Examining health care champions: a mixed-methods study exploring self and peer perspectives of champions

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Abstract

Background: Champions are widely recognized as playing a key role in the successful implementation of evidence-based interventions within the health care sector; however, little is known about which characteristics and skills enable them to play that role. Furthermore, previous studies have measured only individual champions’ responses to personal attributes without incorporating input from other observers. A mixed-methods study was conducted to identify, analyze, and group the behaviors and characteristics of champions who have successfully promoted the adoption of new initiatives within the health care delivery system, taking into consideration self and peer perspectives.

Methods: Using a mixed-methods, cross-sectional triangulation design with a convergence model, quantitative data were collected and analyzed from health care champions (n = 30) and their colleagues (n = 58) from 11 countries using a survey. Every champion and a subset of colleagues (n = 14) also participated in in-depth interviews. Descriptive statistics were used to explore the relationship between champion and colleague responses to survey items; chi-squared tests and Kruskal–Wallis tests were used to compare the differences. Thematic content analysis of qualitative data was used to explore champion-like behaviors and features. Characteristics of champions were categorized using the Transformational Leadership Theory framework.

Results: Champions exhibited characteristics that facilitated trust and encouraged motivation among their colleagues to adopt innovations, such as being intrinsically motivated, persistent, enthusiastic, and highly effective communicators. Champions were described by their colleagues as empathetic, curious, physically present, approachable, and often soliciting feedback from others. Although there was a high degree of agreement between champion and colleague survey responses, champions were more likely to underrate their skills and abilities to instigate change compared to their colleagues.

Conclusion: Both champions and colleagues described key champion-like characteristics, but champions often downplayed the characteristics and behaviors that make champions uniquely effective at facilitating the adoption of evidence-based interventions.

Plan language abstract: Health care champions are people who promote the adoption of new initiatives to improve the quality of patient care among their colleagues within health care settings. Champions are often viewed by organizational leaders and researchers as critical for the successful implementation of new ideas; however, little is known about what specific skills or characteristics make them effective at promoting the adoption of new ideas among their colleagues. Most studies on champions’ behaviors have only included the perspectives of champions, and not perspectives from others within the organization. The goal of our study was to not only explore...
champions’ perspectives of themselves, but also the views of champions’ colleagues to understand why and how champions motivated and influenced their colleagues to try new things. Findings from this study could lead to more accurate identification of health care champions, which in turn could lead to more efficient and effective adoption of new initiatives to improve the quality of patient care.

**Keywords**
champion, clinician, health, implementation, innovation, intervention—implementation interface, mixed-methods

**Introduction**

Health care champions—defined as individuals who are committed to supporting and marketing an innovation at each stage of development and implementation—are cited extensively in the literature as a key factor for the successful implementation of quality improvement initiatives within the health care sector (Blake & Chambers, 2012; Damschroder et al., 2009; Howell & Shea, 2006; Powell et al., 2015; Soo, 2010). Through an integrated review of the literature, Miech et al., found that champions are people who fill a role related to the implementation of an intervention and (1) are internal to the organization; (2) have intrinsic motivation and a strong commitment to implement a change; (3) work tirelessly to drive the implementation forward, even if their efforts receive no formal recognition or compensation; (4) are enthusiastic, optimistic, and persistent; and (5) have strong communication skills (Miech et al., 2018).

The existence of champions is considered one of many factors that influences implementation outcomes, which in turn, influence clinical outcomes. Implementation outcomes are distinct from outcomes related to service and clinical treatment (Fixsen et al., 2005; Glasgow, 2007; Proctor et al., 2009), and are defined as “the effects of deliberate and purposeful actions to implement new treatments, practices, and services (Proctor et al., 2011).” Implementation outcomes serve as indicators of implementation success, are proximal indicators of implementation processes, and serve as key intermediate outcomes (Proctor et al., 2011). Interventions must be implemented effectively to obtain any type of clinical and/or service improvement. The conceptual framework for implementation outcomes designed by Proctor et al., a well-established implementation framework gaining popularity in public health, describes eight implementation outcomes within implementation research: acceptability, adoption, appropriateness, costs, feasibility, fidelity, penetration, and sustainability (Figure 1) (Proctor et al., 2011). Within these implementation outcomes, champions primarily influence adoption, but can also influence fidelity by encouraging accurate and consistent behavior change (Brownson et al., 2012).

Few empirical studies have been conducted to understand what characteristics make champions effective at driving change within health care institutions, specifically when compared to non-champions. In one study comparing champions and non-champions in the technology industry, champions demonstrated specific behaviors to a significantly greater extent such as: expressing a compelling vision of the innovation’s potential for the organization, communicating high expectations, expressing confidence in others to participate in the initiative, and encouraging others to engage in actions to achieve goals (Howell & Higgins, 1990).

