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AN EMPIRICAL INVESTIGATION OF THE KELLEY FOLLOWERSHIP QUESTIONNAIRE REVISED

Abstract

The basis of this study is Kelley's (1992) two-dimensional model, which measures five follower types. Previous investigations did not support the validity of Kelley's model. Although the model is utilized in research, the validity and reliability of the Kelley Followership Questionnaire (KFQ) is still in question. In this study, the KFQ validity was tested after revision of the instrument. Factor analysis revealed a three-factor model disputing the theorized two-factor model. Factors of the KFQ-R convergent validity were supported by significant correlations with critical thinking disposition and work engagement scales. This research project is intended to promote the study of the followership construct.

Introduction

"Followership" emerged as a new area of study during the early 1990's. A follower is a person who makes a decision whether or not to collaborate with a leader in order to achieve an organizational purpose. Robert Kelley described followers as "thinking for themselves, giving constructive criticism, owning their own person, and being innovative and creative" (Kelley, 1992, p. 93). Additionally, followers are responsible for 80 percent of organizational outcomes (Kelley, 1992). Kelley significantly influenced the field of followership through the development of his two-dimensional model, from which he developed the Kelley Followership Questionnaire (KFQ).

Kelley defined five types of followers: Passive, Exemplary, Alienated, Conformist, and Pragmatist. By utilizing these dimensions, Kelley's purpose included helping organizations promote and develop exemplary followers, who add value to the organization. However, the two dimensions that construct Kelley's model--independent, critical thinking and active engagement--need further investigation.

Statement of the Problem

Kelley developed the KFQ with the purpose of helping followers identify their type and strive for increased independent, critical thinking and active engagement. Although Kelley's model is cited as an important contribution (Crossman & Crossman, 2011; Chaleff, 2009; Kellerman, 2007; Riggio, Chaleff, & Lipman-Blumen, 2008), the KFQ has not been widely tested and lacks broad empirical support. Despite this fact, the KFQ is implemented in followership research through multiple studies. First, the KFQ was used to explore follower types within organizations (Al-Anshory & Ali, 2014; Francis, 2014; Kalkhoran, Naami,

& Beshlideh, 2013; Oyetunji, 2013; Thomas, 2014; Vandoren, 1998). Second, the KFQ was utilized in investigating relationships between follower types and other behavioral and psychological traits (Burke, 2009; Gatti et al., 2014; Tanoff & Barlow, 2002). The remaining studies focused on follower types and organizational outcomes (Favara, 2009, Gatti et al., 2014; Kalkhoran et al., 2013; Morgan, 2014; Seeley, 2007); however, only five investigations focused on validity and reliability support for the instrument. Blanchard et al. (2009), Colangelo (2000); and Seeley (2007) did not find consistent validity support for the KFQ; however, Gatti et al. (2014) supported an Italian 14-item KFQ questionnaire based on the original KFQ, while Ghislieri et al. (2015) found significant empirical support for an Italian 8-item KFQ.

There are six methodological issues with Kelley's model that need further analysis. First, the survey questions may contain social desirability response bias (Blanchard et al., 2009; Gatti et al., 2014). Thomas (2014) warns that the survey questions may prompt participants to indicate higher scores for independent, critical thinking and active engagement which may skew the true followership picture and prompt followers to score higher in more active follower types. Second, the structure and proposed dimensions by Kelley for the majority of questions did not match the theoretical constructs of independent, critical thinking and engagement (Blanchard et al., 2009; Colangelo, 2000; Gatti et al., 2014; Ghislieri et al., 2015; Seeley, 2007). The listed questions need to be reworded to measure the dimensions proposed by Kelley (Seeley, 2007). Also, the questions need to be simplified to increase response rates by decreasing test taking time and increasing the level of respondent comprehension (Salant & Dillman, 1994). Third, Kelley's model is limited to two dimensions; however, the KFQ may measure more than just two dimensions (Blanchard et al., 2009; Colangelo, 2000; Gatti et al., 2014; Seeley, 2007). Fourth, validity and reliability of the KFQ is still not significantly supported (Blanchard et al., 2009; Gatti et al., 2014; Colangelo, 2000; Seeley, 2007). Fifth, the language used in the KFQ is complicated due to the use of compound questions (double-barreled). Many survey questions include two items linked by conjunctions. Sixth, the language used in the survey is outdated and difficult to comprehend (Gatti et al., 2014).

Purpose of Study

The purpose of this study was to examine the structure of the model and provide an empirical investigation of a revised KFQ (KFQ-R). To accomplish a review of the instrument, the KFQ questions were simplified, updated, and aligned with dimensions that they represent. The data collected was analyzed using Exploratory Factor Analysis (EFA) and appropriate reliability statistics were developed. To identify social desirability response bias, the Marlowe-Crowne scale (M-C SDS scale) was used. Finally, convergent validity was explored by using the University of Florida Engagement, Cognitive Maturity, and Innovativeness assignment (UF-EMI) and the Ultrecht Work Engagement Scale (UWES) to further investigate the constructs proposed by Kelley.

