Norming the Peterson Assertiveness Questionnaire

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Abstract

An assertiveness measure was developed based on the Mind Tools framework for fostering assertive behaviour (‘How to be Assertive,’ n.d.). Previous research supports the elements within the Mind Tools framework, but none has been conducted on Mind Tools specifically. Therefore, the purpose of this study is to first verify the construct, and then test the questionnaire based on that framework for its psychometric properties as well as norm the measure. Questions developed ranged from passive in nature to aggressive with varying informants. The construct was validated through a Principle Components Analysis. The measure was normed using pilot testing and a think aloud protocol and found to be reliable and valid.

Keywords: assertiveness; norming; instrument development, validation

Interest in the construct of assertiveness has existed for many years and has permeated various fields of study. Initially, the construct of assertiveness was developed as a means to understand mental illness (Peneva & Mavrodiev, 2013). Specifically, it was believed that understanding the nature of aggression and its opposite, which further developed into both assertiveness and passiveness, could assist in understanding the nature of mental illness. However, it has since developed into a concept that is applied to all types of individuals across many fields. Assertiveness had morphed into a means of protecting one's rights, a concept that first emerged during the civil rights movement (Jaubowski & Lange, 1978; Lindsey, 1990; Peneva & Mayrodiev, 2013). One of the more recent developments in assertiveness theory was its application to skills training in various public spheres. The most established applications include both K-12 and higher education and 'professional relations and human resource management' (Peneva & Mavrodiev, 2013, p. 4).

The literature indicates that when an individual acts assertively they are more likely to experience positive and authentic relationships with others (Jaubowski & Lange, 1978), improve their communication skills (Bishop, 2013; Jaubowski & Lange, 1978; Peneva & Mavrodiey, 2013; Vagos & Pereira, 2018), increase their self-confidence and self-esteem (Bishop, 2013), and reduce instances of being taken advantage of (Bishop, 2013; Jaubowski & Lange, 1978; Vagos & Pereira, 2018). Additionally, studies have indicated that assertiveness increases the likelihood an individual will be respected by their peers (Bishop, 2013; Jaubowski & Lange, 1978; Peneva & Mavrodiey, 2013; Vagos & Pereira, 2018). Although many assertiveness theories exist, they all contain similar elements. First, common theories of assertiveness include a phrase that indicates one's ability to express their own wants and needs to others (Bishop, 2013; Jaubowski & Lange, 1978; Lindsey, 1990; Peneva & Mayrodiev,

2013; Vagoes & Pereira, 2018). Second, theories include a phrase or statement explaining that assertiveness is dependent on whether one's approach to communicating their wants and needs violates another's rights (Jaubowski & Lange, 1978; Lindsey, 1990; Peneva & Mayrodiev, 2013; Vagoes & Pereira, 2018). Additional elements found in common theories of assertiveness include stating one's right to making a request and not feeling guilty about it (Lindsey, 1990), as well as an emphasis on being assertive to promote improved communication (Bishop, 2013) and desired outcomes (Jaubowski & Lange, 1978). Theorists have taken these essential elements and created books and trainings to help individuals build their assertiveness skills and improve their career. One example is Mind Tools, a website devoted to providing training on various topics that are intended to build skills relevant to becoming better and more effective in one's career for free ('Hello, We're Mind Tools,' n.d.). Mind Tools was developed by co-founders James Manktelow and Rachel Thompson in 1996, both of whom are experts in business and geared their research to helping businesses and employees maximize their experiences in the workplace.

Mind Tools has developed a framework devoted to assertiveness training, which includes seven key components that one should work on in order to increase their assertiveness. The seven components include:

- Believing in your own value and your own rights as an individual
- Expressing your needs and wants in a confident manner
- Understanding your lack of control outside of your own behaviour
- Learning to express your thoughts and feelings in a positive manner
- Accepting both positive and critical feedback
- Acknowledging your ability to say No

- Successfully implementing assertive communication techniques (‘How to be Assertive,’ n.d.)