The integrated review of champions conducted by Miech et al. (2018) revealed limited data on identifying and characterizing health care champions. For example, little is known about exactly which characteristics and skills, developed in an individual prior to their success in taking an intervention to scale, enabled them to play a key role in the successful adoption of an intervention. It is also unclear which champion characteristics are the most relevant in driving the adoption of interventions among champions’ colleagues. Indeed, personal characteristics are the traits that predispose individuals to champion-like behaviors, and these behaviors positively influence others, serving as a precursor to widespread adoption (Burgelman, 1983; Howell & Higgins, 1990).

Previous studies have used inconsistent methods to identify champions, many of which have been based on individual champion responses that are not corroborated by others (Howell & Shea, 2006; Miech et al., 2018). This lack of substantiation has the potential to introduce bias in the results due to the social desirability of being labeled a “champion” (Howell & Shea, 2006). To address this gap, the goal of our study was to not only explore champions’ perspectives of themselves, but also the views of champions’ colleagues to (1) contribute to knowledge on how colleagues viewed the champions’ behaviors and characteristics and (2) how and why colleagues were motivated by the champion to adopt the new intervention. To our knowledge, this is one of the few studies to analyze the behaviors and characteristics of champions, as well as understand through their colleagues’ perceptions, why these specific factors were effective at facilitating the adoption of new interventions. Findings from this study will enhance our ability to identify, develop, and replicate the specific ways champions positively influence the adoption of evidence-based interventions in the fields of mental and behavioral health, as well as the broader health care context.

**Methods**

Using a mixed-methods, cross-sectional triangulation design with a convergence model as described by...
Creswell and Clark (2010) (Figure 2), researchers analyzed and grouped the behaviors and characteristics of champions who had successfully promoted the adoption of new initiatives within the health care delivery system as reported by the champions themselves and their colleagues. Using this method, quantitative and qualitative data were collected at the same time but analyzed separately. The study team compared data sets followed by a full interpretation.

Study setting and sample: To be eligible, champions had to be an administrator or clinician who had dedicated themselves within the past 5 years to supporting, marketing, and driving the successful implementation of a multidisciplinary, evidence-based intervention within their respective health setting as identified by at least two other individuals who were involved in the implementation, and had to be willing to complete a survey and in-depth interview (Jamshed, 2014).

Champions were recruited purposively based on age, gender, and location to ensure a representative and diverse sample. A sample size of 30 champions was predetermined by the research team to be sensitive to the additional burden placed on health care workers during a pandemic, believing that a sample of 30 would be sufficient to obtain thematic saturation (Guest et al., 2006). Approximately 40 champions were identified by the research team’s past experiences implementing health care interventions. Snowball sampling yielded 20 more champions. Approximately 50 individuals were screened; 38 were interested in and eligible for participation. Of these 38, outreach attempts were made and the first 30 champions available were enrolled. Once the sample size was reached, outreach attempts were discontinued.

Each participating champion was asked to identify two to three colleagues who had been involved in the intervention implementation to participate in the study. Colleagues had to be a clinician or medical assistant who had been involved in the implementation of a multidisciplinary, evidence-based intervention within their respective health setting with the champion in the past 5 years and had to complete the survey. On the survey, colleagues were asked if they would participate in an additional study procedure—an IDI.

Out of 30 champions, 29 referred at least two colleagues (and sometimes more) to participate. One champion failed to provide contact information of colleagues; when prompted, the champion stated these colleagues were experiencing a COVID-19 surge where his colleagues worked. Furthermore, one champion identified two colleagues, but stated that both had just experienced deaths in their family due to COVID-19, so contact was not initiated. A total of 58 colleagues of champions participated in the survey.

Of the 58 colleagues identified by champions, 53 gave permission to be contacted for an IDI (two were excluded because they did not speak English). Of those who gave permission and responded to outreach attempts, colleague participants were selected purposively to represent a sample of colleagues who came from various positions within the champions’ hospital structure (i.e., higher, lower, or lateral positions). Thematic saturation occurred after 14 IDIs.