Based on this purpose, the following hypotheses were tested:

> H 1: There will be a significant correlation between the response bias scale (M-C SDS scale) and the KFQ-R scale.
>
> H 2: There will be significant interpretable factors that arise from the EFA procedure
>
> used on the data collected from the revised KFQ-R.
>
> H 3: There will be significant correlation between the UF-EMI and the UWES scores and possible significant factor scores that may emerge from the EFA analyses of the KFQ-R data.

Methodology

Participants. Participants of this study were employees of banking and public utility companies in the southern region of the United States. Sampling consisted of a non-random convenience sample in which employees of the five locations were emailed the survey by their human resources department utilizing a self-administered electronic survey using the Qualtrics platform. Because this study is focused on the construct of followership, all participants were employees in subordinate positions (e.g. customer service, administrative, security, loss prevention, managers etc.). In total, 374 surveys were received; however, 43 surveys were removed due to incompleteness. An additional two were removed due to being considered outliers as they were +/- 3 standard deviations from the mean (Field, 2013; Tabachnick & Fidell, 2000) within the KFQ-R subsequently leaving the study with 329 participants (N=329). Of the respondents, 59.9% were female and 94.6% self-identified as Caucasian. Participants indicated a largest grouping with some college (39.2%) and working in their position in a full-time capacity (97.9%). Participant income was represented in two majoritive groupings with 20.1% indicating they earn between $20,000 and $29,999 annually and 24.9% earning $70,000 and above annually.

Instruments. Four instruments were used in the study; including nine demographic questions, the total number of questions was 81. Twenty-five questions were from the Kelley's Followership Questionnaire – Revised (KFQ-R), ten from the Marlowe – Crowne scale, Social Desirability Scale – Short Form (M-C SDS-SF), twenty-six from the University of Florida Engagement, Cognitive Maturity, and Innovativeness assignment (UF-EMI), and nine from the Ultrecht Work Engagement Scale (UWES). The electronic survey also included an informed consent section.

Revised KFQ-R. The original KFQ represents five categories of followers by measuring two proposed dimensions: independent, critical thinking and active engagement (Kelley, 1992). The original KFQ is comprised of 20 close-ended questions on a seven-point Likert scale. The revised survey was created after reading the literature concerning reliability and validity of the original KFQ. After noting concerns of previous researchers (validity of factors and response bias in questions), we followed specific guidelines for survey construction, such as aligning questions with proposed dimensions by Kelly, splitting the double-barreled questions, eliminating biased words, and keeping questions concise and simple (Salant & Dillman, 1994). Significant revisions reduced ambiguity and bias in the wording by eliminating words such as "promptly", "merely", and "honestly" and shortening compound questions to bolster understanding and readability. Following revision of the items, we utilized results from previous factor analytic studies to identify which questions assessed the proposed dimension.

The revised version (KFQ-R) resulted in 25 questions on a seven-point Likert scale. The revision process and Kelley's original and revised questionnaires are presented in Table 1.

Table 1.

