)	.47	0.03
Hispanic	10 (2)	5 (2)	5 (2)			
Non-Hispanic	527 (98)	323 (99)	204 (98)			
Marital status				2.53 (4)	.64	0.07
Single	50 (10)	33 (10)	17 (10)			
Married	393 (80)	249 (78)	144 (83)			
Widowed	3 (0.6)	2 (0.6)	1 (0.6)			
Divorced	41 (8)	31 (10)	10 (6)			
Other	5 (1)	3 (0.9)	2 (1)			
Marital status (collapsed)				1.4 (1)	0.24	.05
In a relationship	393 (80)	249 (78)	144 (83)			
Not in a relationship	99 (20)	69 (22)	30 (17)			
Salary				9.87 (4)	.04	0.14
<\$60,000	42 (9)	20 (7)	22 (13)			
\$60,000–75,000	43 (9)	25 (8)	18 (11)			
\$75,000–100,000	179 (38)	116 (38)	63 (37)			
\$100,000–125,000	156 (33)	112 (36)	44 (26)			
>\$125,000	57 (12)	35 (11)	22 (13)			
Specialty				10.06 (1)	.002	0.14
FNP	220 (41)	152 (46)	68 (33)			
Non-FNP	317 (59)	176 (54)	141 (68)			

(continued)

**Table 1. Demographic characteristics of participants (N = 537), members (n = 328), and nonmembers (n = 209), continued**

Characteristics	Total, n (%)	Member, n (%)	Nonmember, n (%)	$\chi^2$ (df)	p-Value	Phi or Cramer's V
Highest degree completed				0.37 (2)	0.83	.03
Bachelor	4 (0.8)	2 (0.6)	2 (1)			
Master	358 (71)	231 (71)	127 (70)			
Doctorate	145 (29)	93 (29)	52 (29)			
Age (categorical)				2.11 (3)	.55	0.07
≤35 (26–35)	126 (26)	77 (25)	49 (28)			
36–45	137 (29)	85 (28)	52 (30)			
46–55	96 (20)	67 (22)	29 (17)			
≥56 (56–77)	122 (25)	79 (26)	43 (25)			
	Total, M (SD, Range)	Member, M (SD, Range)	Nonmember, M (SD, Range)	t (df)	p-Value	Cohen's d
Age	45.5 (11.70, 26–77)	46.0 (11.69, 26–74)	44.7 (11.71, 27–77)	1.17 (479)	.24	0.11

( $p < .001$ ), and personal development ( $p = .015$ ) when compared with nonmembers.

To investigate which benefits are most important to participants, they were asked to select which PAMQ item(s) was/were most important to them (Table 3). The top five items overall and between members and nonmembers were education, improvement of the profession, professionalism, maintenance of professional standards, and self-improvement.

## Discussion

Results of this study suggest that most NPs value professional programs, improvement of the profession, and personal development. However, when compared with nonmembers, members of NP associations saw more value in each of those areas. Furthermore, the most

important PAMQ items among our sample of NPs were education, improvement of the profession, professionalism, maintenance of professional standards, and self-improvement, suggesting key areas to be targeted by NP professional associations.

Our findings largely replicate those found using individual items from PAMQ in RNs. Deleskey (2003) found that RN participants valued education, professionalism, improvement of the profession, maintenance of professional standards, and self-improvement the most. Walton (2017) found that APRN participants valued education, improvement of the profession, self-development, new ideas, and professionalism among the highest scores. Our survey found that all participants valued education, improvement of the profession, professionalism, maintenance of professional standards,

**Table 2. Professional Association Membership Questionnaire**

PAMQ Subgroup	Member		Nonmember		t (df)	Independent Sample t-test	
	n	M (SD)	n	M (SD)		p-Value	Cohen's d
Professional programs	328	4.60 (0.93)	194	3.99 (1.28)	5.82 (314.90)	<.001	0.55
Social benefits	328	2.03 (1.35)	194	1.88 (1.32)	1.24 (520)	.22	0.11
Monetary benefits	328	3.40 (1.57)	193	3.47 (1.69)	-0.48 (519)	.64	-0.04
Improvement of the profession	328	4.38 (1.06)	193	3.68 (1.33)	6.22 (336.73)	<.001	0.58
Personal development	328	3.37 (1.20)	194	3.08 (1.36)	2.45 (364.46)	.015	0.23
Membership benefits	328	2.72 (1.39)	193	2.48 (1.36)	1.95 (519)	.05	0.17

Note: PAMQ = Professional Association Membership Questionnaire.