Data collection: Primary data were collected between November 1 and December 31, 2020 from health care champions and their colleagues identified in 11 different countries. Quantitative data were collected using online, closed-ended surveys in English with a 4-point Likert scale to institute a forced measure (Chyung et al., 2017).
Table 1. Participant demographics and intervention-specific factors.

|                                | Champions (survey + IDI) | Colleagues (survey) | Colleagues (IDI) |
|--------------------------------|--------------------------|---------------------|------------------|
|                                | n (%) (n = 30)           | n (%) (n = 58)      | n (%) (n = 14)   |
| **Gender (Female)**            | 20 (66.6%)               | 42 (72.4%)          | 9 (60%)          |
| Prefer not to say              | 0 (0%)                   | 1 (1.7%)            | 1 (6.6%)         |
| **Age**                        |                          |                     |                  |
| 21–29                          | 2 (6.6%)                 | 3 (5.1%)            | 0 (0%)           |
| 30–39                          | 7 (23%)                  | 22 (37.9%)          | 5 (33.3%)        |
| 40–49                          | 15 (50%)                 | 17 (29.3%)          | 4 (26.6%)        |
| 50–59                          | 5 (16.6%)                | 12 (20.6%)          | 4 (26.6%)        |
| 60 or older                    | 1 (3.3%)                 | 4 (6.8%)            | 1 (6.6%)         |
| **Region of birth**            |                          |                     |                  |
| Africa                         | 8 (26.6%)                | 14 (24.1%)          | 2 (13.3%)        |
| North America/Central America  | 15 (50%)                 | 31 (53.4%)          | 9 (60%)          |
| South America                  | 1 (3.3%)                 | 2 (3.4%)            | 0 (0%)           |
| New Zealand                    | 2 (3.3%)                 | 1 (1.7%)            | 0 (0%)           |
| Asia                           | 5 (16.6%)                | 7 (12.0%)           | 2 (13.3%)        |
| Europe                         | 0 (0%)                   | 2 (3.4%)            | 1 (6.6%)         |
| Missing data                   | 0 (0%)                   | 1 (1.7%)            | 0 (0%)           |
| **Education (highest achieved)**|                          |                     |                  |
| Trade school                   | 0 (0%)                   | 1 (1.7%)            | 0 (0%)           |
| Associate’s degree             | 0 (0%)                   | 2 (3.4%)            | 1 (6.6%)         |
| Bachelor’s degree              | 2 (66%)                  | 12 (20.6%)          | 4 (26.6%)        |
| Master’s degree                | 8 (26.6%)                | 18 (31.0%)          | 6 (49%)          |
| Medical degree/PhD or higher   | 20 (66.6%)               | 25 (43.1%)          | 3 (20%)          |
| **Length of time in health care (years)** |                |                     |                  |
| 2–5 years                      | 0 (0%)                   | 4 (6.8%)            | 1 (6.6%)         |
| 6–10 years                     | 4 (13.3%)                | 14 (24.1%)          | 3 (20%)          |
| 10 + years                     | 26 (86.6%)               | 40 (68.9%)          | 10 (66.6%)       |
| **Role when intervention was implemented** |  |                     |                  |
| Nurse                          | 5 (16.6%)                | 13 (22.4%)          | 2 (13.3%)        |
| Doctor                         | 12 (40.0%)               | 17 (29.3%)          | 2 (13.3%)        |
| Nurse practitioner/Physician’s Assistant | 5 (16.6%) | 4 (6.8%)       | 0 (0%)           |
| Health administration          | 5 (16.6%)                | 20 (34.4%)          | 9 (60%)          |
| Social worker                  | 1 (3.3%)                 | 0 (0%)              | 0 (0%)           |
| Quality/Process improvement    | 2 (6.6%)                 | 3 (5.1%)            | 1 (6.6%)         |
| Other                          | 0 (0%)                   | 1 (1.7%)            | 0 (0%)           |
| **Formal Leadership Role (Yes)** | 24 (80%) | 35 (60.3%)    | 9 (60%)          |
| **Length of time working in specific healthcare setting when intervention was implemented (years)** | | | |
| Less than 2 years              | 3 (10%)                  | 4 (6.8%)            | 1 (6.6%)         |
| 2–5 years                      | 6 (20%)                  | 19 (32.7%)          | 7 (46.6%)        |
| 6–10 years                     | 5 (16.6%)                | 16 (27.5%)          | 4 (26.6%)        |
| 10 + years                     | 16 (53.3%)               | 19 (32.7%)          | 2 (13.3%)        |
| **State/Country where intervention was implemented** | | | |
| Brazil                         | 1 (3.3%)                 | 1 (3.3%)            | 0 (0%)           |
| Ghana                          | 2 (3.3%)                 | 2 (3.3%)            | 1 (6.6%)         |
| India                          | 3 (3.3%)                 | 3 (3.3%)            | 1 (6.6%)         |
| Kenya                          | 3 (10%)                  | 3 (10%)             | 1 (6.6%)         |
| Mexico                         | 1 (3.3%)                 | 1 (3.3%)            | 0 (0%)           |
| Namibia                        | 2 (3.3%)                 | 2 (3.3%)            | 0 (0%)           |
| New Zealand                    | 3 (3.3%)                 | 3 (3.3%)            | 1 (6.6%)         |
| Nigeria                        | 2 (6.6%)                 | 2 (6.6%)            | 0 (0%)           |
| Sierra Leone                   | 1 (3.3%)                 | 1 (3.3%)            | 0 (0%)           |
| Singapore                      | 2 (3.3%)                 | 2 (3.3%)            | 1 (6.6%)         |
| United States (states represented: CA, KS, MA, MI, MO, NV, OK, OH, PA, SC, TX) | 17 (56.6%) | 17 (56.6%) | 9 (60%) |
Surveys used descriptions of champion-like characteristics and behaviors identified in previous studies, as well as additional descriptions informed by the researchers’ experiences. Champions surveys contained 50 questions and colleague surveys contained 55 questions; the average completion time was 10 min. Champion and colleague surveys were identical with only two differences: (1) altered language to obtain colleague’s perspectives versus the champion’s own self-report (e.g., “I am persuasive,” vs. “The champion was persuasive”) and (2) the champion survey asked five additional questions that were only relevant to the champion’s personal experience (e.g., “The outcome of the intervention was important to me.”) Internal consistency of the surveys administered to champions and colleagues was evaluated by the Cronbach’s alpha coefficient (α = 0.82 and α = 0.51, respectively).