KFQ Revision Process

Kelley (1992) Dimensions	The Original KFQ	The Revised KFQ	Action Taken towards original question		
			Split	Re-worded	Removed content
IT	1. Does your work help you fulfill some societal goal or personal dream that is important to you?	1. I think about how my work adds to society 2. I spend time thinking about how my work contributes to my personal fulfillment	X	X	
AE	2. Are your personal work goals aligned with the organization's priority goals?	3. Alignment between my personal and organizational goals helps me stay involved at work		X	
AE	3. Are you highly committed to and energized by your work and organization, giving them your best ideas and performance?	4. I am committed to my work role 5. I contribute my best at work	X	X	X
AE	4. Does your enthusiasm also spread to and energize your co-workers?	6. My involvement at work energizes coworkers		X	
IT	5. Instead of waiting for or merely accepting what the leader tells you, do you personally identify which organizational activities are most crucial for achieving the organization's priority goals?	7. I evaluate activities that are necessary for organizational goal achievement		X	X
AE	6. Do you actively develop a distinctive competence in those critical activities so that you become more valuable to the leader and the organization?	8. I develop competencies in my work to increase my value to the organization		X	
AE	7. When starting a new job or assignment, do you promptly build a record of successes in tasks that are important to the leader?	9. When starting a new assignment, I strive to succeed at tasks that are important to the leader		X	
AE	8. Can the leader give you a difficult assignment without the benefit of much supervision, knowing that you will meet your work deadline with highest-quality work and that you will "fill in the cracks" if need be?	10. The leader can give me an assignment without supervision, knowing that I will complete it		X	
AE	9. Do you take the initiative to seek out and successfully complete assignments that go above and beyond your job?	11. I finish assignments that go beyond my job duties		X	
AE	10. When you are not the leader of a group project, do you still contribute at a high level, often doing more than your share?	12. When I am not the leader of a group project, I contribute at a high level		X	
IT	11. Do you independently think up and champion new ideas that will contribute significantly to the leader's or the organization's goals?	13. I generate and evaluate new ideas that contribute to the organizational goals		X	
IT	12. Do you try to solve the tough problems (technical or organizational), rather than look to the leader to do it for you?	14. I try to solve problems rather than rely on the leader		X	
AE	13. Do you help out other co-workers, making them look good, even when you don't get any credit?	15. I emphasize coworkers contribution, even when I don't receive credit		X	
IT	14. Do you help the leader or group see both the upside potential and downside risks of ideas or plans, playing the devil's advocate if need be?	16. I help the leader to see potential and risks of ideas and plans 17. I help my team to see the potential and risks of ideas and plans	X	X	
AE	15. Do you understand the leader's needs, goals, and constraints, and work hard to help meet them?	18. I strive to understand the leader's perspectives 19. I work to achieve the leader's needs and goals	X	X	
IT	16. Do you actively and honestly own up to your strengths and weaknesses rather than put off evaluation?	20. I evaluate my strengths and weaknesses at work		X	
IT	17. Do you make a habit of internally questioning the wisdom of the leader's decision rather than just doing what you are told?	21. I question internally the wisdom of the leader's decisions		X	
IT	18. When the leader asks you to do something that runs contrary to your professional or personal preferences, do you say "no" rather than "yes"?	22. I do what the leader requests regardless of my beliefs		X	
IT	19. Do you act on your own ethical standards rather than the leader's or the group's standards?	23. I act on my own ethical standards rather than those of my work group (team)		X	
IT	20. Do you assert your views on important issues, even though it might mean conflict with your group or reprisals from the leader?	24. I assert my views on important issues, even though they may conflict with coworkers 25. I assert my views on important issues, even though they may conflict with those of the leader	X	X	

M-C SDS. The Marlowe – Crowne Social Desirability Scale (M-C SDS) (Crowne & Marlowe, 1960) consists of 33 questions presented in a true-false response format. Crowne and Marlow claim that the scale measures the extent to which respondents answer questions based on socially accepted and unaccepted norms, values, and behaviors. The M-C SDS does not measure psychopathology or deception (Barger, 2002); however, the scale is most often exercised to explore the influence of social desirability as a response bias in psychological test administration (Crowne & Marlowe, 1960). The internal consistency coefficient (KR-20) for the original scale was reported as .88 using 39 undergraduate student responses; the test-retest reliability after a one-month interval for 31 participants yielded a correlation of .89 (Crowne & Marlowe, 1960).

In the present study, a shortened version of the Marlowe – Crowne scale, the Marlowe – Crowne, Social Desirability Scale – Short Form (M-C SDS-SF) was used. Reynolds (1982) developed three shorter versions of the scale using factor analyses and scale correlations between the original and shorter versions. Version C, which includes items: 3, 6, 10, 12, 13, 15, 16, 19, 21, 26, 28, 30, 33 from the original scale, showed the highest level of internal consistency reliability $\alpha = .76$. Scale validity was supported by the correlation of .86 ($p < 0.001$) with the original scale (Reynolds, 1982). Additionally, Loo and Thorpe (2000) recommended use of the shorter scale version to save time and avoid participant fatigue while still allowing for the balance between participant fatigue and overall scale reliability (Reynolds, 1982). Some of the questions include: "I sometimes feel resentful when I don't get my way.", "No matter who I'm talking to, I'm always a good listener.", and "There have been times when I was quite jealous of the good fortune of others." The questions are presented through True or False choices, and the survey results created by totaling assigned point values to specific responses as suggested by Reynolds.

UF- EMI. Critical thinking is "a judgment process" (Facione & Facione, 2008, p. 2) and is a complex process that is challenging to measure (Spicer & Hanks, 1995). An independent study lead by the United States Department of Education provided empirical support for the two dimensional model of critical thinking, which consists of cognitive skills and affective disposition (Facione, Facione & Giancarlo, 2000). Critical thinking disposition is characterized as a willingness to use personal critical thinking skills, rather than depend on someone else's guidance (Facione & Facione, 2008). Without the disposition component, critical thinking skills are not exploited (Facione et al., 2000). Kelley's dimension of independent, critical thinking represents the affective dispositional component of critical thinking thus establishing a link to the concepts of thinking disposition and affect disposition.