**Table 3. Most Important Professional Association Membership Questionnaire factor total**

PAMQ Factor	Total, n (%)	Member, n (%)	Nonmember, n (%)
Education	361 (67)	234 (71)	127 (61)
Improvement of my profession	276 (51)	182 (56)	94 (45)
Professionalism	241 (45)	173 (53)	68 (33)
Maintenance of professional standards	228 (43)	157 (48)	71 (34)
Self-improvement	214 (40)	147 (45)	67 (32)
Political lobbying	182 (34)	126 (38)	56 (27)
Improvement of my work	170 (32)	106 (32)	64 (31)
Better pay	130 (24)	69 (21)	61 (29)
Advancement	116 (22)	72 (22)	44 (21)
Peer group contact	107 (20)	67 (20)	40 (19)
New ideas	103 (19)	75 (23)	28 (13)
Improved benefits	77 (14)	47 (14)	30 (14)
Programs	63 (12)	51 (16)	12 (6)
Support	58 (11)	41 (13)	17 (8)
Validation of ideas	49 (9)	38 (12)	11 (5)
Job placement aid	36 (7)	18 (6)	18 (9)
Meetings	32 (6)	25 (8)	7 (3)
Group benefit plans	32 (6)	17 (5)	15 (7)
Travel	31 (6)	16 (5)	15 (7)
Change	24 (5)	19 (6)	5 (2)
Friendship	13 (2)	7 (2)	6 (3)
Happiness	13 (2)	7 (2)	6 (3)
Social activities	12 (2)	7 (2)	5 (2)
Fulfill desire to belong	12 (2)	7 (2)	5 (2)
Break from work	6 (1)	5 (2)	1 (0.5)
Something new	6 (1)	5 (2)	1 (0.5)
Change of pace	3 (0.6)	2 (0.6)	1 (0.5)
Fun	2 (0.4)	1 (0.3)	1 (0.5)
Relief from boredom	1 (0.2)	1 (0.3)	0 (0)

Note: PAMQ = Professional Association Membership Questionnaire

and self-improvement. Unlike when comparing members and nonmember individual PAMQ item preferences, there is uniformity in studies individual PAMQ item preferences among all participants. This suggests that all nurses and APRNs value the items contained in subgroups “improvement of the profession” and “personal development” without regard to membership status.

To date, studies have compared members’ and nonmembers’ results using individual items from PAMQ

rather than the subgroups. Deleskey (2003) found that nurse members scored significantly higher for “improvement of my work” than former members. Alotiabi (2007) found that nurse members in Kuwait favored social activities, relief from boredom, fun, travel, improvement of care, something new, friendship, group benefit plans, and peer group contact significantly more than nonmembers. Although independent comparisons of individual PAMQ subscales was not performed, our study

found that members favored maintenance of professional standards, self-improvement, improvement of profession, and political lobbying, whereas more nonmembers favored better pay. The variety of results among nursing workforce studies suggest that individual PAMQ item preferences between members and nonmembers of professional associations may be specific to location and professional association surveyed.

Using his own questionnaire, Dr. Yeager (1983) found that, among RNs, members of professional associations had a significantly higher desire for professional programs, social benefits, improvement of the profession, and membership benefits than nonmembers. Although our project found that Utah NPs who are members also had a significantly higher desire for professional programs and improvement of the profession, they were more interested in personal development than the nurses included in Yeager's study. This suggests that, as NP associations are striving to create professional programs to improve competence and patient outcomes, they should focus more on personal development than their nurse association counterparts when trying to attract and retain members.

This study has two primary limitations. The first is the potential of sample bias, where respondents may represent those who are more engaged with their professional practice. However, the demographics of the sample reflect the larger population of NPs in Utah, suggesting their views would be similar in a larger NP population. Second, despite the relatively large sample size of this study and its range to capture data from all NPs (not just current or previous association members), the target population was limited to NPs in Utah. As such, findings may not be generalizable to the general population of NPs.

Future studies should evaluate the opinions of NPs throughout the United States. Additional topics for further study include examining why members score higher in all but one subgroup of the PAMQ than nonmembers. Historical factors that affect an individual's choice to join professional associations such as exposure to associations during their NP education or professional mentors may shed light on their future decisions to join professional association. Finally, and potentially most importantly, although NP associations offer education and connections meant to improve health outcomes of populations and patients, the direct effect between membership and health outcomes has yet to be established. Demonstrating the direct benefit of professional association membership on health outcomes of patients and populations is a key area for future research.

### Implications

This information should lead professional associations—although their main mission should remain on professional programs linked to improving

health outcomes—to attract and retain members by creating programs that will improve the profession and lead to professional development.