The proportions of concordance between champion and colleague responses were compared. Concordance between responses was indicated by similarity in ratings on the Likert scale. For example, what proportion of champions “somewhat disagreed” or “disagreed” they were persuasive compared to the proportion of colleagues who “somewhat disagreed” or “disagreed” their champion was persuasive?

Champions and colleagues were informed that completion of the survey signaled enrollment and were emailed a link when they agreed to participate. If the survey was not completed within a week, they were reminded via email once. All recruited champions (n = 30) and colleagues (n = 58) completed (and thereby enrolled) in the study. There were no missing data, except for one colleague (n = 58) who did not indicate their region of birth (Table 1).

Table 1. (Continued)

| Health care setting where intervention was implemented | Champions (survey + IDI) n (%) (n = 30) | Colleagues (survey) n (%) (n = 58) | Colleagues (IDI) n (%) (n = 14) |
|-------------------------------------------------------|----------------------------------------|----------------------------------|-------------------------------|
| Primary care clinic                                    | 3 (10%)                                | 3 (10%)                          | 2 (13.3%)                     |
| Hospital                                              | 25 (83.3%)                             | 25 (83.3%)                       | 12 (80%)                      |
| Local or state health department                      | 2 (6.6%)                               | 2 (6.6%)                         | 0 (0%)                        |

Relationship to champion

| Peer | N/A | – | 6 (40%) |
|------|-----|---|---------|
| Supervisor | N/A | – | 2 (13.3%) |
| Supervisee | N/A | – | 6 (40%) |
– Did not collect.
IDI = in-depth interview.

Quantitative data analysis: Quantitative data were analyzed using SAS 9.4. Surveys were analyzed as a single measure without evaluation of latent factors. Descriptive statistics were used to describe participant demographics. Results were summarized using frequencies and proportions to explore the relationships between champion and colleague responses; either the chi-squared test of independence or the Kruskal-Wallis test was used, as appropriate, to compare the differences between survey items for which there were responses from both groups (n = 33).

Qualitative data analysis: Interview transcripts were uploaded to NVIVO 12 and coded by the first author and another member of the research team. An initial codebook was developed; five interviews were coded and compared among the coders to ensure inter-coder reliability. Regular meetings were held to discuss questions or disagreements in coding and the codebook was revised accordingly. A final codebook was developed and applied to all remaining interviews. Using thematic content analysis, champion-like behaviors were explored. Sub-themes were identified, and care was taken to examine potential outliers.

During the analysis, characteristics and behaviors of champions identified via quantitative and qualitative data collection were organized using the Transformational Leadership Theory framework described in Figure 3 (Bass & Riggio, 2006). It is important to note that this framework was selected ex post and applied during the analysis phase once results emerged because our findings and themes fit logically into each domain. The rationale for not selecting this framework (or any framework) a priori was due to the limited justification from the literature review; specifically, only one study noted champions within the technology industry exhibited transformational
leadership behaviors more frequently than non-champions (Howell & Higgins, 1990). Given the paucity of previous research with an identified framework for analyzing or grouping champions, and the fact that the aforementioned study was not conducted among health care champions, it seemed critical to explore first how the characteristics of health care champions emerged before determining how to categorize them.