The UF-EMI was used to test for correlations between Kelly's independent critical thinking dimension and the three scales of the UF-EMI. Originally developed as shorter alternative to the California Critical Thinking Disposition Inventory (CCTDI), which measures seven dimensions of critical thinking: truth-seeking (12 items, $\alpha = .72$), open-mindedness (12 items, $\alpha = .73$), analyticity (11 items, $\alpha = .72$), systematicity (11 items, $\alpha = .74$), critical thinking self-confidence (9 items, $\alpha = .78$), inquisitiveness (10 items, $\alpha = .80$), maturity of judgment (10 items, $\alpha = .75$), and overall scale (75 items, $\alpha = .90$) (Facione, Giancarlo, & Facione, 1995); the UF-EMI measures three components: Engagement (11 items), Cognitive Maturity (8 items), and Innovativeness (7 items) (Ricketts & Rudd, 2004).

The UF- EMI has been used in several studies addressing critical thinking disposition and measuring learning using business replications (Bell & Loon, 2015), problem solving in undergraduate agriscience students (Friede, Irani, Rhoades, Fuhrman, & Gallo, 2008) exploring the "cognitive relationship" between learning and problem solving styles in international settings (Lamm, Harder, Irani, Roberts, & Snyder, 2011), relating agricultural and leadership disposition in youth leaders (Ricketts & Rudd, 2004), and exploring emotional intelligence (Stedman & Andenoro, 2007). These researchers reported acceptable reliability and validity. Reliabilities coefficients range for engagement: .89 to .91; innovativeness: .79 to .80;

cognitive maturity: .75 to .79 (Ricketts & Rudd, 2004; Lamm et. al., 2011). Reliabilities coefficient for total critical-thinking disposition ranged from .84 to .94 (Friede et al., 2008; Irani et al, 2007).

UWES. The Ultrecht Work Engagement Scale (UWES), which has been widely utilized in international research, measures work engagement through the constructs of vigor, dedication, and absorption. Originally, the scale included 24 items: nine items measuring the construct of vigor, eight items measuring dedication, and seven items measuring absorption (Schaufeli & Bakker, 2003). After the UWES underwent testing, subsequent psychometric examinations eliminated items resulting in scales with 17, 15, 14, and eventually, nine items representing the three constructs (vigor, dedication, and absorption).

Results

Preliminary analyses. The assumption of univariate and multivariate normality was tested for the KFQ-R. One-Sample Kolmogorov-Smirnov Test (Chakravarti & Laha, 1967; Conover, 1999) revealed test statistics (.09) as insignificant, which supported a normal distribution pattern. The histogram was slightly skewed negatively; however, skewness (-.62) and kurtosis (-.11) were within +/- 1.00 tolerance (Meyers, Gamst, & Guarino, 2013). The Q-Q normality plot, which is the plot of each observed value with the expected value if the distribution were normal, showed that plotted values did not depart significantly from a straight diagonal line, thereby indicating that the scores were considered normally distributed.

Internal consistency reliabilities of the four instruments were also tested. KFQ-R showed Cronbach's $\alpha = .88$. while the UF-EMI and UWES revealed Cronbach's $\alpha = .93$ and $\alpha = .94$ respectively. M-C SDS suggested reliability is in low .70s and .80s (Reynolds, 1982 and thus due to the categorical variables of the test, reliability was not tested.

Primary analyses. Statistical analysis consisted of Pearson's product-moment correlation and exploratory factor analyses (EFA). First, the correlation between the KFQ-R and M-C SDS was tested. Second, exploratory factor analysis was performed to verify construct validity of the KFQ-R. Field (2013) identifies factor analysis as the most effective technique for measuring complex constructs. Followership, according to Kelley, is a complex construct based on two dimensions (latent variables); the identification of significant correlation with the latent variables (called factor loadings) is the focus of EFA. By having test items load on identified factors, construct validity is supported. Third, the convergent validity was investigated through possible correlations between factors of the KFQ-R, the critical thinking disposition (UF-EMI), and the work engagement (UWES) scales.

Using data collected from the KFQ-R and M-C SDS SF, the first hypothesis was tested using correlation. The correlation between the KFQ-R and the M-C SDS SF ($r = .07$; $p = .20$, which indicated that there was no significant correlation between the response bias scale and the KFQ-R scale. To examine the second hypothesis, exploratory factor analysis was performed to establish construct validity of the revised questionnaire (Table 2).

