

# Exploring How Women and Men Prioritize Employability Skills for Communication, Decision Making and Self-Management

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## Abstract

Employability skills, or transferable skills, are critical in accompanying technical skills and disciplinary knowledge for success in the work force. As the agricultural sector diversifies, with younger generations entering the work force and women taking on more leadership positions, it is imperative to understand the differing priorities of employability skills based on gender and prepare today's students with ways to highlight and use their employability skills. Using the 2011 national survey data collected by the Association of Public and Land Grant Universities, this study explores the different rank order of seven clusters of soft [employability] skills, each with seven descriptive characteristics. The most important clusters for entry level employment are the fundamentals to a work environment (communication, decision making, self-management) while the least important clusters are of a higher order skill (professionalism, leadership). Ordinal regression and rank order analysis reveal women significantly prioritize the skills connected to transferring of knowledge, professional development, and working with diverse groups of people more so than men. This study aids the agricultural sector in understanding possible changes in the diversifying profession and the importance of understanding the "big picture" of agricultural employability.

## Introduction

The composition and values of the workforce are changing. The "rules" of success for entry-level employees are shifting as Baby Boomers retire, Gen X-ers rise to management roles, Millennials enter the workforce, and Gen-Z's move through higher education (Taylor, 2014; Lipkin and Perrymore, 2009; Seemiller and

Grace, 2016; Twenge and Campbell, 2009). Along with these generational changes, there has been an influx of women entering the work force beginning in the 1940s (Broido, 2004). Bhatnager and Swamy (1995) posit that the increased experiences of employees with women in management and leadership roles increases their positive attitudes towards women in these positions. The Millennial generation values diversity and acceptance more than any other generation (Broido, 2004). This population seeks out the flexibility to work for women leaders as the Millennials value women's tendency towards transparency in communication (Correia, n.d.). As women enter an increasing variety of employment fields, studies have focused on women's skills that led to success or failure of reaching gender equality in a range of employment sectors, such as evaluation bias, lack of leadership training, and communication differences. (Weyer, 2007; Helgesen, 2005; Metz, 2003; Cobb-Clark and Dunlop 1999; Berryman-Fink, 1985). Women have shown success through excellence in higher education, computer and technological abilities, and self-management and self-esteem (Ruskus et al., 2004). Across the disciplines, many Millennials lack the necessary employability skills to succeed in a professional office (Harris-Reeves and Mahoney, 2017; Crawford et al., 2011; Yorke, 2006), such as working with diverse audiences and teams, written communication and abstract thinking. Past studies demonstrate differences between women and men leaders, but as women's numbers increase in the agricultural sector, it is not yet known which employability skills are highest prioritized between these groups.

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## Women in Management

Internationally, women have encountered numerous obstacles when entering the work force: glass (or even concrete) ceilings and sticky floors (Biagetti and Scicchitano, 2011), leadership defined as a man's characteristic (Alimo-Metcalf, 1998), the pay gap (Gabriel and Schmitz, 2007) and sexual harassment (Spikes et al., 1996). The World Economic Forum (WEF) tracks the global gender gap, which is in part due to these societal actions preventing women from achieving upper level positions. The WEF measures the gap with four factors: "economic participation and opportunity," "educational attainment," "health and survival," and "political empowerment" (4). General trends find that, globally, the gap and specifically the economic participation gap is closing. While the majority of the top 10 countries for smallest gap are in Europe (Iceland, Finland, Norway, Sweden, Ireland, and Slovenia), the United States ranks 45th. The United States has much to accomplish to achieve overall parity, and the efforts will vary by state. This is particularly important for states such as North Dakota, Nebraska, and Kentucky, which rank in the top 25 agricultural producers (USDA-ERC, 2017) and top 25 largest pay gaps (IWPR, n.d.).

Students with nearly equitable education attainment can emphasize different career goal skills they bring to a job. For instance, women in science, technology, engineering, and mathematics (STEM) fields focus on leadership and self-management and struggle to be identified as a "scientist." Men in K-12 teaching majors emphasize job security and their communication skills in the classroom (Buschor et al., 2014). Social Role Theory or Expectation States Theory may explain the attitude and values of the individual and the organizational body (Weyer, 2007). Today, though, students in higher education still expect their professors to follow "traditional" gender roles, evaluating the effectiveness of women professors by their ability to act in a nurturing manner (Hirschfield, 2014). Gen Z's and Millennials have a positive attitude toward women's leadership, however, their behaviors and values in higher education show there is still work to be done to help them understand gender complexity in management roles. Studies have shown that those in hiring positions prefer take-charge candidates, regardless of gender (Wessel et al., 2015). Kanter (1977) wrote that women need to reach a critical mass within the work force to begin to influence the business culture, while Lortie-Lussier and Rinfret (2002) wrote that this proportion may vary by business sector – such as in agriculture. While Crawford et al., (2011) investigated employability skill priority differences among students, faculty, alum, and industry, there is still an opportunity to investigate employability skill priority differences based upon gender, specifically how gender influences each of these stakeholder groups' priorities.