No assertiveness measures existed at the time of the present study that could be used to assess whether implementing these specific techniques would lead to the outcome of increased assertiveness, as Mind Tools suggests. Measures do exist that assess one’s assertiveness, passiveness, or aggression and may cover similar elements, but none were found to assess all elements in one measure. Therefore, the purpose of the present study was to both verify the Mind Tools’ construct of assertiveness through six of the seven elements described above and create a measure that could be used to assess the construct of assertiveness as defined by Mind Tools (‘How to be Assertive,’ n.d.). We hypothesize that the construct of assertiveness will be represented by the seven elements that define the Mind Tools’ assertiveness framework (‘How to be Assertive,’ n.d.). Additionally, we hypothesize that the questionnaire we create will be a reliable and valid measure of individuals’ level of assertiveness for six of the seven elements.

Methods

Scale Description

The Peterson Assertiveness Questionnaire (PAQ) was originally designed with 20 brief statements that participants are instructed to rate on a Likert scale of 1 (Very Unlike Me) to 6 (Very Much Like Me) to indicate how likely they are to feel or react similarly to a given situation, which can be found in Figure 1. The statements were intended to reflect six of the seven key areas in Mind Tool’s assertiveness construct (‘How to be Assertive,’ n.d.). The seventh key component, using assertive communication, was not included because the mode of expression differed from the six other subsections. Two to five items were created to assess each of the six subscales.

The number of items corresponding to each component was limited to between two and five in order to keep the questionnaire short and in the event that analysis led to the removal of items, enough items would remain in each content area. The items themselves remained gender neutral to apply to anyone taking the survey. The statements included a range of facilitators (e.g., boss, friends, family). This decision was motivated by literature indicating people respond with different levels of assertiveness to adjust to the demands of the situation, in which other people are included (Vagos & Pereira, 2016, p. 113). Additionally, items were presented in a combination of assertive, passive or aggressive manner. The main principle in previously established assertiveness theories, including Mind Tools construct, states that assertiveness is a balance of understanding and speaking up for one's wants and needs without taking away from others' needs and wants. The other two ends of the spectrum (e.g., passive and aggressive) determined which elements in each item made them assertive, passive, or aggressive ('How to be Assertive,' n.d.; Peneva & Mayrodiev, 2013). For example, the item 'When someone says something negative about me, I will remain quiet because I do not like confrontation,' was considered passive due to the situation involving no confrontation and allowing another's negative view of them to persist rather than protecting one's values and beliefs of oneself.

Figure 1

All Initial Items for the Peterson Assertiveness Questionnaire Before Analyses

1. When I need something from someone, I will ask them in a clear and confident way.
2. I won't tell someone what I need or want, because they should be able to figure it out without me telling them.
3. I am self-confident.
4. I feel embarrassed and dismiss compliments that are given to me by others.
5. When things aren't going my way, I will intimidate the other person so they give in.
6. I will at times sacrifice my own wants and needs if I have to in order to help out others.

7. When someone does something that upsets me and doesn't stop when I ask them to, I acknowledge that I can't control their behavior and try to move on.
8. My wants and needs come first, and others' wants and needs come after.
9. When someone points out a mistake I made, I view it as an opportunity to improve or correct my skills or habits.
10. If my roommate has a habit that bothers me and won't stop after I tell them, then I will snap at them. I know they will feel bad for annoying me after snapping at them, and this will get them to stop doing it.
11. I feel comfortable and confident in telling someone "no" when I need to refuse a task.
12. When I become overwhelmed with work, I will still take on a new assignment when my boss asks because I don't want to tell them "no".
13. If I find out someone is spreading rumors about me, then I will confront them in a way to scare them into not saying negative and untrue things about me anymore.
14. When others give me feedback on something I did wrong and I disagree, I often become defensive or angry.
15. When someone says something negative about me, I will remain quiet because I do not like confrontation.
16. I often do not say "no", because I don't like to disappoint others.
17. I feel comfortable standing up for myself.
18. I will confront someone if they challenge me and my rights.
19. I accept compliments when they are given to me.
20. When there is a long line at a grocery store and the cashier is not calling up a second cashier, I will begin to loudly question their ability to do their job right in front of everyone else.