The theory of transformational leadership consists of four domains: inspirational motivation, individual consideration, idealized influence, and intellectual stimulation (Bass & Riggio, 2006). The framework’s language has been adapted slightly in this study, using the word “champion” instead of “leader.” Associated champion-like characteristics were identified from the analysis of survey and IDI data; they also reflected previous data associated with characteristics of transformational leaders (Bass & Riggio, 2006; Kopperud et al., 2013; Murphy, 2005).

Ensuring analytic rigor: Early in the coding and analysis, peer debriefing meetings occurred between members of the research team and external readers to promote reflexivity and to guard against bias (Lincoln, 2007). There were seven peer debriefing meetings (October 2020–March 2021) that included qualitative data experts and the lead investigator, all of whom had experience in qualitative methods and the implementation of evidence-based interventions.

Member checking was used at the end of the analysis to validate the final results and main conclusions, as well as mitigate researcher bias. Three member-checking meetings were held via video conference in March 2021 with two members of the research team and a total of 21 champions who participated in the study.

Ethical approval: This study was submitted to the Boston University Institutional Review Board and qualified for an exemption determination. Informed consent was obtained from all participants prior to enrolling in the study.

Results

Participant characteristics: A total of 30 champions participated in the survey and IDI. A total of 58 colleagues participated in the survey.

Most champions and their colleagues were female (champions 66.6%; colleagues 72.4%), over the age of 40 years, had a bachelor’s degree or equivalent, or higher, and had been in health care for over 10 years. Participants represented diverse health care settings and clinical disciplines. See Table 1 for participant demographics and intervention-specific factors.

Intervention setting: Champions and colleagues implemented interventions in various health settings. Nearly half of the interventions (44%) were implemented outside the United States in 10 different countries. The other half of the interventions (56%) were implemented in 11 states within the United States representing diverse regions of the country. Most interventions (83%) were implemented in a hospital. Table 1 contains full details of intervention settings.

A subset of 14 colleagues participated in IDIs. Sixty percent were female, over the age of 40 years, and had a bachelor’s degree or higher. Forty percent of participants had implemented the intervention outside the United States. The majority were in health administration or quality improvement roles during the implementation, even if they held a dual clinical role. Approximately 42% identified as peers (rather than supervisors or supervisees) to the champion. The same proportion reported directly to the champion; the remaining 16% directly supervised the champion. Full demographics of interviewed colleagues and the intervention-specific factors can be found in Table 1.

Survey and interview findings: Groups aligned with the four domains of the Transformational Leadership Theory framework outlined in Figure 3: inspirational motivation, individualized consideration, idealized influence, and intellectual stimulation.

Inspirational motivation: When asked why they initiated the intervention, all champions described a desire to make things better for their colleagues and their patients. They saw something that could be improved and wanted to fix it. For each of the champions, this desire was entirely intrinsic; meaning, they indicated they were not motivated by any external reward, but by some personal enjoyment, satisfaction, and/or responsibility. This intrinsic motivation to make improvements was confirmed by colleagues of champions when asked why they thought the champions were motivated to institute changes within their health settings.

“I really do this work from my heart. I have a deep passion for quality. I love making rounds and thinking about what is working and not working. It comes naturally. I think it’s just a part of me. I really like going above and beyond.”

– Physician’s Assistant

“It’s the will and the passion he has. It was as if he was on a personal mission. He would speak with so much passion and dedicate so much of his time and knowledge to [the intervention]. It was easy to follow him and know why he does what he does.”

– Peer of physician champion

One of the most common ways inspirational motivation manifested in champions was in their persistence. Champions described themselves as not giving up, working tirelessly to find a solution to a problem, and continuing to point people toward the goal when facing implementation barriers. Persistence among champions was confirmed by the colleagues who worked alongside them.
“She would not take no for an answer. She would make a point to go see people in person. She would wait outside of peoples’ offices if they had not responded to her email. Sometimes she would drive all over campus to these peoples’ offices just to talk to people. She knew she would catch people that way.”  
– Supervisor of physician champion

No champions or colleagues believed that champions were “easily discouraged.” When it came to effective communication, colleagues were more likely to report on the survey that champions were persuasive and strong communicators than champions themselves; this difference was statistically significant. Lastly, champions were asked if they were pessimistic: no champions agreed with this statement and only 4% of colleagues described them this way.