## Employability Skills

Employability skills are considered universally required, regardless of profession. They are the trans-

ferable skills across professions (Robinson, 2006), increasing "*the relative chances of acquiring and maintaining different kinds of employment*" (Brown et al., 2003, 111). Technical skills and disciplinary knowledge are the attributes required for specific professions (Hofstrand, 1996), such as crop or plant identification knowledge or lab research techniques. While higher education institutions teach technical skills and core disciplinary knowledge, there remains a gap in employability skill development between what employers want and the skills entry-level hires bring to the work force from their academic careers (McMullin et al., 2016; Agriculture Future of America and Millennium Research, 2009).

The United States Department of Labor issued a report proposing the required employability skills, regardless of profession, as well as those required in each specific market (SCANS, 2000). The SCANS report identified communication as one of the most important skills, reinforcing the findings of Moore (2015), Crawford et al., (2011), Wilton, (2011), and Robinson and Garton, (2008). SCANS also identified skills that are clustered into two categories: Thinking Skills and Personal Qualities. Intrinsic qualities, separate from employability skills, are also a component of work readiness, such as Responsibility and Self-Esteem (SCANS, 2000).

The importance of providing educational opportunities for developing employability skills and understanding employer expectations and needs is reinforced by the range of work being done in other countries. The United Kingdom and Australia have found similar results: employers report entry-level hires needing to develop oral communication, problem-solving, and team-working, among other skills (Commonwealth of Australia, 2009; UK Commission on Employment Skills, 2009). In business markets from Asia to Africa and Europe, employers request that their hires bring enhanced foreign language and other communication skills to the workplace (Griesel and Parker, 2009; Zaharim et al., 2009; Arocena et al., 2007). Job candidates around the world must be able to articulate their employability skill development and utilize these skills in their employment positions (Blignaut et al., 2013).

## Methods

The Association of Public and Land Grant Universities (APLU) and Michigan State University (MSU) conducted a survey to prioritize and rank order employability skills (MSU IRB x11-258 protocol deemed exempt). Researchers collected and reviewed over 100 articles and reports related to employability skills. Using a cluster analysis, seven clusters, each with seven employability skill characteristics, were identified. An online survey was developed that used a forced ranking response format to elicit explicit priorities of the employability skills clusters and characteristics. Forced ranking is a marketing research technique used for discovering priorities in circumstances with limited resources, such as the funding available to purchase a range of commodities or amount of time to spend on a desired

## Exploring How Women and Men

activity (Foxall et al., 2006; Lehman et al., 1998). The forced ranking is especially useful when all the items on the list could be considered desirable. In the survey, a respondent's ranking of one signified the most important characteristic or cluster, while a ranking of seven signified the least important, within the given list. The forced ranking method was selected to provide data that can be translated to decision making. For example, when given limited time in the classroom, which employability skills should faculty focus on? The survey was distributed through 31 participating universities to reach students, faculty, and alum related to the university's College of Agriculture and Natural Resources, or a similar college. The research team sought to find the attributes which were considered most important for new graduates in the agricultural and natural resource sector. A report further detailing this process, including participating universities, employment sectors represented, and key stakeholder rank orders, can be found through APLU's website (Crawford et al., 2011). These skill clusters are:

### Communication

- Listen effectively
- Communicate accurately and concisely
- Effective oral communication
- Communicate pleasantly and professionally
- Effective written communication
- Ask good question
- Communicate appropriately and professionally using social media

### Decision Making/Problem Solving

- Identify and analyze problems
- Take effective and appropriate action
- Realize the effect of decision
- Transfer knowledge from one situation to another
- Engage in life-long learning
- Think abstractly about problems

### Self-Management

- Efficient and effective work habits
- Self-starting
- Well-developed ethic, integrity, and sense of loyalty
- Work well under pressure
- Adapt and apply appropriate technology
- Dedication to continued professional development