Participants

Participants were recruited through email. A total of 128 participants took the survey. Approximately 80% of the sample completed 100% of the survey, 5% completed at least 90% of the survey, and the rest completed anywhere from 10-83% of the survey. Only participants who completed 90-100% of the survey were included in the analysis. Therefore, the total number of participants included in this study was 110. Over half of the sample identified as female (*n*=65; 59%), 38 identified as male (35%), and seven chose not to disclose their gender (6%). The majority of participants in this sample were White (*n*=89; 81%). The next largest racial or ethnic group represented in this sample identified as Black or African American (*n*=7; 6%), followed by Asian (*n*=7; 6%), Other (*n*=6; 6%), and Native Hawaiian or Pacific Islander (*n*=1; 1%).

Procedures

This research study was approved by Minnesota State University, Mankato's Institutional Review Board. The survey was created online and distributed using an online survey development and distribution platform called Qualtrics®. This program generated an anonymous link that was sent out through university and professional organization list-servs and posted on social media pages in order to advertise the study and target those interested in participating in a survey. Once the data was collected, the team exported the data file in order to analyse the data using the Statistical Package for the Social Sciences 20 (SPSS) computer program. In addition to statistical analysis of the data to determine validity and reliability, the team conducted a think-aloud procedure where two team members facilitated an informal discussion with a small group focused primarily on format and structure of the questionnaire (Charters, 2003). This procedure is done for additional input on the usability of the questionnaire. Four individuals were present for the think-aloud session. Much of the feedback focused on the format and usability of the questionnaire, and only one specific item was eliminated from the statistical analysis based on participant feedback. Specifically, comments on usability included re-wording questions for clarification, eliminating repeated directions, formatting the sections, and formatting of demographic responses (e.g., gender response via fill-in-the-blank versus a dropdown box). The revised survey was sent to participants for final data collection.

Results

Statistical Analysis

The statistical analyses conducted in this study were intended to determine the validity of the construct as well as test the psychometric properties and norm the assertiveness measure. The analyses were run twice, as additional data collection

occurred. The same analyses were run for both rounds of data collection. Before any analyses were conducted, the data was checked for missing data. To assess the validity, a Principal Component Analysis (PCA) using a Varimax rotation with Kaiser Normalization was conducted. A Varimax rotation was used to adjust the data to more discretely define which factor each item contributes to in order to make the interpretation clearer (Everitt ,2006). It is the job of the researcher to determine the pattern in responding to the items included in each subscale to determine what it is that has created that subscale (Everitt, 2006). It is important to note that the cutoff criteria for including an item was an eigenvalue of .6 or greater for the first PCA. However, the cutoff score was dropped to .55 for the second analysis. This decision was made by the research team because the item 'When someone points out a mistake I made, I view it as an opportunity to improve or correct my skills or habits,' was previously identified in the first analysis as important and was close to the .60 criteria previously established. Due to this and the correlation matrix identifying the item as being sufficiently correlated with other questionnaire items, the decision to drop the criteria to .55 was made for the second analysis.

Table 1
Factor loadings based on a principal components analysis with varimax rotation from the Peterson Assertiveness Questionnaire (PAQ)