### Conclusion

The primary factors differentiating NPs who choose to join a professional association from those who do not appear to be desire for professional programs, improvement of the profession, and personal development. Professional associations seeking to improve health outcomes by creating more competent, safe NPs and keeping the public's trust should consider focusing on efforts that foster education, professional networking and new ideas, and self-improvement.

**Author's contributions:** T. Rowley and J. Balk developed the initial draft of the manuscript and obtained permission from DOPL for participant contact information; J. W. Guo and T. Rowley performed the survey development, data extraction, and data analysis; A. Wallace assisted with study development and design and was the primary editor of the manuscript; All authors reviewed and revised the manuscript for final submission.

**Competing interests:** The authors report no conflicts of interest.

**Funding:** A \$500 grant was awarded from Utah Nurse Practitioners and used as funding for this study. The grant was used to pay for the DOPL fee for APRN contact information and purchase gift cards used to attract participants and encourage survey completion.

### References

- Alotaibi, M. (2007). Factors affecting nurses' decisions to join their professional association. *International Nursing Review*, 54, 160–165. American Academy of Nurse Practitioners (AANP). (n.d.). About AANP. Retrieved from <https://www.aanp.org/about-aanp>.
- American Academy of Nurse Practitioners (AANP). (2018). How many members does AANP have? Retrieved from <https://www.aanp.org/about-aanp/97-about-aanp/faq-accordion/940-how-many-members-does-aanp-have>.
- Bruhn, J. G. (2001). Being good and doing good: The culture of professionalism in the health professions. *Health Care Manager*, 19, 47–58.
- Utah Medical Education Council (UMEC) (2017). *Utah's advanced practice registered nurse workforce, 2017: A study of the supply and distribution of APRNs in Utah*. Retrieved from [https://umec-nursing.utah.gov/wp-content/uploads/APRN\\_2017\\_FINAL.pdf](https://umec-nursing.utah.gov/wp-content/uploads/APRN_2017_FINAL.pdf).
- Deleskey, K. (2003). Factors affecting nurses' decisions to join and maintain membership in professional associations. *Journal of Perianesthesia Nursing*, 18, 8–17.
- Esmaeili, M., Dehghan-Nayeri, N., & Negarandeh, R. (2013). Factors impacting membership and non-membership in nursing associations: A qualitative study. *Nursing & Health Sciences*, 15, 265–272.
- Eysenbach, G. (2004). Improving the quality of web surveys: The checklist for reporting results of internet E-surveys (CHERRIES). *Journal of Medical Internet Research*, 6, e34.
- Farina, C. A., Wilson, W., & FitzSimmons, K. (2016). Exploring strategies to increase and sustain membership in the American Association of Nurse Anesthetists. *AANA Journal*, 84, 396–403.
- Goolsby, M. J., & DuBois, J. C. (2017). Professional organization membership: Advancing the nurse practitioner role. *Journal*

- of the American Association of Nurse Practitioners, 29, 434–440.
- Hall, R. H. (1982). The professions, employed professionals, and the professional association. *American Nurses Association Publications*, 1–15.
- Harris, P. A., Taylor, R., Thielke, R., Payne, J., Gonzalez, N., & Conde, J. G. (2009). Research electronic data capture (REDCap): A metadata-driven methodology and workflow process for providing translational research informatics support. *Journal of Biomedical Informatics*, 42, 377–381.
- Henderson, B. (2013). Barriers to membership in the American Dental Hygienists' Association in the state of Georgia. Retrieved from <https://dc.etsu.edu/cgi/viewcontent.cgi?article=3631&context=etd>.
- Walton, K. R. (2017). Barriers to membership in a professional organization for advanced practice nurses. Walden Dissertations and Doctoral Studies Collection. Retrieved from <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=5287&context=dissertations>.
- White, M. J., & Olson, R. S. (2004). Factors affecting membership in specialty nursing organizations. *Rehabilitation Nursing*, 29, 131–137.
- Wynd, C. A. (2003). Current factors contributing to professionalism in nursing. *Journal of Professional Nursing*, 19, 251–261.
- Wynia, M. K., Papadakis, M. A., Sullivan, W. M., & Hafferty, F. W. (2014). More than a list of values and desired behaviors: A foundational understanding of medical professionalism. *Academic Medicine: Journal of the Association of American Medical Colleges*, 89, 712–714.
- Wynia, M. K. (2008). The short history and tenuous future of medical professionalism: The erosion of medicine's social contract. *Perspectives in Biology and Medicine*, 51, 565–578.
- Yeager, S. T. (1983). Motives for joining professional associations: A test of Olson's exchange theory. *Journal of Health and Resource Administration*, 334–350.