### Teamwork

- Productive as a team member
- Positive and encouraging attitude
- Punctual and meets deadlines
- Maintains accountability to the team
- Work with multiple approaches
- Aware and sensitive to diversity
- Share ideas to multiple audiences

### Professionalism

- Effective relationships with customers, businesses, and the public

- Accept and apply critique and direction in the workplace
- Trustworthy with sensitive information
- Understand role and realistic career expectations
- Deal effectively with ambiguity
- Maintain appropriate décor and demeanor
- Select appropriate mentor and acceptance of advice

### Experiences

- Related work or internship experiences
- Teamwork experiences
- Leadership experiences
- Project management experiences
- Cross disciplinary experiences
- Community engagement experiences
- International experiences

### Leadership

- See the "big picture" and think strategically
- Recognize when to lead and when to follow
- Respect and acknowledge contributions from others
- Recognize and deal constructively with conflict
- Build professional relationships
- Motivate and lead others
- Recognize change is needed and lead the change effort

This study uses the APLU data set and ordinal regressions to find significant differences between women and men and their rankings of employability skills. While numerous significant differences were found, this article highlights those Core Employability Skills and Characteristics that women and men rank order differently.

## Results and Discussion

The survey includes responses from 4,117 women and 3,673 men; 3,998 of the women earned a Bachelor's degree, 1,263 a Master's degree and 623 a PhD; 3,510 of the men earned Bachelor's degree, 1,442 a Master's and 919 a PhD. The range of degrees indicates varied education levels and assumedly age in the respondents. The respondents also represent over 45 employment fields within the Agriculture or Natural Resource professions. This permits the research team to investigate general trends explained by gender rather than age, as research shows that women and men learn and experience the world differently at each level of cognitive development (Baxter-Magolda, 1992).

### Core Skill Clusters

Women and men rank order the seven employability skill Core Clusters slightly differently. The first three clusters are ranked the same across gender, as (1) Communication, (2) Decision Making/Problem Solving, and (3) Self-Management. Women next rank order (4) Experiences and then (5) Teamwork, while men rank

order (4) Teamwork, then (5) Experiences. Women and men then rank order (6) Professionalism and lastly (7) Leadership. While there are similarities in the rank order, the intensity of all the core skills are significantly different by gender.

These results mirror past studies that demonstrate Communication is a primary, and possibly a foundational component, of employability skills (Wilton, 2011). Without communication skills, the others become irrelevant. For example, someone can have well-developed problem solving skills, but if they can't communicate their ideas, then the skill is difficult to apply in the work environment. The top three Employability Skill Core Clusters are fundamental to a work environment: communication, problem solving, and managing one's own work. The Core Skills least prioritized are also the same for women and men. Professionalism and Leadership are employability components requiring a higher order of cognitive development, maturity and familiarity with a company. These are skills a new employee should be aware of and understand the need for these skills to develop over time. A frustrating situation could arise when a new employee attempts to demonstrate leadership too soon, or in too big of a scale, which could be deemed inappropriate within a company's structure.

Rank ordering of Experiences and Teamwork clusters is where differences surfaced by gender. Women ranked Experiences higher ( $p=0.000$ ) than men in the rank order, and they placed significantly more emphasis on Experiences than did men. In contrast, men rank ordered Teamwork (0.023) higher than Experiences. The Experiences cluster focused on real-world experiences across a range of contexts; from work-related, to cross-disciplinary, to international. The Teamwork cluster focused on individual traits such as accountability and punctuality. This could surface in the work or academic environment where, given the same event, women place a higher value or importance on the context of the experience and men focus more on the individual's skills, attributes or contributions.

**Communication**

Women and men rank order the seven Communication characteristics identically: (1) accurate and concise, (2) listen effectively, (3) oral communication, (4) pleasant and professional communication, (5) written communication, (6) asking good questions, and lastly (7) appropriate and professional on social media.

Communicating accurately and concisely

is the top ranked characteristic, however a caution is provided to not be so concise that the communication comes across as abrupt or rude. Listening outranks speaking, reinforcing the adage to listen carefully before speaking. This can be especially important for someone new in a company or team to take the time to listen and learn before proposing changes or new ideas. A pleasant demeanor is highly valued by both women and men. Though concise communication is important, all people in the work environment should balance it with a polite and professional tone. While the rank order is the same, other studies have demonstrated how professionals communicate does vary by gender. Women have a higher aptitude for writing (Reynolds et al., 2015), prefer communication one-on-one rather than in large groups (MacLeod et al., 1992), and act with more empathy (Graff et al., 2017).