	Loadings on Identified Factors				
Questionnaire Items	Expressing Wants & Needs *(α = .86)*	Accepting Compliments *(α = .81)*	Responding to Others in an Aggressive Manner *(α = .52)*	Prioritizing My Needs Versus Others' Needs *(α = .62)*	Modifying Behaviors *(α = .38)*
When I need something from someone, I will ask them in a clear and confident way.	.61				
I won't tell someone what I need or want, because they should be able to figure it	.68				

out without me telling them.					
I am self confident.	.62				
I feel comfortable and confident in telling someone “no” when I need to refuse a task.	.84				
I often do not say “no”, because I don’t like to disappoint others.	.75				
I feel comfortable standing up for myself.	.78				
I will confront someone if they challenge me and my rights.	.63				
I feel embarrassed and dismiss compliments that are given to me by others.		.84			
I accept compliments what they are given to me.		.86			
When things aren’t going my way, I will intimidate the other person so they give in.			.73		
If my roommate has a habit that bothers me and won’t stop after I tell them, then I will snap at them, and this will get them to stop doing it.			.63		
When there is a long line at a grocery store and the cashier is not calling up a second cashier, I will begin to loudly question their ability to do their job right in front of everyone else.			.70		
I will at times sacrifice my own wants and needs if I have to in order to help out others.				.78	

My wants and needs come first, and others' wants and needs come after.	.78	
When someone does something that upsets me and doesn't stop when I ask them to, I acknowledge that I can't control their behavior and try to move on.		.77
When someone points out a mistake I made, I view it as an opportunity to improve or correct my skills or habits.		.57

To test the reliability of the survey, a reliability analysis of inter-item correlations and item-total correlations were run to obtain Cronbach's Alpha for the entire measure and each of the factors, or subscales, identified by the PCA. This also helped researchers determine if the removal of any one item from a subscale would lead to increased reliability. The guidelines established by Ponterotto and Ruckdescel's (2007) matrix was used to interpret reliability coefficients. The matrix was developed in order to interpret research measures' internal consistency coefficients while taking into account number of items per subscale and sample size, as these are known to influence reliability coefficients (Ponterotto & Ruckdescel, 2007).

Lastly, the data was normed. Means, standard deviations and percentiles were gathered for each of the subscales as well as passive, assertive, aggressive and total scores provided by a comparison. One-Way ANOVAS were then used to identify differences in responding by groups for each of the subscales and communication styles.

The finalized, identified elements from the PCA with a varimax rotation, the individual items and factor loadings, and reliability coefficients for each of the subscales and entire scale can be found in Table 1. The PCA run identified only five of

the six elements. When the PCA was run with additional participants, six elements were identified, but eigenvalue (less than .55) and reliability for the sixth factor did not meet our criteria, so it was removed from the measure later on. The questions loaded fairly similar from the first to the second time the analysis was ran, with very little change. In the end, the five elements were found to be representative of important elements in the Mind Tools framework, leading researchers to validate the construct as well as providing validity evidence for the questionnaire. In addition, the reliability analyses indicate the entire scale falls within the good range according to Ponterotto and Ruckdescel (2007), with a coefficient of .78. The subscales were found to range from .38 to -.96 reliability, with coefficients of unacceptable (for 1 subscale) to excellent, respectively. The measure was found to have adequate validity and overall reliability evidence to support its use in measuring all important elements of the Mind Tools construct of assertiveness, except that of modifying behaviours.

Although some descriptive statistics were run prior to analysis to ensure assumptions were met, additional descriptive statistics were run to assess response patterns on the entire measure based on identified gender, race/ethnicity and age. The means and standard deviations of each subscale and measure for each of the different demographic categories are in Table 2. One-way ANOVAs were conducted for each demographic group to compare responses on each of the subscales, the tones of the items, and the overall measure. The tones of each item were included to see if any significant differences existed based on the presentation of the items. First, gender was selected as the dependent variable. The one-way ANOVA found one significant difference between genders. A statistically significant difference between genders was found for the first subscale ($F(2, 109) = 3.77$, $p = .03$). A Tukey post hoc revealed that those who did not respond with their gender (M = 3.71; SD = .65) scored lower than

males (M = 4.71, SD = .80, p = .04). There was no statistically significant difference between females (p = .24) compared to those who chose not to reveal their gender. No other statistically significant differences for gender were found.