**Individualized consideration:** A consistent theme among champions was how attentive they were to the needs of the people around them. They discussed how they had a strong interest in their colleagues and patients. This sincere interest, which was coded as empathy, drove their desire for improvement. Colleagues of champions confirmed that the empathy that champions possessed was sincere and a driving force in their improvement efforts.

“I’ve always made every attempt to make things as easy for my team as possible. I want things to be simple and easy for everyone. Empathy is the ultimate quality for a nurse, but for me, it became important to have this in my relationship with my colleagues. So much of my empathy is for other staff members. I wasn’t so much as taking care of patients as I was taking care of staff.”  
– Nurse

“She is one of those doctors that is not afraid to talk about hard things with families or staff. She would come in at 2 a.m. to talk to the mom of the dying kid because she really wanted to be there for that mom. That same empathy and willingness to sit down and talk with you, even if it’s a hard conversation, she does that in her quality improvement work, as well.”  
– Peer of physician champion

Empathy manifested in a variety of ways among champions, including simply being physically present in the daily activities in their organization. When asked how they gained support for the intervention, champions shared stories about coming to their health setting on their day off to talk to people, to ensure the implementation was going smoothly, or to help and gather feedback. Colleagues of champions stated that champions were perpetually available, approachable, and accessible. These consistent behaviors, including being physically present, were seen by colleagues as significant, and colleagues believed they contributed to the overall success of gaining buy-in and trust to carry out the intervention.

“She was so approachable. She made herself available to the staff. She would come in on her day off to talk to people and check-in. People were not nervous to ask her questions. She would stand there for 20 min and talk to people. She did this for almost a year. She’s really good at making people understand why we are doing something different.”  
– Peer of physician champion

Among champions, the quality of inspirational motivation was accompanied by strong communication skills. Champions and their colleagues stated that champions were highly communicative, whether that be in their ability to articulate their ideas effectively or gain buy-in for their efforts through persuasive speech abilities.

Another characteristic found among champions within the larger theme of inspirational motivation was their optimism. Champions explained they were able to see the good in others or in situations. In turn, they attempted to infuse their positive outlook into others, particularly when others were feeling discouraged during their change efforts. Additionally, champions explained that this core belief—that others are inherently good and/or want to do the right thing—enabled them to demonstrate compassion toward others. Furthermore, champions explained that this belief gave them the ability to be more open and objective to others’ resistance to the change they were implementing. Colleagues of champions also relayed that champions were extremely positive and able to see the good in every situation.

“It gets back to the core principle that I have to deeply believe and remind myself every day that everyone here is intrinsically good. They may have motivations that are different, they see things differently, but I believe they are good, and if I start from that, I can always develop and empathize with [my colleagues’ concerns about the intervention]. I can believe in them and respect our differences and at least engage them.”  
– Physician

“She has a healthy-questioning attitude and is so positive. She believes everyone is doing everything for the right reasons and we just must figure out what the process breakdown is. That is how she approaches everything.”  
– Peer of physician champion

Quantitative findings related to inspirational motivation are shown in Figure 4. For characteristics and behaviors associated with inspirational motivation, the quantitative results supported qualitative findings. On almost every item, there were similar levels of agreement between champions and colleagues, although champions slightly underrated themselves on all items except for “enjoy motivating others overall” and “enthusiastic about the intervention.”
Because of champions’ abilities to demonstrate “individualized consideration” of their colleagues, they discussed the importance of surrounding themselves with a team of people who balanced them, and/or helped them to see things they could not see. When asked why they were successful in moving the intervention forward, champions frequently cited working in collaboration with others who brought their own unique talents to the team as one of the main reasons. Colleagues of champions reiterated this finding by sharing their own stories of how they felt included, seen, and appreciated as they worked alongside the champion.

“She takes a genuine interest in the team. She knows them. She knows what they are good at. She encourages them to develop themselves. That personalized approach makes the

Figure 3. Adapted Transformational Leadership Theory framework.

Figure 4. Inspirational motivation: Associated characteristics of champions.
*Kruskal–Wallis test signifies the statistical difference between champion and colleague responses of \( p < .05 \).
huge difference. She reaches individuals and brings people together as a team. We feel committed to the team as a whole. When we are in high-level leadership meetings, she goes around the table and asks those who have not spoken to speak.”

– Supervisee of a nurse champion

Quantitative data revealed that over 80% of champions and colleagues agreed that champions were empathetic. There were no quantitative data associated with physical presence or team-centeredness.

Idealized influence: Champions stated they consistently modeled the behaviors they were hoping to see and invited others to participate with them in these activities. They talked about how important it was for others to see them engaging in the desired behaviors of the intervention instead of promoting the intervention with words alone. Colleagues confirmed these characteristics and believed they were fundamental to their success in facilitating the uptake of interventions.