**Decision Making/Problem Solving**

Women rank order the seven Decision Making/ Problem Solving characteristics as (1) identify and analyze problems, (2) take effective and appropriate

**Table 1. Core Skill Clusters as Ranked By Women with Mean, N, Standard Deviation, Significance, Wald and Standard Error**

Core Skill	Gender	Rank	Mean	N	Std. Dev	Significance	Wald	Std. Err.
Communication	Female *	1	2.904	3641	1.644	0.000***	16.389	0.043
	Male	1	3.063	3268	1.677			
Decision Making / Problem Solving	Female	2	3.676	3275	1.852	0.000***	129.601	0.043
	Male *	2	3.173	3634	1.806			
Self-Management	Female *	3	3.626	3625	1.935	0.002**	10.012	0.042
	Male	3	3.775	3261	1.905			
Experiences	Female *	4	3.983	3633	2.307	0.000***	50.296	0.043
	Male	5	4.377	3250	2.251			
Teamwork	Female*	5	4.263	3623	1.816	0.023**	5.198	0.042
	Male	4	4.367	3250	1.784			
Professionalism	Female*	6	4.500	3627	1.879	0.026**	4.954	0.042
	Male	6	4.597	3249	1.880			
Leadership	Female	7	4.888	3617	1.886	0.001**	11.173	0.043
	Male*	7	4.729	3254	1.904			

\*The gender with a lower mean score, and thus a higher priority. Shading indicates a change in rank order of mean score.

\*Significant at the 0.05 level  
 \*\*Significant to the 0.01 level  
 \*\*\*Significant to the 0.001 level

**Table 2. Communication Characteristics as Ranked by Women with Mean, N, Standard Deviation, Significance, Wald and Standard Error**

Communication Characteristic	Gender	Rank	Mean	N	Std. Dev	Significance	Wald	Std. Err.
Characteristic 1	Female	1	2.987	3875	1.695	0.023**	5.151	0.041
	Male *	1	2.896	3422	1.670			
Characteristic 2	Female	2	3.094	3879	1.661	0.000***	158.575	0.068
	Male *	2	2.923	3428	1.663			
Characteristic 3	Female	3	3.326	3878	1.632	0.223	1.485	0.041
	Male	3	3.277	3435	1.614			
Characteristic 4	Female *	4	3.359	3878	1.883	0.000***	149.718	0.042
	Male	4	3.892	3404	1.831			
Characteristic 5	Female	5	4.054	3862	1.685	0.004**	8.351	0.410
	Male *	5	3.933	3423	1.737			
Characteristic 6	Female	6	5.117	3857	1.702	0.000***	151.489	0.420
	Male *	6	4.645	3405	1.749			
Characteristic 7	Female *	7	6.000	3866	1.563	0.000***	86.152	0.048
	Male	7	6.286	3422	1.350			

\*The gender with a lower mean score, and thus a higher priority. Shading indicates a change in rank order of mean score.

\*Significant at the 0.05 level  
 \*\*Significant to the 0.01 level  
 \*\*\*Significant to the 0.001 level

## Exploring How Women and Men

action, (3) transfer knowledge, (4) realize the effect of decisions, (5) creative and innovative solutions, (6) engage in life-long learning, and lastly (7) think abstractly. Men rank the first two characteristics the same but then order them: (3) realize the effect of a decision, (4) creative and innovative solutions and (5) transfer knowledge. The last two characteristics are ordered the same by women and men.

Identifying the problem and taking effective action are important employability skills and create the framework from which work is organized. The difference between women and men is in the rank ordering of the middle three characteristics, around how to approach the solution. This subtle difference, in how to approach a decision-making task, could create tension in the work environment. Women place significantly (0.000) more emphasis on the transfer of knowledge and may tend to start with looking for connections to the problem at hand to other situations, skills or knowledge. Exploring the effects of the decision and innovative solutions come in later. Men, on the other hand, may tend to start with a focus on the effects of a decision, and how to be innovative before using knowledge transfer skills.

### Self-Management

Women rank order the seven Self-Management characteristics as: (1) efficient and effective work habits, (2) self-starting, (3) well developed ethic, integrity and sense of loyalty, (4) sense of urgency to complete tasks, (5) work well under pressure, (6) dedication to continued professional development, and (7) adapt and apply appropriate technology. Men, however, flip the last two characteristics as women place significantly (0.000) more emphasis on professional development.