Table 2
Means and Standard Deviations for Each Subscale Grouped by Demographic Variables

		M(SD)								
Variable	N(%)	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Passive	Assertive	Aggressive	Total Score
Gender										
Female	65(59.1%)	4.37 (1.02)	4.05 (1.24)	4.64 (.60)	2.66 (.99)	4.52 (.92)	3.72 (.86)	4.25 (.73)	4.35 (.57)	4.21 (.55)
Male	38(34.5%)	4.71 (.80)	3.84 (1.26)	4.61 (1.00)	2.68 (1.02)	4.58 (1.00)	3.74 (.89)	4.29 (.65)	4.34 (.63)	4.23 (.59)
No Response	7(6.4%)	3.71 (.95)	3.71 (1.11)	4.86 (.38)	2.00 (.58)	4.57 (.79)	3.14 (.90)	3.86 (.69)	4.29 (.49)	3.90 (.67)
Age										
18-24	14(12.7%)	4.57 (.85)	3.79 (1.12)	4.79 (.58)	2.79 (1.25)	4.29 (.91)	3.64 (.74)	4.14 (.66)	4.50 (.52)	4.12 (.53)
25-34	29(26.4%)	4.41 (.98)	3.93 (1.30)	4.59 (.68)	2.72 (.92)	4.62 (.73)	3.66 (.77)	4.28 (.84)	4.34 (.67)	4.18 (.57)
35-44	25(22.7%)	4.08 (.95)	3.76 (1.30)	4.68 (.56)	2.76 (1.05)	4.52 (.92)	3.52 (.92)	4.12 (.73)	4.28 (.54)	4.07 (.46)
45-54	28(25.5%)	4.61 (1.10)	4.21 (1.17)	4.64 (.68)	2.61 (.92)	4.82 (.86)	3.89 (1.03)	4.36 (.62)	4.36 (.62)	4.24 (.64)
55-64	12(10.9%)	4.83 (.58)	4.16 (1.34)	4.50 (.52)	2.08 (.79)	4.17 (1.47)	3.92 (.67)	4.25 (.62)	4.25 (.45)	4.41 (.37)
65-74	1(.9%)	5.00	3.00	5.00	2.00	4.00	3.00	4.00	4.00	5.00 (1.41)
75-85	1(.9%)	3.00	3.00	5.00	2.00	4.00	2.00	4.00	5.00	3.63
Race/Ethnicity										
Black/African American	7(6.4%)	4.71 (.49)	3.43 (1.72)	4.86 (.38)	2.43 (.79)	5.29 (.76)	4.00 (.58)	4.29 (.49)	4.57 (.53)	4.29 (.54)
Asian	7(6.4%)	3.86 (.69)	3.71 (.49)	4.00 (.82)	3.43 (.79)	4.86 (.69)	3.43 (.53)	4.14 (.38)	4.00 (.82)	3.92 (.30)
Native Hawaiian/Pacific	1(.9%)	5.00	3.00	4.00	3.00	6.00	4.00	4.00	4.00	4.25

Islander										
White	89(80.9%)	4.45 (.98)	3.98 (1.22)	4.65 (.59)	2.55 (.97)	4.42 (.93)	3.64 (.86)	4.21 (.71)	4.33 (.56)	4.16 (.54)
Other	6(5.5%)	4.67 (1.51)	4.67 (1.37)	5.17 (.41)	3.00 (1.41)	5.00 (.89)	4.33 (1.51)	4.67 (1.03)	4.83 (.41)	4.74 (.86)

Next, one-way ANOVAs were also run on race/ethnicity. Two subscales were identified by the ANOVA as statistically significant. A statistically significant difference between race/ethnicity was found in the third subscale ($F(4, 109) = 3.24$, $p = .015$). Interestingly, Tukey post hoc revealed no significant differences between racial-ethnic categories. Next, another statistically significant difference in responding for race/ethnicity was found in the fifth subscale ($F(2, 109) = 2.86$, $p = .03$). Again, a Tukey post hoc revealed that no statistically significant differences occurred between the individual race/ethnicity categories. No other one-way ANOVAs identified any statistically significant differences in responding for any other race/ethnicity category. Additionally, no statistically significant differences were found for age or within any of the different tones of items in any of the demographic categories.