“She’s not afraid to do things herself. She is involved in [the intervention activities] and doesn’t expect us to do it without her. She is a situational servant leader who is willing to do whatever needs to happen to get things accomplished. I think everyone really appreciates that.”

– Peer of physician champion

One of the most common ways role modeling manifested in champions was in their pursuit of establishing credibility through demonstration of high performance in their role. Their credibility went beyond only possessing clinical knowledge, and was articulated as having integrity, being able to stand up for their convictions even if others did not agree with them, and possessing a deep commitment and connection to the communities served.

Champions possessed a keen sense of self, others, and the environment around them. They described being tuned in to the cultural climate and the ways in which certain people behaved or made decisions in various contexts. Champions attributed their success in implementing interventions to this keen awareness of how things and people worked together within their organization. They believed they were able to see and understand which levers to pull to bring about change, gain support, and mobilize resources as needed.

“He worked with a team of people with various skill levels, and he was able to recognize that some people were more experienced than others and he read that very quickly. He knew who he was talking to and would tailor his communication methods to his audience.”

– Peer of a physician champion

From the survey data, over 90% of champions and colleagues agreed that the champion regularly encouraged others on the team to participate in implementation activities; however, there were no explicit quantitative data collected pertaining to credibility or self-awareness. One survey question addressed situational awareness by asking if champions found it easy to determine who to go to when they needed help implementing the intervention; 70% of champions agreed that they did find it easy.

Intellectual stimulation: This Transformational Leadership Theory domain describes a general approach that champions took with others when overseeing the implementation of their respective interventions, as opposed to explicit, descriptive, and individualized characteristics. Champions consistently stated that they created an environment in which others could honestly share how they felt about the intervention and the approach to implementation. They discussed valuing feedback and intentionally creating a space for others to share their ideas, questions, or opposing ideas. Champions stated that they consistently tried new things to modify their intervention and encouraged others to do the same.

Colleagues echoed the reports of champions by describing their ability to genuinely connect through relationships, thoughtfully elicit feedback, and seriously consider all opinions when revising implementation approaches.

“She is a very good listener. She will really listen and see how things need to change and how the project should be modified. She’s not offended. She’s always learning. All feedback is good to her.”

– Peer of nurse champion

Quantitative results associated with intellectual stimulation are shown in Figure 5. Among champions, 80% described themselves as people who were curious and asked a lot of questions. Colleagues were less likely to agree with these characteristics. However, colleagues were more likely to report that champions regularly sought out feedback from peers and leaders, with the difference between responses for seeking out peer feedback being statistically significant.

**Discussion**

Champions are described in the literature as possessing key characteristics that enable them to successfully motivate others to adopt new innovations and behaviors in health care such as being intrinsically motivated, committed to implementing a change, persistent, enthusiastic, and highly effective communicators (Miech et al., 2018). Our results match these previously identified findings and were identified via surveys and IDIs by both the champions themselves and their colleagues. Findings from both the surveys and the interviews with colleagues who were peers, direct reports, and supervisors of champions were highly correlated with the findings from champions themselves, demonstrating that champions seem to be consistent
in their attitudes and behaviors toward others regardless of their rank within the organization.

Our research resulted in the identification of champion characteristics and behaviors that have been underrepresented in the literature, such as: (1) empathy, (2) curiosity, (3) being physically present, available, and approachable, and (4) often soliciting feedback from others. Systematic reviews conducted on empathy and curiosity and leadership effectiveness have yielded a positive correlation, as both qualities build trust, foster a learning environment, and create strong emotional connections between leaders and their followers (MacDonald, 2015; Wagstaff et al., 2021). Furthermore, one could argue that empathy drives champions to be physically present, available, and approachable, and curiosity drives champions to solicit feedback from others. These findings are useful for refining how we identify health care champions, mirror what has previously been identified among transformational leaders, and support the research teams’ observations and experiences for why health care champions have been successful at promoting the adoption of interventions.