There is common ground in the Self-Management cluster, starting with a basic set of skills: to work well, without need for much guidance, and to follow and understand the rules and values in a work environment. The next two characteristics concern time, by developing the skills to work quickly and without panic when under pressure.

The difference between women and men falls at the end of the rank order. Like the differences in Decision Making, women are emphasizing a connection to knowledge, be it transferring from previous experiences or gaining new knowledge through professional

**Table 3. Decision Making/Problem Solving Characteristics as Ranked by Women with Mean, N, Standard Deviation, Significance, Wald and Standard Error**

DM/PS Characteristic	Gender	Rank	Mean	N	Std. Dev	Significance	Wald	Std. Err.
Characteristic 1	Female	1	2.632	3708	1.690	0.000***	35.346	0.043
	Male *	1	2.400	3310	1.613			
Characteristic 2	Female *	2	3.393	3694	1.737	0.032*	4.572	0.042
	Male	2	3.483	3311	1.749			
Characteristic 3	Female *	3	3.760	3700	1.784	0.000***	37.184	0.042
	Male	5	4.022	3322	1.778			
Characteristic 4	Female *	4	3.765	3685	1.726	0.001***	11.708	0.042
	Male	4	3.896	3310	1.682			
Characteristic 5	Female	5	4.229	3692	1.778	0.000***	35.772	0.410
	Male *	3	3.980	3299	1.747			
Characteristic 6	Female	6	4.796	3694	2.215	0.182	1.778	0.043
	Male	6	4.873	3319	2.197			
Characteristic 7	Female	7	5.390	3684	1.712	0.005**	7.950	0.043
	Male *	7	5.236	3299	1.822			

\*The gender with a lower mean score, and thus a higher priority.

Shading indicates a change in rank order of mean score.

\*Significant at the 0.05 level

\*\*Significant to the 0.01 level

\*\*\*Significant to the 0.001 level

**Table 4. Self-Management Characteristics as Ranked by Women with Mean, N, Standard Deviation, Significance, Wald and Standard Error**

Self-Management Characteristic	Gender	Rank	Mean	N	Std. Dev	Significance	Wald	Std. Err.
Characteristic 1	Female *	1	2.513	3674	1.485	0.000***	38.448	0.043
	Male	1	2.775	3297	1.574			
Characteristic 2	Female	2	3.322	3671	1.951	0.000***	69.439	0.042
	Male *	2	2.929	3305	1.827			
Characteristic 3	Female	3	3.440	3670	2.018	0.852	0.035	0.042
	Male	3	3.429	3296	2.007			
Characteristic 4	Female	4	4.410	3664	1.753	0.000***	31.278	0.042
	Male *	4	4.167	3292	1.757			
Characteristic 5	Female *	5	3.973	3661	1.726	0.015**	5.948	0.042
	Male	5	4.076	3288	1.720			
Characteristic 6	Female *	6	5.057	3655	1.819	0.000***	43.692	0.043
	Male	7	5.330	3292	1.753			
Characteristic 7	Female	7	5.268	3647	1.635	0.250	1.322	0.043
	Male	6	5.231	3261	1.630			

\*The gender with a lower mean score, and thus a higher priority.

Shading indicates a change in rank order of mean score.

\*Significant at the 0.05 level

\*\*Significant to the 0.01 level

\*\*\*Significant to the 0.001 level

**Table 5. Experiences Characteristics as Ranked by Women with Mean, N, Standard Deviation, Significance, Wald and Standard Error**

Experiences Characteristic	Gender	Rank	Mean	N	Std. Dev	Significance	Wald	Std. Err.
Characteristic 1	Female *	1	2.168	3982*	1.558	0.000***	64.397	0.043
	Male	1	2.469	3520	1.702			
Characteristic 2	Female	2	2.842	3980	1.506	0.559	0.341	0.041
	Male	2	2.805	3518	1.456			
Characteristic 3	Female	3	3.151	3969	1.502	0.009**	6.744	0.041
	Male *	3	3.066	3498	1.538			
Characteristic 4	Female	4	3.991	3967	1.608	0.000***	38.507	0.041
	Male *	4	3.756	3497	1.621			
Characteristic 5	Female	5	4.445	3966	1.633	0.000***	35.175	0.041
	Male *	5	4.227	3511	1.636			
Characteristic 6	Female *	6	4.955	3965	1.509	0.000***	98.031	0.042
	Male	6	5.267	3497	1.509			
Characteristic 7	Female	7	6.248	4020	1.318	0.000***	15.981	0.046
	Male *	7	6.163	3563	1.350			

\*The gender with a lower mean score, and thus a higher priority.