Discussion

The analysis of the questionnaire provides preliminary evidence that the questionnaire can effectively measure many of the important elements included in the Mind Tools framework. The PCA maintained the six components researchers assessed and that the developers included in Mind Tools' construct for assertiveness. The PCA also identified five of the six elements to provide support for the validity of the measure. The reliability analysis indicates the entire measure, as well as all but one subscale, is within an acceptable to excellent range of reliability. Therefore, it can be stated that the evidence supports claims that the measure can validly and reliably measure five of the six components included in the verified Mind Tools construct of

assertiveness. Additionally, important differences in responding were noted while norming the questionnaire.

Component seven was not identified by the PCA as researchers did not include it during its construction. Component six was also not identified by the analysis. However, the other five components (e.g., Believing in your own value and your own rights as an individual; Expressing your needs and wants in a confident manner; Understanding your lack of control outside of your own behaviour; Learning to express your thoughts and feelings in a positive manner; Accepting both positive and critical feedback) were all represented to some degree by the subscales of the questionnaire. First, 'Believing in your own value and your own rights as an individual' in the Mind Tools framework can be matched with the subscale *Prioritizing My Needs Versus Others' Needs*. In order for an individual to value their needs and rights, they must be able to prioritise their needs over others' in many situations. Next, Mind Tool's second component of 'Expressing your needs and wants in a confident manner' can be linked to the questionnaire's subscale *Expressing Wants and Needs*. This subscale does not address whether the expression of the needs is done confidently. However, different tones of passive, aggressive, and assertive throughout this questionnaire can hint at the type of communication used to express wants and needs. The third Mind Tools component of 'Understanding your lack of control outside of your own behaviour' can be linked to the questionnaire's subscale *Modifying Behaviours*. This subscale label appears to address the act rather than a belief, as suggested by the word 'acknowledge' in the Mind Tools component. However, one item included did assess acknowledgement of one's level of control over another's behaviour, so both the belief and how that belief is carried out was assessed by this subscale. This subscale was labelled modifying behaviours without specifying others because an item included

addressing their own behaviours after another individual points out a mistake. Component four is ‘Learning to express your thoughts and feelings in a positive manner’ which can be loosely associated with the subscale *Responding to Others in an Aggressive Manner*. The items included in the subscale addressing how one expresses themselves were all worded in an aggressive tone, which was reflected in the name of the subscale. The fifth component of ‘Accepting both positive and critical feedback’ is partially matched with the subscale *Accepting Compliments*. The only items included in the factor from the PCA addressed compliments and included any criticism as part of other subscales or were removed from the questionnaire. Component six was ultimately incorporated into the first factor by the PCA. Items addressing a participant’s willingness or tendency to say ‘no’ remained in the questionnaire but were identified to be related to prioritizing one’s needs. Conceptually, this appears it would make sense as the act of telling someone ‘no’ in order to not become overwhelmed, for example, would be acting out how one prioritises their needs and others’. However, the questionnaire did not include this as a separate subscale as was intended because it was highlighted as an important and separate component in the Mind Tools framework.

While a majority of the elements were reflected in the questionnaire as subscales, not all elements of each component were identified in the subscale. Overall, the measure included the core components of the Mind Tools framework with the exception of component seven due to the difficulty of condensing the multitude of communication techniques into a factor. Additionally, a few minor elements in the framework are not included or done so in the manner in which they were intended to. It was later found that including the three different tones could potentially lead to an estimation of the level participants are using assertive communication. As this was identified following the analysis and not explicitly or intentionally included in such a

way, the researchers would not recommend using this as an indicator of component seven of the Mind Tools Framework. Other missing elements include not having a subscale designated to component six of saying no, assessing expressing the self in an aggressive rather than positive way, not assessing whether the wants and needs are expressed in a confident manner, and only assessing whether one is accepting of compliments, not criticism.