Table 2

Correlations between KFQ-R Variables (N=329)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. KFQ-R 1	--																								
2. KFQ-R 2	.51	--																							
3. KFQ-R 3	.46	.59	--																						
4. KFQ-R 4	.29	.37	.23	--																					
5. KFQ-R 5	.41	.47	.41	.43	--																				
6. KFQ-R 6	.18	.26	.16	.50	.33	--																			
7. KFQ-R 7	.36	.42	.40	.35	.65	.32	--																		
8. KFQ-R 8	.39	.46	.45	.36	.53	.24	.55	--																	
9. KFQ-R 9	.25	.27	.30	.24	.37	.35	.48	.32	--																
10. KFQ-R 10	.30	.44	.41	.30	.52	.25	.51	.39	.37	--															
11. KFQ-R 11	.33	.42	.38	.23	.52	.20	.62	.52	.41	.50	--														
12. KFQ-R 12	.26	.37	.32	.35	.34	.34	.37	.29	.35	.36	.39	--													
13. KFQ-R 13	.38	.44	.37	.24	.51	.22	.60	.45	.48	.47	.78	.43	--												
14. KFQ-R 14	.11	.24	.23	.28	.24	.28	.23	.17	.30	.33	.25	.33	.27	--											
15. KFQ-R 15	.33	.43	.41	.23	.35	.23	.33	.30	.33	.39	.32	.33	.40	.35	--										
16. KFQ-R 16	.22	.31	.17	.27	.35	.25	.34	.28	.38	.38	.28	.37	.29	.35	.32	--									
17. KFQ-R 17	-.03	-.18	-.01	-.25	-.11	-.20	.03	-.05	.11	-.02	.01	-.13	.04	-.09	.01	.00	--								
18. KFQ-R 18	.20	.19	.24	.12	.27	.21	.41	.28	.36	.30	.36	.28	.40	.29	.27	.32	-.04	--							
19. KFQ-R 19	-.00	-.00	-.02	.07	.04	.12	.05	-.12	.22	.04	.01	.16	.07	.18	.06	.12	.08	.12	--						
20. KFQ-R 20	.18	.24	.22	.15	.37	.21	.35	.33	.30	.31	.39	.27	.34	.21	.36	.34	-.04	.38	.20	--					
21. KFQ-R 21	.15	.14	.19	.02	.15	.06	.06	.05	.14	.19	.17	.06	.17	.15	.11	.15	.14	.25	-.02	.13	--				
22. KFQ-R 22	.28	.34	.23	.35	.35	.31	.33	.28	.31	.31	.34	.41	.39	.29	.37	.38	-.13	.31	.23	.44	.19	--			
23. KFQ-R 23	.07	.17	.14	.07	.06	.04	.17	.12	.28	.17	.29	.15	.31	.19	.13	.15	.28	.15	.05	.14	.29	.28	-		
24. KFQ-R 24	.22	.34	.19	.31	.24	.32	.17	.16	.24	.19	.26	.49	.26	.40	.31	.31	-.22	.31	.33	.40	.14	.59	.16	--	
25. KFQ-R 25	.14	.13	.17	.03	.03	.00	.14	.12	.23	.12	.34	.10	.33	.10	.16	.13	.30	.17	-.05	.10	.30	.15	.69	.11	--

Note. ** p < .005.

Principal Axis Factoring was performed on the 25 items of the KFQ-R with Varimax rotation. Orthogonal rotation was utilized to better achieve a simple factor structure (Field, 2013). The value of the Kaiser-Meyer-Olkin (KMO), a measure of sampling adequacy was .89, exceeding the recommended beginning value of .60, and indicated that the data was suitable for this type of analysis. Additionally, Bartlett's test of sphericity was significant ($p < .001$), thus demonstrating that sufficient correlations existed between the variables to progress with the analysis (Meyers et al., 2013).

Factors were extracted by comparing the scree plot of actual eigenvalues with the scree plot of randomly derived eigenvalues from a parallel analysis (Horn, 1965; Zwick & Velicer, 1986). Essentially, parallel analysis uses an SPSS algorithm (O'Connor, 2000) to derive factors from random inter-item correlations in a sample with the number of items and sample size matching the research sample. The scree plot from the parallel analysis was overlaid on the research sample scree plot. Factors retained from the research sample were larger than random factors and positioned above the parallel analysis scree plot. The amount of variance accounted for by such factors is greater than chance, and are therefore deemed important (Hayton, Allen, Scarpello, 2004). Results of the parallel analysis in the current study indicate that a three - factor solution was appropriate (Figure 1). These three factors accounted for 47.42% of variance in the sample (31.02%, 8.78%, and 7.62% respectfully).