Even though champions and colleagues tended to have a high agreement when describing the champions’ characteristics, champions scored themselves lower than colleagues on many characteristics. A large body of evidence demonstrates that self-ratings on performance evaluations most likely tend to be inflated which led to organizations initiating 360 evaluations, or evaluations conducted on one person by several others in the organization. In the case of being evaluated by others, several studies have shown that colleagues’ ratings of performance were highest for people who underrate themselves (Arnold & Davey, 1992; Atwater et al., 1998; Carless & Roberts-Thompson, 2001; Dunning et al., 2004; Van Velsor et al., 1993; Yammarino & Atwater, 1997). Furthermore, leaders who underrate themselves are perceived as being more effective leaders than leaders who tend to see themselves accurately and much more so than leaders who overrate themselves (Van Velsor et al., 1993). The underlying notion behind this finding is that when leaders overestimate their performance, it is generally linked to traits like arrogance and/or lack of self-awareness, which have been shown to be detrimental to leadership effectiveness overall (Sala, 2003; Van Velsor et al., 1993). Even though it would be expected that accurate raters would have the highest levels of self-awareness, a study revealed that leaders who underrated themselves were perceived by others as having higher levels of self-awareness (Van Velsor et al., 1993).

The results presented above have already demonstrated that champions possess high levels of self-awareness, but underrating themselves could also be interpreted as champions being humble or modest, further contributing to their success at effecting change in their settings overall. It is also important to note that even if champions underrated themselves on perceived negative behaviors such as feeling easily frustrated, not being supportive of others, or failing to communicate well, they were not perceived in those ways by their colleagues. The findings demonstrate that champions were able to present supportive attitudes and behaviors outwardly to a degree that ultimately motivated their colleagues to adopt the intervention they were implementing.

All key themes fell within the domains of the Transformational Leadership Theory framework; there were no discrepant views or outliers. Overall concordance among champion and colleague responses was surprising and warrants further investigation.
Limitations

A potential limitation of this study is sampling bias, as champions recommended colleagues to participate in the study and may have only referred those who would speak positively of them. However, the purpose was to explore what champions did to drive change and only those who had overseen interventions within health settings were included. Champions had already achieved some definition of success by the very nature of the inclusion criteria, and the study was designed to explore why they were effective; therefore, only prosocial behaviors were examined. If the study had been designed to answer a different research question, such as why an intervention failed or why it was not sustained, a more representative sample would have been necessary to mitigate bias. Another limitation could be recall bias, as participants were asked to comment on the implementation of interventions that occurred within the past 5 years, thereby inflating the effect of the champion.

Another limitation of this study was that the survey tool used to assess champion characteristics was not a validated instrument. However, using Cronbach’s alpha, the champion survey instrument exhibited acceptable reliability with $\alpha = 0.82$, while the instrument administered to colleagues did not exhibit acceptable reliability, with $\alpha = 0.51$. Poor reliability statistics of the colleague survey indicate that a further study of these topics may warrant a customized survey for colleagues, rather than a modified version of the champion survey. Another limitation of the study was the omission of exploration of latent factors in the analysis of survey results; future research could include exploratory factor analysis to determine definitive subgroups of champion features to explore nuances. Lastly, a limitation could be the small sample sizes for both the surveys and the IDIs which may have inflated our effect.

Conclusion

Champions tend to inspire their clinical teams to adopt new interventions within health care using a leadership style that naturally facilitates trust, as well as motivation to work toward common goals. This leadership style matches what is exhibited by transformational leaders; therefore, champions may be identified, categorized, and developed using Transformational Leadership Theory. Champions may be able to reliably self-report some champion-like characteristics, but their colleagues may be more likely to reliably identify the characteristics and behaviors that make champions effective at facilitating the adoption of evidence-based interventions.

Future directions

This study points to several important directions for future research. Only one study was found in the literature review which showed that technology champions exhibit transformational leadership characteristics and behaviors more frequently than non-champions (Howell & Higgins, 1990). This same study also found that the promotion of new innovations within technology can be empirically linked to transformational leadership behaviors (Howell & Higgins, 1990). Findings from this study demonstrate a strong link between champion characteristics and Transformational Leadership Theory. This finding was surprising to us, as this link has been underrepresented in the implementation science literature among champions promoting new evidence-based interventions within health care, and suggests the importance of looking to other disciplines to inform our understanding of health care champions. This finding is substantial because methods for identifying, growing, and developing transformational leaders are well established in the literature and can immediately be applied to growing and developing more champions to facilitate the adoption of evidence-based interventions in health care. Further research on the identification and development of champions using Transformational Leadership Theory should be conducted to confirm this, particularly when champions may not be in a formal leadership position but are in fact leading others through change.

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Supplemental material

Supplemental material for this article is available online.

Notes

1. Multidisciplinary is defined as “combining or involving several academic disciplines or professional specializations in an approach to a topic or problem.” Source: Oxford Dictionary, 2020.
2. Evidence-based intervention is defined as “the integration of best research evidence (through some sort of outcome evaluations) with clinical expertise and patient values.” Source: Institute of Medicine, 2001.

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