The reliability was also found to be acceptable to excellent. The major concerns found would be the less than fair reliability for subscale five *Modifying Behaviours*. Otherwise, the remaining subscales and the overall measure were found to be primarily reliable. Two subscales fell between the fair to moderate range of reliability (i.e., *Responding to Others in an Aggressive Manner* and *Prioritizing My Needs Versus Others' Needs*), and two more fell between the good to excellent range of reliability (i.e., *Expressing Wants & Needs* and *Accepting Compliments*).

When norming the responses, a few gender and racial differences were noted. First, gender differences in *Expressing Wants & Needs* and racial differences in *Responding to Others in an Aggressive Manner and Modifying Behaviours* were recorded. For gender specifically, responders who did not provide a response to their gender scored lower than males in expressing their wants and need. For race and ethnicity, significant differences were found in the post hoc analyses, but the direction of these differences was not indicated by a post-hoc analysis. Therefore, we can interpret that a difference between participants exists, but we are unable to determine what that difference is by this analysis. No other differences in race on any of the subscales or tones were noted. Finally, no differences in responding were found for age.

Overall, the preliminary results from this study provided evidence that this questionnaire can be used to assess the components of the Mind Tools assertiveness

framework (‘How to be Assertive,’, n.d.), but a number of limitations have been identified. The first major limitation is the sample size. Ninety-seven participants, while not a number completely unheard of for these analyses, is not ideal. In an attempt to remedy this, the research team sent the survey out a second time to collect additional responses for a more appropriate sample size. Ponterotto and Ruckdeschell (2007) report that having at least 300 participants is ideal for reaching a small amount of error in reliability analyses. Unfortunately, the attempt for additional responses was unable to increase the sample size to 300. However, Cattell (1978) indicated a sample size of 100 to be acceptable. A greater sample size would provide more confidence in the interpretation of results, but the interpretation can still be done as the acceptable minimum was approximately met.

Another issue with the sample size occurs in the demographic categories. A large proportion of the study identified as White (60%) and aged between the ranges of 25-34 (26%) and 45-54 (26%) and it is possible that a low number of participants from other demographic groups may impede the generalizability of results.

Future research should be conducted in order to refine and further support the construct of assertiveness as defined by Mind Tools and the questionnaire of the present study. Specifically, future research should attempt to determine the best way to measure the sixth element, as it was not supported as a reliable approach in the present study. Further, another study should aim to verify the psychometric properties of the measure. The current results did assess reliability and norming data based on the questionnaire’s construction after the PCA. Therefore, it can be inferred that after eliminating questionnaire items and creating subscales, the validity, reliability and norming data are all relevant for the new questionnaire construction. However, it would be beneficial to run psychometric analyses and norming on the questionnaire with a new

sample presented in its new format to verify the results. Additionally, a sample that has a larger number of participants in each demographic group and a larger total number in general would allow for a more confident interpretation of results as well as verification of the preliminary evidence found. Next, additional tests of the different types of validity and reliability analyses should be employed to further validate the psychometric properties of the questionnaire. Last, the questionnaire's usability in detecting changes in assertive behaviour following a training, such as the Mind Tools free module, should be conducted to ensure this questionnaire can be utilized to indicate change and growth.

This study provides a first step in developing a questionnaire based on the Mind Tools framework. This framework provides many of the elements common to definitions of assertiveness, which have found assertiveness to be important in many aspects throughout life. Mind Tools specifically focuses on increasing the effectiveness regarding communication and satisfaction for one in their career. The preliminary evidence supports this questionnaire's use in assessing the various aspects of assertiveness based on this Mind Tools framework. Should this framework be used in a training or self-help for individuals interested in developing their assertiveness skills for their career, this questionnaire may prove useful to help assess an individual's current level of assertiveness and the growth or outcomes following the intervention to improve assertiveness skills.

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