Shading indicates a change in rank order of mean score.

\*Significant at the 0.05 level

\*\*Significant to the 0.01 level

\*\*\*Significant to the 0.001 level

development. The data may be reflecting a larger trend of women not moving towards technology and computer-based majors (Henn, 2014; Whitley, 1997), with women ranking the application of technology last.

**Experiences**

Women and men rank the seven Experiences characteristics in the same order: (1) related work experiences, (2) teamwork experience, (3) leadership experience, (4) project management experience, (5) cross-disciplinary experience, (6) community engagement experiences, and lastly (7) international experiences. Significant differences exist among these characteristics, but these differences are not enough to change the rank order and priority of the characteristic.

The top two characteristics are experiences often encountered during the higher education years, be it summer employment or team projects in the classroom, (related work experience and teamwork experience). Internships are a specific form of related work experience. If internships are designed well by the employer, they can be an excellent place for students to expand both employability and disciplinary skills (Marsh et al., 2016). The next two rank order characteristics involve degrees of leadership experience (leadership experience and project management experience), followed by three characteristics that involve working with a new group of people (cross-disciplinary experience, community engagement, and international experience). While international experience is the lowest ranked characteristic, this could in part be explained by a recent graduate's inability to explain the impact of their study abroad (Gardner et al., 2008). Employers who have participated in a study abroad place a significantly higher emphasis on this experience when looking for new employees (Trooboff et al., 2008).

**Teamwork**

Women rank the seven Teamwork characteristics as: (1) productive as team member, (2) punctual and meets deadlines, (3) positive and encouraging attitude, (4) maintains accountability to the team, (5) works with multiple approaches, (6) aware of and sensitive to diversity, and lastly (7) share ideas to multiple audiences. Men flip the final two characteristics, placing significantly less emphasis on sensitive to diversity (0.000) and more emphasis on sharing to multiple audiences (0.000).

Women and men concur that the three most important skills for Teamwork are the ability to be productive, punctual, and meet deadlines with a good attitude.

The last two characteristics represent different ways of engaging with people. Recognizing diversity comes from a place of empathy towards others, where communicating to multiple audiences is about others understanding you. Women place a significantly higher emphasis on being aware and sensitive to diversity. Millennials and Gen Z's will continue to raise the

**Table 6. Teamwork Characteristics as Ranked by Women with Mean, N, Standard Deviation, Significance, Wald and Standard Error. Differences in Rank are Highlighted**

Teamwork Characteristic	Gender	Rank	Mean	N	Std. Dev	Significance	Wald	Std. Err.
Characteristic 1	Female	1	2.612	3917	1.573	0.567	0.328	0.042
	Male	1	2.617	3459	1.540			
Characteristic 2	Female	2	2.933	3915	1.627	0.982	0.001	0.041
	Male	2	2.924	3473	1.600			
Characteristic 3	Female	3	3.174	3919	1.758	0.000***	19.803	0.041
	Male *	3	2.998	3463	1.755			
Characteristic 4	Female	4	3.606	3910	1.667	0.559	0.341	0.041
	Male	4	3.576	3449	1.595			
Characteristic 5	Female	5	4.516	3892	1.781	0.001***	10.244	0.041
	Male *	5	4.413	3442	1.701			
Characteristic 6	Female *	6	5.474	3908	1.647	0.000***	140.343	0.043
	Male	7	5.878	3463	1.504			
Characteristic 7	Female	7	5.566	3899	1.508	0.000***	35.400	0.042
	Male *	6	5.394	3448	1.512			

\*The gender with a lower mean score, and thus a higher priority. Shading indicates a change in rank order of mean score.

\*Significant at the 0.05 level  
 \*\*Significant to the 0.01 level  
 \*\*\*Significant to the 0.001 level

**Table 7. Professionalism Characteristics as Ranked by Women with Mean, N, Standard Deviation, Significance, Wald and Standard Error**

Professionalism Characteristic	Gender	Rank	Mean	N	Std. Dev	Significance	Wald	Std. Err.
Characteristic 1	Female	1	2.797	3638	1.766	0.610	0.260	0.043
	Male	1	2.846	3271	1.840			
Characteristic 2	Female	2	3.282	3634	1.779	0.350	0.875	0.042
	Male	2	3.262	3255	1.846			
Characteristic 3	Female *	3	3.433	3646	1.734	0.000***	23.340	0.042
	Male	3	3.645	3257	1.763			
Characteristic 4	Female *	4	3.726	3636	1.990	0.007**	7.169	0.042
	Male	4	3.853	3265	1.982			
Characteristic 5	Female	5	4.680	3625	1.852	0.510	0.434	0.042
	Male	5	4.710	3240	1.844			
Characteristic 6	Female	6	4.910	3627	1.815	0.000***	42.485	0.043
	Male *	6	4.621	3249	1.866			
Characteristic 7	Female	7	5.145	3611	1.754	0.001***	10.855	0.043
	Male *	7	4.981	3236	1.848			

\*The gender with a lower mean score, and thus a higher priority. Shading indicates a change in rank order of mean score.