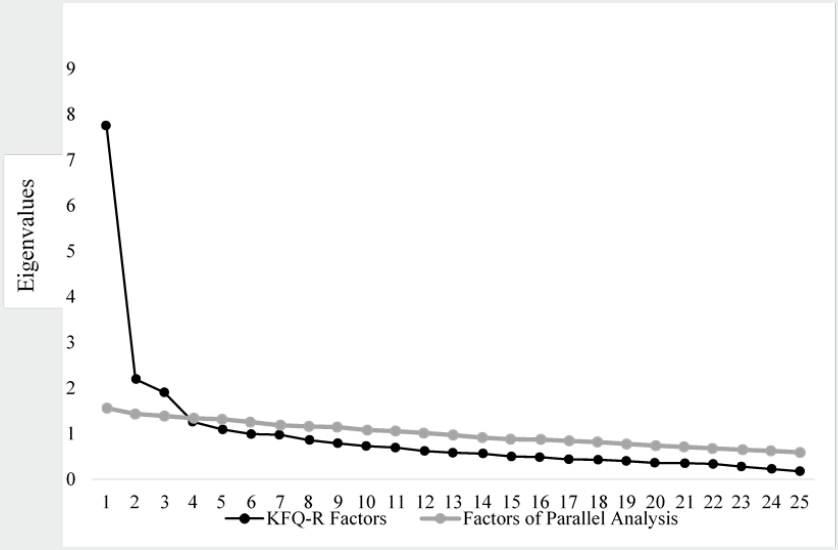

Figure 1. Scree Plot of KFQ-R and Parallel Analysis Factors

TheThe first factor Exemplary Followership (31.02% of variance) was comprised of nine items: 7-Evaluate activities, 5-Contribute my best, 8-Develop competencies to increase my value, 11-Finish assignments beyond my duties, 13-Generate and evaluate new ideas, 2-Match work with my personal fulfilment, 10-Complete assignments without supervision, 3-Align of personal and work goals, and 1-Think of societal input though work. Examination of the items indicated a common theme of an ideal approach to work and life. The second factor Leader-Centered Followership (8.78% of variance) was defined by four items: 24-Assert my views regardless of coworkers, 22-Blindly follow the leader, 14-Solve problems without leader, and 19-Achievement of leader's goals. Examination of these items indicated a common theme of following a leader regardless of personal and coworkers' beliefs. The third factor, Disengaged Followership (7.62% of variance) contained four items: 25-Assert my views regardless of the leader, 23-Follow personal ethics, 17-I help team evaluate ideas and plans, and 21-Internal questioning of the leader. Examination of the items indicated a common theme of influence and self-confidence. The eight remaining items (15, 9, 4; 12, 6, 16, 20, 18) either had low correlations across the factors or had significant correlations on two or three factors and were not retained. Factor loadings above .30 with clear loading on one factor are written in bold type and were kept for the factor solution (Table 3).

Table 3.

Factor Analysis of the KFQ-R Using Varimax Rotation (N=329).

Variable		Factor		
		1	*2*	*3*
KFQ – R 7	Evaluate Activities	**.75**	.16	.10
KFQ – R 5	Contribute my best	**.73**	.21	-.06
KFQ – R 8	Develop competencies to increase my value	**.71**	.07	.02
KFQ – R 11	Finish assignments beyond my duties	**.69**	.16	.31
KFQ – R 13	Generate and evaluate new ideas	**.67**	.22	.33
KFQ – R 2	Match work with my personal fulfilment	**.63**	.24	-.00
KFQ – R 10	Complete assignments without supervision	**.61**	.23	.10
KFQ – R 3	Align of personal and work goals	**-.60**	.11	.09
KFQ – R1	Think of societal input though work	**.54**	.12	.03
KFQ – R 15	Acknowledge coworkers' contribution	.44	.34	.11
KFQ – R 9	Focus on leader's priorities	.43	.34	.25
KFQ – R 4	Personal comment to work	.40	.37	-.18
KFQ – R 24	Assert my views regardless of coworkers	.13	**.78**	.01
KFQ – R 22	Blindly follow the leader	.29	**.63**	.12
KFQ – R 12	I am exemplary follower	.39	.50	.02
KFQ – R 14	Solve problems without leader	.23	**.48**	.08
KFQ – R 6	I energize coworkers	.30	.43	-.14
KFQ – R 16	I help leader evaluate ideas and plans	.33	.43	.10
KFQ – R 20	Personal feedback	.33	.42	.11
KFQ – R 19	Achievement of leader's goals	-.10	**.41**	.04
KFQ – R 18	Understanding of leader's perspective	.33	.35	.19
KFQ – R 25	Assert my views regardless of the leader	.13	.05	**.77**
KFQ – R 23	Follow personal ethics	.10	.18	**.73**
KFQ – R 17	I help team evaluate ideas and plans	-.07	-.20	**.47**
KFQ – R 21	Internal questioning of the leader	.12	.14	**.34**
Eigenvalues		*7.75*	*2.20*	*1.91*
Cumulative percent of variance explained		*31.02*	*8.78*	*7.62*
Cronbach's Alpha		*. 89*	*.60*	*.66*

To investigate Kelley's model, Cronbach's alpha was calculated to measure the reliability of the model and its factors. The reliability of the model was high (α = .93) due to low variability in responses; however, reliability for the variables that loaded on each factor ranged from very good to fair (Factor 1, α = .89; Factor 2, α = .60; Factor 3, α = .66). This range indicated that Factor 1 consisted of a unitary construct. The internal consistency reliability for Factors 2 and 3 was poor to fair, likely due to only having a few items on each factor and that the factors themselves were not particularly strong (Meyers et al., 2013).