\*Significant at the 0.05 level  
 \*\*Significant to the 0.01 level  
 \*\*\*Significant to the 0.001 level

importance and acceptance of race, sexual orientation, ethnicity, religion, class, age, disability and many other forms of diversity to the workplace (Broido, 2004; Seemiller and Grace, 2016). An example of this changing perspective is University Extension offices making concerted efforts to hire more diverse employees to emulate the growing diversity of the communities they serve (Fox, 2017). It is important to note that the concept of diversity is expanding to include ways of thinking, trade or professional expertise, political viewpoints, and expressing individuality, to name a few.

**Professionalism**

Women and men alike rank order the seven Professionalism characteristics as: (1) effective relationships with customers, businesses and the public, (2) trustworthy with sensitive information, (3) accept and apply critique, (4) understanding of role and realistic career expectations, (5) maintain appropriate décor and demeanor, (6) select appropriate mentor and acceptance of advice, and lastly (7) deal effectively with ambi-

**Table 8. Leadership Characteristics as Ranked by Women with Mean, N, Standard Deviation, Significance, Wald and Standard Error**

Leadership Characteristic	Gender	Rank	Mean	N	Std. Dev	Significance	Wald	Std. Err.
Characteristic 1	Female *	1	3.292	3783	1.993	0.000***	13.353	0.042
	Male	2	3.453	3356	1.982			
Characteristic 2	Female	2	3.384	3775	2.029	0.000***	34.775	0.042
	Male *	1	3.108	3355	2.005			
Characteristic 3	Female *	3	3.723	3772	1.716	0.000***	20.260	0.042
	Male	3	3.906	3348	1.722			
Characteristic 4	Female *	4	3.831	3768	1.778	0.002**	9.147	0.042
	Male	4	3.960	3356	1.789			
Characteristic 5	Female	5	4.256	3772	2.088	0.027*	4.905	0.042
	Male *	5	4.144	3348	2.105			
Characteristic 6	Female	6	4.440	3760	1.927	0.000***	19.945	0.042
	Male *	6	4.234	3334	1.945			
Characteristic 7	Female	7	5.030	3760	1.848	0.405	0.694	0.042
	Male	7	5.070	3344	1.819			

\*The gender with a lower mean score, and thus a higher priority.

Shading indicates a change in rank order of mean score.

\*Significant at the 0.05 level

\*\*Significant to the 0.01 level

\*\*\*Significant to the 0.001 level

guity. Women place significantly more emphasis on accepting critique (0.000) and understanding one’s role (0.007), while men place significantly more emphasis on mentors (0.000) and dealing with ambiguity (0.001). These significant differences are not enough to change the priority ranking by gender.

Developing effective relationships is a hallmark of professionalism, along with the ability to know when to keep information (personal or professional) quiet (being trustworthy with sensitive information). Accepting and applying critique demonstrates the ability to learn from mistakes and ideally apply this new knowledge to future situations. Towards the end of the Professionalism rank order is the selection of a mentor. Even through an informal relationship, this can be an important way to develop and hone employability skills in a safe environment (Marsick and Watkins, 1990). Ambiguity is last on the list, but this may be because of its inclusion with Professionalism. If it had been in a different cluster, it might have been ranked higher. Another possible explanation is that dealing with ambiguity is a high level cognitive skill that takes years of practice to develop. This is a skill that needs to be studied further, especially in our increasingly complex and rapidly changing world.

**Leadership**

Women rank the seven Leadership characteristics as: (1) recognize when to lead and when to follow, (2) see the “big picture” and think strategically, (3) recognize and deal constructively with conflict, (4) respect and acknowledge contributions from others, (5) build professional relationships, (6) motivate and lead others and lastly (7) recognize change is needed and lead the change effort. Men flip the top two characteristics. Women place significantly higher emphasis on recognizing when to lead or follow (0.000) while men place significantly more emphasis on seeing the “big picture” (0.000).

Women and men differ in the first two characteristics of Leadership. As with Teamwork, women preference the human interaction (knowing when to lead or

follow) over the individual skill (seeing the big picture) in rank ordering these characteristics. Leadership is a complex topic and, in many ways, is built on a foundation of the previously discussed employability skills. While the remaining five characteristics are in similar order, the fundamental difference in starting place (personal relationship vs work goal) impacts how the skills are actualized. Research in Gender Studies is unearthing ways in which leadership is fraught with gender-biased expectations and assumptions about acceptable behaviors in the workplace. Women may be more hesitant to lead, unsure of when it is appropriate to actively join the table conversation (Sandberg, 2013) or feel pushed from the table by micro-aggressions (Basford et al., 2014). This is directly attributable to Social Role and Expected States The-

ories in which a woman may fear her leadership skills will be perceived negatively (Hirschfield, 2014; Weyer, 2006). Women have been found to tend towards leading as a team member, with an interactive style, defined as a transformational leadership style (Burke and Collins, 2001) while men prefer to lead as the manager (Kochan et al., 2000). Conflict resolution styles have also been found to vary by gender and differ based on dual priorities of achieving work goals or concern for interpersonal relationships. In a meta-analysis of 36 studies, Holt and DeVore (2005) compared five styles of conflict resolution: smoothing, withdrawing, compromising, problem-solving and forcing. They found that women preference a compromising style while men preference a forcing conflict resolution style.

**Summary**

All employability skill characteristics and clusters used in this study have high value, as they emerged through an employability literature review. Although one stakeholder may place emphasis differently than another, each characteristic is important for success in the work environment. The Core Cluster ranking, and the characteristics within each of the seven clusters, follow a pattern of foundational-level skills being highly prioritized (eg: Communication), intermediate skills (eg: Teamwork) in the middle range and the more advanced skills being lower priorities (eg: Leadership). The rankings are valuable for aiding decision-making on where to spend limited time and resources for developing employability skills in academia and in corporate training for workforce development. Understanding the similarities and differences by gender aide in supporting a diverse workplace.

The top three Employability Skill Core Clusters, for both women and men, are fundamental to a work environment: communication, problem solving, and managing one’s own work. They also rank order the characteristics within three of the clusters, (Communication,

Experiences and Professionalism) the same. This may reflect Gender Similarities Hypothesis in which women and men are very similar psychologically (Zuriff, 2015; Hyde 2005). Future studies may investigate this question to understand if women have reached a critical mass in the agriculture sector to the level that their core values are changing the general work culture for specific employability skills. Will transferring knowledge move closer to the top of the decision-making characteristics or will knowing when to lead and when to follow become the highest ranked Leadership skill for women and men?

Overall, women and men do not differ in their mean, prioritized ranking very often. Of the 49 comparisons (clusters and characteristic rankings), men and women ranked the items the same 42 times. From the seven instances where ranking was different, there emerged a potential gender preferred approach to the work environment. Skills that foster connecting and building – across contexts, people, and knowledge – were prioritized by women. Skills that foster standing out and achieving work goals – individual strengths, being heard, and seeing the big picture – were prioritized by men. To be clear, women and men value and have the potential to excel at all the skills, but the data shows that men and women simply start in a different place. For example, when talking about the importance of Teamwork, women and men equally emphasize the value of having multiple views and different individual expertise along with sharing leadership responsibilities and connecting with the bigger picture.

The workforce composition is changing in many aspects, one of which is gender and the rise of women in influential roles (Helgesen, 2005). Leadership is the only cluster where women and men selected a different top priority. With Leadership, the driving force impacts how the skills are actualized – be it interpersonal relationships and sharing responsibilities for women, or strategic thinking and achieving work goals for men. Again, women and men employ all the skills and not all women or men will act within the gender-based expectations or trends found in this study. When one group uses a skill or technique that is strongly associated with the opposite group, they can be perceived in a negative way (Hirschfield, 2014). As the agricultural and natural resources sector adapts to changes – from population demographics and generational differences to climate change and global markets – understanding and harnessing employability skills becomes paramount to success. This study examined the data from the lenses of women and men. Other ways to “cut the deck” need to be considered to see the big picture, understand the nuances of different stakeholder groups and find the points of commonality. The original 2011 APLU study (Crawford, et al) focused on comparing rank ordering of the skills by stakeholder groups across the workforce pathway – students, faculty, alumni and employers. Both studies need to be taken in context together to begin framing the big picture and identifying strategic actions.

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