The third hypothesis represents exploration of possible correlations between the theorized scales of the KFQ-R and the scales of the UF-EMI (critical thinking disposition) and the UWES (work engagement). Theorized positive correlations between the scales provides evidence of convergent validity between the critical thinking disposition and engagement dimensions of the KFQ-R and the scales identified as representing these dimensions respectively (Table 4).

Table 4.
Correlations between KFQ-R Factors and the UF-EMI and UWES Scores

Variable	*1*	*2*	*3*	*4*	*5*
1. F1- Exemplary Follower	--				
2. F2- Leader-Centered Follower	.32**	--			
3. F3- Disengaged Follower	.20**	.11	--		
4. UF-EMI, CT Disposition	.55**	.41**	.26**	--	
5. UWES, Work Engagement	.52**	.27**	-.06	.31**	--

Note. ** p < .01.

The correlation matrix between UF-EMI (critical thinking disposition) and Factor 1: Exemplary Followership, indicated significant moderately strong correlations (r =.55); Factor 2: Leader-Centered Followership, showed significant medium correlation (r =.41); Factor 3: Disengaged Followership, significant low correlation (r =.26). The correlation matrix between UWES (work engagement) and Factor 1: Exemplary Followership, indicated significant correlations (r =.52); Factor 2: Leader-Centered Followership, showed significant moderately low correlation (r =.27); Factor 3: Disengaged Followership, no correlation. Additionally, critical thinking disposition and work engagement correlate at a moderately significant level (r = .31).

Discussion

In this study, the first hypothesis was rejected. The correlation between the KFQ-R and the M-C SDS was non-significant, thus indicating that participants did not exhibit significant social desirability in their responses to the KFQ-R. Although the original questionnaire was never tested for social desirability, Blanchard et al. (2009), Gatti et al. (2014) and Thomas (2014) warned about the potential bias component of the questionnaire due to wording of questions which prompt more favorable response choices.

The second hypothesis, namely that the factor structure of the KFQ-R would match the two-factor structure in Kelley's original questionnaire, was partially supported. Three significant interpretive factors emerged from the factor analysis procedure: Exemplary Followership; Leader-Centered Followership, and Disengaged Followership. The first factor, clearly the strongest of the three, was in part comprised of Kelley's concepts of independent, critical thinking and engagement. According to the inter-item correlations of this first factor, these types of followers evaluate activities, contribute their best, develop competencies to increase their value to the organization, finish assignments beyond their duties, generate and evaluate new ideas, match work to personal fulfilment, complete assignments without supervision, align personal and work goals, and think of their societal input though work. Such characteristics are in agreement with Kelley's (1992) notion as he described this kind of followership as being exhibited by those who show interest in work, strive for creative solutions, find purpose at work, and add value to the organization. Moreover, they add economic value to their organization through higher retention rates, the ability to attract other talented job candidates, and individual attainment of self-actualization needs (Uken, 2008).

Further convergent validity analysis of Factor 1 did lend some support to Kelley's conceptualization of ideal followership. Factor scores had moderate correlations with critical thinking disposition as measured by the UF-EMI and with work engagement measured by the UWES. Factor 1 was also represented by work engagement which was a significant component of Kelley's model. Interestingly, this factor had a fairly high internal consistency value (α=.89) which indicated a unitary factor. In light of this finding, critical thinking disposition and work engagement possibly have some common underlying construct, which is loading on the unitary factor of Exemplary Followership.

The second factor is Leader-Centered Followership which represents typical followers in Kelley's model. According to this factor structure, these followers assert their views regardless of coworkers, solve problems without the leader, blindly follow the leader, and contribute towards achievement of the leader's goals. When viewed across the engagement dimention, leader-centered follower somewhat matches the description of Kelley's typical followers simply take direction, do as they are told, and offer no challenges to the leader or group (Kelley, 1992). Convergent validity analysis of Factor 2 with Kelley's proposed factors showed moderate correlation with critical thinking disposition but moderately low correlation with work engagement. This suggests that while this type of worker does have some predisposition toward critical thinking, they may not necessarily intrinsically engage in work activities.

The third factor, Disengaged Followership, was characterized by those who assert their views regardless of the leader, follow personal ethics, help the team evaluate ideas and plans, and internally question the leader. In analyzing convergent validity with critical thinking disposition and work engagement, Factor 3 had a moderately low correlation with critical thinking disposition and almost no correlation with work engagement. Accordingly, this type of follower would engage in critical thinking occasionally but is not likely to be engaged in work. This would support the notion that disengaged followers are dissatisfied with work due to a variety of reasons.

The final question regarding convergent validity of Kelley's model was to determine if the total KFQ-R score was associated with critical thinking disposition and work engagement. Simple correlations indicated that KFQ-R scores were moderately associated with critical thinking disposition measured by the UF-EMI and with work engagement measured by the UWES thus lending partial support to Kelley's two-factor model.

Limitations of Kelley's Model

Although the KFQ revisions did satisfy the guidance of the survey design (Salant & Dillman, 1994) and matched the original dimensions for each question advocated by Kelley, the KFQ-R did not support Kelley's theory. The current study revealed a three-factor structure rather than two, which is consistent with the findings of Blanchard et al. (2009) and Gatti et al. (2014). These two studies indicated emergence of a third factor in the model. Blanchard et al. (2009) named the newly-emerged factor as Attitude and Affect. Gatti et al. (2014) subsequently adopted this practice in their factor analysis. Gatti et al. (2014) study found that active engagement had the same correlation with independent, critical thinking as did Attitude and Affect ($r = .63$); the same study found also that independent, critical thinking and Attitude and Affect correlated at the lower level ($r = .33$). The factor of Attitude and Affect was disregarded in both studies since it did not match Kelley's two proposed dimensions. Blanchard et al. (2009) justified disregarding the new factor due to its inability to measure behavior as advocated by Kelley's model.

Given findings, it appears that Attitude and Affect is comprised of both of Kelley's dimensions. Attitude is a cognitive process, while affect is an individual emotion. This Attitude and Affect factor may be an important element in employees' organizational behavior, and may affect independent, critical thinking and active engagement of followers. Attitude can impact a follower's independent, critical thinking since it involves thinking and reasoning; Affect influences emotions and leads to engagement which is "positive, fulfilling, work-related state of mind" that increases productivity and emotional wellbeing (Schaufeli, Salanova, González-Romá, & Bakker, 2002, p.74). Gatti et al. (2014) followed the lead and disregarded items that loaded into the new factor along with two additional low loading items and re-ran factor analysis, validating a 14- item KFQ. The results of our study were aligned with the

findings from Blanchard et al. (2009) and Gatti et al. (2014) with three-factor structure, which did not validate Kelley's two-dimension model.

It is important to note that KFQ-R three factors model accounted only for 47.42% of variance in the current sample (Factor 1 = 31.02 %; Factor 2 = 8.78; Factor 3 = 7.62%). Given that less than half of the variance was explained by the three factors indicates that the KFQ-R is not sufficient to explain the complex nature of follower types and their respective behaviors. This is especially noteworthy given the fact that the current sample was drawn from more traditional, hierarchical organizations where one would expect more simplistic followership roles among the employees. This finding echoes the importance of approaching leadership and followership concepts from the multidimensional prospective and of considering the fluid, flexible relationship between followership and leadership within individuals in more egalitarian organizations.

Directions for Future Research

To test the three-factor structure that emerged from this study, further testing of the KFQ-R should be conducted. Future research should first concentrate on investigating the replicability of the current model structure of the KFQ-R through confirmatory factor analysis (CFA). The KFQ-R should be revised to include only questions that loaded into three factors (17-item version of KFQ-R). This replicability should be tested on a more traditional, hierarchical sample and also on a sample of a more dynamic and fluid company structure that is more egalitarian rather than hierarchal. Successful CFA analyses of this type will demonstrate generalizability of the KFQ-R three-dimensional model. In addition, an exploratory factor analysis of the KFQ-R can be conducted on a dynamic and fluid company rather than a traditionally hierarchical company as presented in this study. Such an EFA may yield a different factor structure compared to this study since followership and leadership are practiced differently in egalitarian and hierarchal companies.

Conclusions

Followership continues to be described as an emerging area of leadership research. This study contributed to the literature in various ways. First, the study investigated Kelley's two dimensional model and analyzed each theorized dimension. Kelley's construct includes two dimensions: critical thinking disposition and work engagement versus independent, critical thinking and active engagement. Significant correlations were found between the KFQ-R and the UF-EMI while KFQ-R and UWES provided evidence of convergent validity between the critical thinking disposition and work engagement dimensions of the KFQ-R.

Second, the Kelley Followership Questionnaire was revised in accordance with Salant & Dillman (1994) suggestions. The KFQ-R is more comprehensive and less time consuming compared to KFQ. Additionally, the survey revision prompted a clear loading between two dimensions according to Kelley's theory. Third, the KFQ-R did not hold social desirability bias as original KFQ may have (Blanchard et al., 2009; Gatti et al., 2014; Thomas, 2014). Fourth, the Kelley model was not validated as two dimensional; it is a three dimensional model which is consistent with the previous research (Blanchard et al., 2009; Gatti et al., 2014); however, the three dimensional model explains less than half of the variance. The three dimensional model yields nine follower typologies versus five as theorized by Kelley. Researchers are cautioned in applying the KFQ in their research but encouraged to develop further the KFQ-R as a three dimensional instrument.

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